THE MYTH OF THE RATIONAL VOTER

WHY DEMOCRACIES CHOOSE BAD POLICIES

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Introduction

THE PARADOX OF DEMOCRACY

> A supporter once called out, "Governor Stevenson, all thinking people are for you!" And Adlai Stevenson answered, "That's not enough. I need a majority."
>
> —*Scott Simon, "Music Cues: Adlai Stevenson"*[1]

IN A DICTATORSHIP, government policy is often appalling, but rarely baffling. The building of the Berlin Wall sparked worldwide outcry, but few wondered, "What are the leaders of East Germany thinking?" *That* was obvious: they wanted to continue ruling over their subjects, who were inconsiderately fleeing en masse. The Berlin Wall had some drawbacks for the ruling clique. It hurt tourism, making it harder to earn hard currency to import Western luxuries. All things considered, though, the Wall protected the interests of elite party members.

No wonder democracy is such a popular political panacea. The history of dictatorships creates a strong impression that bad policies exist because the interests of rulers and ruled diverge.[2] A simple solution is make the rulers and the ruled *identical* by giving "power to the people." If the people decide to delegate decisions to full-time politicians, so what? Those who pay the piper—or vote to pay the piper—call the tune.

This optimistic story is, however, often at odds with the facts. Democracies frequently adopt and maintain policies harmful for most people. Protectionism is a classic example. Economists across the political spectrum have pointed out its folly for centuries, but almost every democracy restricts imports. Even when countries negotiate free trade agreements, the subtext is not, "Trade is mutually beneficial," but, "We'll do you the favor of buying your imports if you do us the favor of buying ours." Admittedly, this is less appalling than the Berlin Wall, yet it is more *baffling*. In theory, democracy is a bulwark against socially harmful policies, but in practice it gives them a safe harbor.[3]

How can this Paradox of Democracy be solved? One answer is that the people's "representatives" have turned the tables on them. Elections might be a weaker deterrent to misconduct than they seem on the surface, making it more important to please special interests than the general public. A second answer, which complements the first, is that voters are deeply ignorant about politics. They do not know who their representatives are, much less what they do. This tempts politicians to pursue personal agendas and sell themselves to donors.[4]

A diametrically opposed solution to the Paradox of Democracy is to deny that it regularly delivers foolish policies. You could insist that the public is right and "the experts" are wrong, openly defending the merits of protection, price controls, and so on. That is straightforward, but risky: It is akin to putting your client on the stand and opening him up to cross-examination. A less direct but safer stance—analogous to keeping your client from testifying—is to pick holes in the alleged *mechanisms* of democratic failure. You don't have to show that your client is innocent if the prosecution lacks a coherent account of how the crime was committed. In the same way, you need not show that a policy is good if there is no coherent account of how it could be bad.

Democracy's cleverest enthusiasts usually take this safer route.[5] Especially in recent years, their strategy has been successful despite the intuitive appeal of stories about electorally safe politicians and ignorant voters. For reasons we will soon explore, these stories buckle or even break when critically analyzed. Without a credible account of *how* democracy falls short of its promise, the insight that it *does* fall short lives on borrowed time.

This book develops an alternative story of how democracy fails. The central idea is that voters are worse than ignorant; they are, in a word, *irrational*—and vote accordingly. Economists and cognitive psychologists usually presume that everyone "processes information" to the best of his ability.[6] Yet common sense tells us that emotion and ideology—not just the facts or their "processing"—powerfully sway human judgment. Protectionist thinking is hard to uproot because it *feels good*. When people vote under the influence of false beliefs that feel good, democracy persistently delivers bad policies. As an old computer programming slogan goes, GIGO—Garbage in, garbage out.

Across-the-board irrationality is not a strike against democracy alone, but all human institutions. A critical premise of this book is that irrationality, like ignorance, is *selective*. We habitually *tune out* unwanted information on subjects we don't care about. In the same vein, I claim that we *turn off* our rational faculties on subjects where we don't care about the truth.[7] Economists have long argued that voter ignorance is a predictable response to the fact that one vote doesn't matter. Why study the issues if you can't change the outcome? I generalize this insight: Why control your knee-jerk emotional and ideological reactions if you can't change the outcome?

This book has three conjoined themes. The first: Doubts about the rationality of voters are empirically justified. The second: Voter irrationality is precisely what economic theory implies once we adopt introspectively plausible assumptions about human motivation. The third: Voter irrationality is the key to a realistic picture of democracy.

In the naive public-interest view, democracy works because it does what voters want. In the view of most democracy skeptics, it fails because it does *not* do what voters want. In my view, democracy fails *because* it does what voters want. In economic jargon, democracy has a built-in *externality*. An irrational voter does not hurt only himself. He also hurts everyone who is, as a result of his irrationality, more likely to live under misguided policies. Since most of the cost of voter irrationality is *external*—paid for by *other people*, why not indulge? If enough voters think this way, socially injurious policies win by popular demand.

When cataloging the failures of democracy, one must keep things in perspective. Hundreds of millions of people under democratic rule enjoy standards of living that are, by historical standards, amazingly good. The shortcomings of the worst democracies pale in comparison with those of totalitarian regimes. At least democracies do not murder millions of their own citizens.[8] Nevertheless, now that democracy is the typical form of government, there is little reason to dwell on the truisms that it is "better than Communism," or "beats life during the Middle Ages." Such comparisons set the bar too low. It is more worthwhile to figure out how and why democracy disappoints.[9]

In the minds of many, one of Winston's Churchill's most famous aphorisms cuts the conversation short: "Democracy is the worst form of government, except all those other forms that have been tried from time to time."[10] But this saying overlooks the fact that the governments vary in *scope* as well as form. In democracies the main alternative to majority rule is not dictatorship, but markets.

Democracy enthusiasts repeatedly acknowledge this.[11] When they lament the "weakening of democracy," their main evidence is that markets face little government oversight, or even usurp the traditional functions of government. They often close with a "wake-up call" for voters to shrug off their apathy and make their voice heard. The heretical thought that rarely surfaces is that weakening democracy in favor of markets could be a good thing. No matter what you believe about how well markets work in absolute terms, if democracy starts to look worse, markets start to look better by comparison.

Economists have an undeserved reputation for "religious faith" in markets. No one has done more than economists to dissect the innumerable ways that markets can fail. After all their investigations, though, economists typically conclude that the man in the street—and the intellectual without economic training—underestimates how well markets work.[12] I maintain that something quite different holds for democracy: it is widely *over*-rated not only by the public but by most economists too. Thus, while the general public underestimates how well markets work, even economists underestimate markets' virtues *relative* to the democratic alternative.

Chapter 1

BEYOND THE MIRACLE OF AGGREGATION

I am suspicious of all the things that the
average citizen believes.
—*H. L. Mencken,* A Second Mencken Chrestomathy[1]

What voters don't know would fill a university library. In the last few decades, economists who study politics have revitalized age-old worries about the people's competence to govern by pointing out that—selfishly speaking—voters are not making a mistake. One vote has so small a probability of affecting electoral outcomes that a realistic egoist pays no attention to politics; he chooses to be, in economic jargon, *rationally ignorant.*[2]

For those who worship at the temple of democracy, this economic argument adds insult to injury. It is bad enough that voters *happen* to know so little. It remains bearable, though, as long as the electorate's ignorance is a passing phase. Pundits often blame citizens' apathy on an elections' exceptionally insipid candidates. Deeper thinkers, who notice that the apathy persists year after year, blame voters' ignorance on lack of democracy itself. Robert Kuttner spells out one version of the story:

> The essence of political democracy—the franchise—has eroded, as voting and face-to-face politics give way to campaign-finance plutocracy . . . [T]here is a direct connection between the domination of politics by special interest money, paid attack ads, strategies driven by polling and focus groups—and the desertion of citizens. . . . People conclude that politics is something that excludes them.[3]

Yet the slogan "The solution for the problems of democracy is more democracy" sounds hollow after you digest the idea of rational ignorance. Voter ignorance is a product of natural human selfishness, not a transient cultural aberration. It is hard to see how initiatives, or campaign finance reform, or any of the popular ways to "fix democracy" strengthen voters' incentive to inform themselves.

As the rational ignorance insight spread, it became an intellectual fault line in the social sciences. Economists, along with economically minded political scientists and law professors, are generally on one side of the fault line.[4] They see voter ignorance as a serious problem, making them skeptical about using government intervention to improve market outcomes. Beneficial government action is possible in theory, but how could hopelessly uninformed voters be expected to elect politicians who follow through? The implication: "Voters don't know what they're doing; just leave it to the market." Thinkers on the other side of the fault line downplay these doubts about government intervention. Once you discount the problem of voter ignorance, it is a short hop from "the policies beneficial in theory" to "the policies democracies adopt in practice."

In time, rational ignorance spawned an expansive research program, known as *public choice* or *political economy* or *rational choice theory*.[5] In the 1960s, finding fault with democracy bordered on heretical, but the approach was hardy enough to take root. Critiques of foolish government policies multiplied during the 1970s, paving the way for deregulation and privatization.[6]

But as these ideas started to change the world, serious challenges to their intellectual foundations surfaced. Earlier criticism often came from thinkers with little understanding of, and less sympathy for, the economic way of thinking. The new doubts were framed in clear economic logic.

The Miracle of Aggregation

> Think about what happens if you ask a hundred people to run a 100-meter race, and then average their times. The average time will not be better than the time of the fastest runners. It will be worse. . . . But ask a hundred people to answer a question or solve a problem, and the average answer will often be at least as good as the answer of the smartest member. With most things, the average is mediocrity. With decision-making, it's often excellence. You could say it's as if we've been programmed to be collectively smart.
>
> —*James Surowiecki,* The Wisdom of Crowds[7]

If a person has no idea how to get to his destination, he can hardly expect to reach it. He might get lucky, but common sense recognizes a tight connection between knowing what you are doing and successfully doing it. Ubiquitous voter ignorance seems to imply, then, that democracy works poorly. The people ultimately in charge—the voters—are doing brain surgery while unable to pass basic anatomy.

There are many sophisticated attempts to spoil this analogy, but the most profound is that democracy can function well under almost any magnitude of voter ignorance. How? Assume that voters do not make *systematic* errors. Though they err constantly, their errors are random. If voters face a blind choice between X and Y, knowing nothing about them, they are equally likely to choose either.[8]

What happens? With 100% voter ignorance, matters are predictably grim. One candidate could be the Unabomber, plotting to shut down civilization. If voters choose randomly, the Unabomber wins half the time. True, the assumption of zero voter knowledge is overly pessimistic; informed voters are rare, but they do exist. But this seems a small consolation. 100% ignorance leads to disaster. Can 99% ignorance be significantly better?

The surprising answer is yes. The negative effects of voter ignorance are not linear. Democracy with 99% ignorance looks a lot more like democracy with full information than democracy with total ignorance.[9] Why? First, imagine an electorate where 100% of all voters are well informed. Who wins the election? Trivially, *whoever has the support of a majority of the well informed.* Next, switch to the case where only 1% of voters are well informed. The other 99% are so thick that they vote at random. Quiz a person waiting to vote, and you are almost sure to conclude, with alarm, that he has no idea what he is doing. Nevertheless, it is basic statistics that—in a large electorate—each candidate gets about half of the random votes. Both candidates can bank on roughly a 49.5% share. Yet that is not enough to win. For that, they must focus all their energies on the one well-informed person in a hundred. Who takes the prize? *Whoever has the support of a majority of the well informed.* The lesson, as Page and Shapiro emphasize, is that studying the average voter is misleading:

> Even if individuals' responses to opinion surveys are partly random, full of measurement error, and unstable, when aggregated into a collective response—for example, the percentage of people who say they favor a particular policy—the collective response may be quite meaningful and stable.[10]

Suppose a politician takes a large bribe from "big tobacco" to thumb his nose at unanimous demand for more regulation. Pro-tobacco moves do not hurt the candidate's standing among the ignorant—they scarcely know his name, much less how he voted. But his share of the informed vote plummets. Things get more complex when the number of issues rises, but the key to success stays the same: Persuade a majority of the well informed to support you.

This result has been aptly named the "Miracle of Aggregation."[11] It reads like an alchemist's recipe: Mix 99 parts folly with 1 part wisdom to get a compound as good as unadulterated wisdom. An *almost* completely ignorant electorate makes the same decision as a fully informed electorate—lead into gold, indeed!

It is tempting to call this "voodoo politics," or quip, as H. L. Mencken did, that "democracy is a pathetic belief in the collective wisdom of individual ignorance."[12] But there is nothing magical or pathetic about it. James Surowiecki documents many instances where the Miracle of Aggregation—or something akin to it—works as advertised.[13] In a contest to guess the weight of an ox, the average of 787 guesses was off by a single pound. On *Who Wants to Be a Millionaire*, the answer most popular with studio audiences was correct 91% of the time. Financial markets—which aggregate the guesses of large numbers of people—often predict events better than leading experts. Betting odds are excellent predictors of the outcomes of everything from sporting events to elections.[14] In each case, as Page and Shapiro explain, the same logic applies:

> This is just an example of the law of large numbers. Under the right conditions, individual measurement errors will be independently random and will tend to cancel each other out. Errors in one direction will tend to offset errors in the opposite direction.[15]

When defenders of democracy first encounter rational ignorance, they generally grant that severe voter ignorance would hobble government by the people. Their instinctive responses are to (*a*) deny that voters are disturbingly ignorant, or (*b*) interpret voters' ignorance as a fragile, temporary condition. To call these responses "empirically vulnerable" is charitable. Decades of research show they are plain wrong.[16] About half of Americans do not know that each state has two senators, and three-quarters do not know the length of their terms. About 70% can say which party controls the House, and 60% which party controls the Senate.[17] Over half cannot name their congressman, and 40% cannot name either of their senators. Slightly *lower* percentages know their representatives' party affiliations.[18] Furthermore, these low knowledge levels have been stable since the dawn of polling, and international comparisons reveal Americans' overall political knowledge to be no more than moderately below average.[19]

You could insist that none of this information is relevant. Perhaps voters have holistic insight that defies measurement. But this is a desperate route for a defender of democracy to take. The Miracle of Aggregation provides a more secure foundation for democracy. It lets people believe in empirical evidence and democracy at the same time.

The original arguments about rational ignorance took time to spread, but eventually became conventional wisdom. The Miracle of Aggregation is currently in the middle of a similar diffusion process. Some have yet to hear of the Miracle. Backward-looking thinkers hope that if they ignore the objection, it will go away. But the logic is too compelling. Unless someone uncovers a flaw in the Miracle, the fault line in the social sciences will close. Economists and economically minded political scientists and law professors will rethink their doubts about democracy, and go back to the prerational ignorance presumption that if democracies do X, X is a good idea.

The Reality of Systematic Error

> Universal suffrage, which to-day excludes free trade from the United States, would certainly have prohibited the spinning-jenny and the power-loom.
> —*William Lecky,* Liberty and Democracy[20]

The Miracle of Aggregation proves that democracy can work even with a morbidly ignorant electorate. Democracy gives equal say to the wise and the not-so-wise, but the wise determine policy. Belaboring the electorate's lack of knowledge with study after study is beside the point.

But there is another kind of empirical evidence that *can* discredit the Miracle of Aggregation. The Miracle only works if voters do not make *systematic* errors. This suggests that instead of rehashing the whole topic of voter error, we concentrate our fire on the critical and relatively unexplored question:[21] *Are voter errors systematic?*

There are good reasons to suspect so. Yes, as Surowiecki points out, our average guess about the weight of oxen is dead on. But cognitive psychology catalogs a long list of other questions where our average guess is systematically mistaken.[22] This body of research ought to open our minds to the *possibility* of systematic voter error.

By itself, though, the psychological literature does not get us very far. The link between general cognition and particular political decisions is too loose. People could have poor overall judgment but good task-specific judgment.[23] Voters might be bad statisticians but perceptive judges of wise policy. Thus, we should refine our question: Are voter errors systematic *on questions of direct political relevance?*

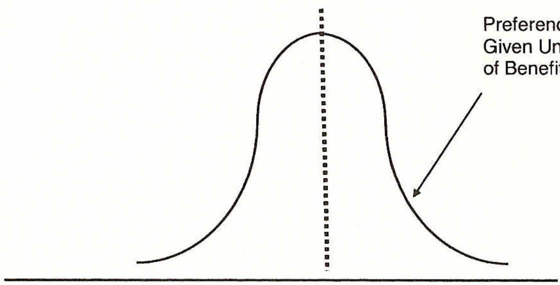

Figure 1.1 The Median Voter Model: Random Error

My answer is an emphatic yes. This book presents robust empirical evidence that—at minimum—beliefs about economics are riddled with severe systematic errors.[24] I strongly suspect that the same holds for beliefs about many other subjects. But as far as economics is concerned, the jury is in. People do not understand the "invisible hand" of the market, its ability to harmonize private greed and the public interest. I call this *antimarket* bias. People underestimate the benefits of interaction with foreigners. I call this *antiforeign* bias. People equate prosperity not with production, but with employment. I call this *make-work* bias. Lastly, people are overly prone to think that economic conditions are bad and getting worse. I call this *pessimistic* bias.

Economic policy is the primary activity of the modern state, making voter beliefs about economics among the most—if not *the* most—politically relevant beliefs. If voters base their policy preferences on deeply mistaken models of the economy, government is likely to perform its bread-and-butter function poorly. To see this, suppose that two candidates compete by taking positions on the degree of protectionism they favor. *Random* voter errors about the effect of protection cause some voters who prefer the effect of free trade to vote for protection. But it is equally common for voters who prefer the effect of protection to vote for free trade.[25] Then the Miracle of Aggregation holds: in spite of voter ignorance, the winning platform is socially optimal.

For anyone who has taught international economics, though, this conclusion is underwhelming. It takes hours of patient instruction to show students the light of comparative advantage. After the final exam, there is a distressing rate of recidivism. Suppose we adopt the

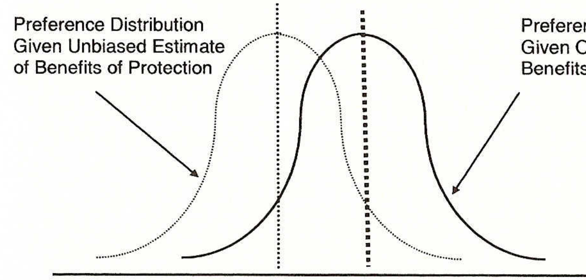

Figure 1.2 The Median Voter Model: Systematic Error

more realistic assumption that voters systematically overestimate the benefits of protection. What happens? Lots of people vote for protection who prefer the effect of free trade, but only a few vote for free trade who prefer the effect of protection. The political scales tilt out of balance; the winning platform is too protectionist. *The median voter would be better off if he received less protection than he asked for.* But competition impels politicians to heed what voters ask for, not what is best for them.

Comparable biases plausibly underlie policy after policy.[26] For example, supply-and-demand says that above-market prices create unsaleable surpluses, but that has not stopped most of Europe from regulating labor markets into decades of depression-level unemployment.[27] The most credible explanation is that the average voter sees no link between artificially high wages and unemployment. Before I studied economics, I failed to see it myself.

Modern Research versus Intellectual Tradition

> Economists have two attitudes toward discourse, the official and the unofficial.
> —*Donald McCloskey,* The Rhetoric of Economics[28]

The terminology of "systematic" versus "random" error entered economists' vocabulary about 30 years ago.[29] But the concept of systematic error has a much longer history. Here is how Simon Newcomb began an article in the *Quarterly Journal of Economics* in 1893:

> The fact that there is a wide divergence between many of the practical conclusions of economic science, as laid down by its professional exponents, and the thought of the public at large, as reflected in its current discussion and in legislation, is one with which all are familiar.[30]

This was the intellectual climate that Newcomb saw in the contemporary United States and Great Britain. Over a century earlier, in *The Wealth of Nations*, Smith made similar observations about economic beliefs in Britain:

> Nothing, however, can be more absurd than this whole doctrine of the balance of trade, upon which, not only these [mercantilist] restraints, but almost all other regulations of commerce are founded. When two places trade with one another, this doctrine supposes that, if the balance be even, neither of them loses or gains; but if it leans in any degree to one side, that one of them loses, and the other gains in proportion to its declension from the exact equilibrium.[31]

The policy consequences, for Smith, are far-reaching:

> By such maxims as these, however, all nations have been taught that their interest consisted in beggaring all their neighbors. Each nation has been made to look with an invidious eye upon the prosperity of all the nations with which it trades, and to consider their gain as its own loss. Commerce, which ought naturally to be, among nations, as among individuals, a bond of union and friendship, has become the most fertile source of discord and animosity.[32]

When he affirms that "science is the great antidote to the poison of enthusiasm and superstition,"[33] Smith is not thinking about errors that harmlessly balance out.

In the middle of the 19th century, Frédéric Bastiat, the French popularizer of classical economics, titled one of his most famous books *Economic Sophisms.* "Sophism" is Bastiat's synonym for "systematic error," and he assigns sophisms broad consequences: They "are especially harmful, because they mislead public opinion in a field in which public opinion is authoritative—is, indeed, law."[34] Bastiat attacks dozens of popular protectionist sophisms, for example, but does not bother to criticize any popular free trade sophisms. The reason is not that bad arguments for free trade do not exist, but that—unlike bad arguments for protection—virtually none are popular!

Bastiat's outlook remained respectable well into the 20th century. The eminent economist Frank Knight made no apologies for it:

> The action taken by our own democracy, and the beliefs of the great majority on which the action rests, are often absurd. Nor are they to be explained by economic self-interest, since the measures depend on votes of electors whose interests are directly opposed to them, as well as those benefited.[35]

Yet in recent decades, these ideas have been forced underground. Nearly all modern economic theories of politics begin by assuming that the typical citizen understands economics and votes accordingly—at least on average.[36] As George Stigler, widely known as a stern critic of government regulation, scoffs:

> The assumption that public policy has often been inefficient because it was based on mistaken views has little to commend it. To believe, year after year, decade after decade, that the protective tariffs or usury laws to be found in most lands are due to confusion rather than purposeful action is singularly obfuscatory.[37]

In stark contrast, introductory economics courses still tacitly assume that students arrive with biased beliefs, and try to set them straight, leading to better policy. Paul Samuelson famously remarked, "I don't care who writes a nation's laws—or crafts its advanced treaties—if I can write its economics textbooks."[38] This assumes, as teachers of economics usually do, that students *arrive* with systematic errors.

What a striking situation: As researchers, economists do not mention systematically biased economic beliefs; as teachers, they take their existence for granted. One might blame ossified textbooks for lagging behind research, or teachers for failing to expose their students to cutting-edge work. But the hypothesis that people hold systematically biased beliefs about economics has not been falsified; it has barely been tested.

I maintain that the oral tradition of the teachers of economics offers the researchers of economics a rich mine of scientific hypotheses. At the same time, the oral tradition has been subject to so little analytical scrutiny that it is not hard to refine. Samuelson's is a story of hope; we can sleep soundly as long as he keeps writing textbooks. But pondering two more facts might keep us lying awake at night. Fact 1: The economics the average introductory student absorbs is disappointingly small. If they had severe biases at the beginning, most still have large biases at the end. Fact 2: *below-average students are above-average citizens.* Most voters never take a single course in economics. If it is disturbing to imagine the bottom half of the class voting on economic policy, it is frightening to realize that the general population already does. The typical voter, to whose opinions politicians cater, is probably unable to earn a passing grade in basic economics. No wonder protectionism, price controls, and other foolish policies so often prevail.

Preferences over Beliefs

> The growing obsession in most advanced nations with international competitiveness should be seen, not as a well-founded concern, but as a view held in the face of overwhelming contrary evidence. And yet it is clearly a view that people very much want to hold—a desire to believe that is reflected in a remarkable tendency of those who preach the doctrine of competitiveness to support their cases with careless, flawed arithmetic.
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> —*Paul Krugman,* Pop Internationalism[39]

The most common objection to my thesis is theoretical: it contradicts the whole "rational choice approach" of modern social science. My colleague Robin Hanson aptly describes rational choice models as "stories without fools." I put folly—or, in technical terms, "irrationality"—at center stage.

One is tempted to snap: If the facts do not fit rational choice theory, so much the worse for rational choice theory! But this reaction is premature, for there is a satisfying way to reconcile theory and common sense. The preliminary step is to drop specious analogies between markets and politics, between shopping and voting. *Sensible public opinion is a public good.*[40] When a consumer has mistaken beliefs about what to buy, he foots the bill. When a voter has mistaken beliefs about government policy, the whole population picks up the tab.

Dropping false analogies between shopping and voting restores our intellectual flexibility, making the conflict between theory and common sense less daunting. But how can the conflict be resolved? We do not have to turn our backs on economics. It is only necessary to broaden its understanding of human motivation and cognition.

Economists usually presume that beliefs are a means to an end, not an end in themselves. In reality, however, we often have cherished views, valued for their own sake. As Shermer puts it, "Without some belief structure many people find this world meaningless and without comfort."[41] In economic jargon, people have *preferences over beliefs.* Letting emotions or ideology corrupt our thinking is an easy way to satisfy such preferences.[42] Instead of fairly weighing all claims, we can show nepotism toward our favorite beliefs. Ayn Rand calls it "blanking out": "the willful suspension of one's consciousness, the refusal to think—not blindness, but the refusal to see; not ignorance, but the refusal to know."[43]

Outside of economics, the idea that people like some beliefs more than others has a long history. John Locke's *Essay Concerning Human Understanding* inveighs against "enthusiasm, in which reason is taken away." To be an enthusiast is to embrace dubious ideas on emotional grounds:

> For the evidence that any proposition is true (except such as are self-evident) lying only in the proofs a man has of it, whatsoever degrees of assent he affords it beyond the degrees of that evidence, it is plain that *all the surplusage of assurance is owing to some other affection,* and not to the love of truth.[44]

Notice the two components of his analysis. The first is "surplusage of assurance." Locke observes that people assign probabilities to beliefs higher than the evidence warrants. The second is "other affections." The cause of excess confidence, on Locke's account, is conflict of motives. Everyone likes to think that he values truth for its own sake, but there are competing impulses: "conceit," "laziness," "vanity," "the tedious and not always successful labor of strict reasoning," and "fear, that an impartial inquiry would not favour those opinions which best suit their prejudices, lives, and designs."[45]

Thinkers who discuss preferences over beliefs almost invariably bring up religion. Locke is no different:

> In all ages, men in whom melancholy has mixed with devotion, or whose conceit of themselves has raised them into an opinion of a greater familiarity with God, and a nearer admittance to his favour than is afforded to others, have often flattered themselves with a persuasion of an immediate intercourse with the Deity, and frequent communications from the Divine Spirit.[46]

Like most things, enthusiasm comes in degrees. Many who feel no need to convert others take offense if you politely argue that their religion is mistaken. Few dispassionately accept their religious teachings as the "current leading hypothesis." Consider the adjectives that so often appear in the study of religion: fervent, dogmatic, fanatical. Human beings *want* their religion's answers to be true. They often want it so badly that they avoid counterevidence, and refuse to think about whatever evidence falls in their laps. As Nietzsche uncharitably puts it, " 'Faith' means not *wanting* to know what is true."[47]

Once you admit that preferences over beliefs are relevant in religion, it is hard to compartmentalize the insight. As Gustave Le Bon observes in *The Crowd*, there is a close analogy between literal religious belief and fervent ("religious") adherence to any doctrine: "Intolerance and fanaticism are the necessary accompaniments of the religious sentiment. . . . The Jacobins of the Reign of Terror were at bottom as religious as the Catholics of the Inquisition, and their cruel ardor proceeds from the same source."[48] Eric Hoffer famously expands on this point in his short classic *The True Believer*, declaring that "all mass movements are interchangeable": "A religious movement may develop into a social revolution or a nationalist movement; a social revolution, into militant nationalism or a religious movement; a nationalist movement into a social revolution or a religious movement."[49]

It is no accident that both of the substitutes for religion that Hoffer names—nationalism and social revolution—are political. Political/economic ideology is the religion of modernity. Like the adherents of traditional religion, many people find comfort in their political worldview, and greet critical questions with pious hostility.[50] Instead of crusades or inquisitions, the twentieth century had its notorious totalitarian movements.[51] "The religious character of the Bolshevik and Nazi revolutions is generally recognized," writes Hoffer. "The hammer and sickle and the swastika are in a class with the cross. The ceremonial of their parades is as the ceremonial of a religious procession. They have articles of faith, saints, martyrs and holy sepulchers."[52] Louis Fischer confesses that "just as religious conviction is impervious to logical argument and, indeed, does not result from logical processes, just as nationalist devotion or personal affection defies a mountain of evidence, so my pro-Soviet attitude attained complete independence from day-to-day events."[53] George Orwell's *1984* developed the novel vocabulary of Newspeak—words like *doublethink* and *thoughtcrime*—to ridicule the quasireligious nature of totalitarian ideologies.[54] A tour of Nazi or Communist websites can provide the reader with good contemporary examples.

As with religion, extreme ideologies lie at the end of a continuum. One's political worldview might compare favorably with the outlook of the sole member of a Maoist splinter faction, but remain less than rational.[55] To many people, for example, blaming foreigners for domestic woes is a source of comfort or pride. They may not proclaim their protectionism every day, and might acknowledge that foreign trade is beneficial in special circumstances. But they still resist—and resent—those who try change their minds by explaining comparative advantage.

Natural scientists have long known that the majority disbelieves some of their findings because they contradict religion.[56] Social scientists need to learn that the majority disbelieves some of their findings because they contradict quasi religion.

Rational Irrationality

> As we never cease to point out, each man is in practice an excellent economist, producing or exchanging according as he finds it more advantageous to do the one or the other.
>
> —*Frédéric Bastiat,* Economic Sophisms[57]

Preferences over beliefs is the critical idea that reconciles the theory of rational choice with the facts of voter irrationality. How? Suppose that human beings value *both* their material prosperity and their worldview. In economic jargon, they have two arguments in their utility function: personal wealth and loyalty to their political ideology. What happens if people rationally make trade-offs between their two values?

In any rational choice analysis, prices are the guiding star. If you like both meat and potatoes, you need to know how much meat you must forego in order to get one more potato. It is a mistake, however, to focus exclusively on the price tags at the grocery store. Part of the price of an unhealthy diet is a shorter life span, but the price tag says nothing about it. Economists call the total cost—explicit and implicit—of an activity its "full price." Though less visible than a printed price tag, the full price is the one that matters most.

The more incorrect your beliefs, the more poorly tailored your actions are to actual conditions.[58] What is the full price of ideological loyalty? *It is the material wealth you forego in order to believe.* Suppose that Robinson Crusoe's ideology teaches that native islanders like Friday are unable to farm. It flatters his pride to believe that only Europeans can understand agriculture. If Crusoe's belief is in fact correct, he wisely specializes in agriculture and has Friday do other kinds of work. But if Crusoe's belief is blind prejudice, keeping Friday out of agriculture reduces total production and makes both men poorer. The difference between Crusoe's potential living standard and his actual living standard is the full price of his ideological stance.

On an island with two people, the ideologue's material cost of hewing to his false precepts can be substantial. Under democracy, however, the probability that one vote—however misguided—changes policy rapidly decreases as the number of voters increases. In order to alter the outcome, a vote has to break a tie. The more votes, the fewer ties there are to break. Imagine a thousand Crusoes vote on permissible lines of work for a thousand Fridays. The Crusoes prefer to believe that the Fridays are unfit for agriculture, but the facts are against them. What is the expected loss of material wealth for a

Crusoe who indulges this preference? He forfeits not the per capita reduction in wealth, but the per capita reduction *discounted* by the probability that he flips the outcome of the election. If the per capita cost of keeping Fridays out of agriculture is $1,000, and the probability of being a tiebreaker is 0.1%, then a Crusoe who votes to keep them out pays $1 to adhere to his cherished fallacy.

This example illustrates one of this book's recurring points: In real-world political settings, the price of ideological loyalty is close to zero.[59] So we should *expect* people to "satiate" their demand for political delusion, to believe whatever makes them feel best. After all, it's free. The fanatical protectionist who votes to close the borders risks virtually nothing, because the same policy wins no matter how he votes. Either the borders remain open, and the protectionist has the satisfaction of saying, "I told you so"; or the borders close, and the protectionist has the satisfaction of saying, "Imagine how bad things would have been if we *hadn't* closed the borders!"

There can easily be a large gap between the private and social costs of ideological fealty. Recall that the expected material cost of error for one Crusoe was only $1. If a majority of the individual Crusoes find this price attractive, though, each and every Crusoe loses $1,000. Voting to keep the Fridays out of agriculture sacrifices $1,000,000 in social wealth in order to placate ideological scruples worth as little as $501.

A recurring rejoinder to these alarmist observations is that precisely because confused political ideas are dangerous, voters have a strong incentive to wise up. This makes as much sense as the argument that people have a strong incentive to drive less because auto emissions are unpleasant to breathe. No one faces the choice, "Drive a lot less, or get lung cancer," or "Rethink your economic views, or spiral down to poverty." In both driving and democracy, negative externalities irrelevant to *individual* behavior add up to a large collective misfortune.

The Landscape of Political Irrationality

> Democracy is the theory that the common people know what they want, and deserve to get it good and hard.
> —*H. L. Mencken*[60]

Ordinary cynics—and most economists—compare voters to consumers who shrewdly "vote their pocketbooks." In reality, this is atypical. Empirically, there is little connection between voting and material interests. Contrary to popular stereotypes of the rich Republican and the poor Democrat, income and party identity are only loosely re-

lated. The elderly are if anything slightly less supportive of Social Security and Medicare than the rest of the population. Men are *more* pro-choice than women.[61]

If self-interest does not explain political opinion, what does? Voters typically favor the policies they perceive to be in the general interest of their nation. This is, however, no cause for democratic optimism. The key word is *perceive.* Voters almost never take the next step by critically asking themselves: "Are my favorite policies *effective means* to promote the general interest?" In politics as in religion, faith is a shortcut to belief.

What are the implications for democracy? Standard rational choice theory rightly emphasizes that politicians woo voters by catering to their preferences. But this means one thing if voters are shrewd policy consumers, and almost the opposite if, as I maintain, voters are like religious devotees. In the latter case, politicians have a strong incentive to do what is popular, but little to competently deliver results. Alan Blinder cuttingly refers to "a compliant Congress, disdainful of logic, but deeply respectful of public opinion polls."[62] If one politician fails to carry out the people's wishes, a competing politician will. Le Bon makes the same point in sweeping terms:

> The masses have never thirsted after truth. They turn aside from evidence that is not to their taste, preferring to deify error, if error seduce them. Whoever can supply them with illusions is easily their master; whoever attempts to destroy their illusions is always their victim.[63]

Thus, it is in *mind-set,* not practical influence, that voters resemble religious believers. Given the separation of church and state, modern religion has a muted effect on nonbelievers. Scientific progress continues with or without religious approval. Political/economic misconceptions, in contrast, have dramatic effects on everyone who lives under the policies they inspire—even those who see these misconceptions for what they are. If most voters think protectionism is a good idea, protectionist policies thrive; if most believe that unregulated labor markets work badly, labor markets will be heavily regulated.

The conventional complaint about politicians is "shirking"—their failure to do what voters want.[64] I maintain that "shirking" should be dethroned in favor of "demagoguery." *Merriam-Webster's Collegiate Dictionary* defines a *demagogue* as "a leader who makes use of popular prejudices and false claims and promises in order to gain power."[65] Put bluntly, rule by demagogues is not an aberration. It is the natural condition of democracy. Demagoguery is the winning strategy as long as the electorate is prejudiced and credulous. Indeed, while *dema-*

gogue normally connotes insincerity, this is hardly necessary. "Religious" voters encourage politicians to change their behavior by *feigning* devotion to popular prejudices, but also prompt entry by the *honestly prejudiced* into the political arena.[66]

Shirking should be dethroned, not but disowned. Elections are imperfect disciplinary devices.[67] Some deviation from voter wishes is bound to occur. But how much? How strictly do elections constrain politicians? My view is that it depends on voters themselves. If they care deeply about an issue—like public use of racial slurs—politicians have almost no slack. One wrong word costs them the election. In contrast, if voters find a subject boring—like banking regulation—if emotion and ideology provide little guidance, their so-called representatives have "wiggle room" to maneuver.

Politicians' wiggle room creates opportunities for special interest groups—private and public, lobbyists and bureaucrats—to get their way. On my account, though, interest groups are unlikely to directly "subvert" the democratic process. Politicians rarely stick their necks out for unpopular policies because an interest group begs them—or pays them—to do so. Their careers are on the line; it is not worth the risk. Instead, *interest groups push along the margins of public indifference.*[68] If the public has no strong feelings about how to reduce dependence on foreign oil, ethanol producers might finagle a tax credit for themselves. No matter how hard they lobbied, though, they would fail to ban gasoline.

Lastly, for all the power ascribed to them, the media are also consumer-driven. Competition induces them to cover news that viewers want to watch. In the standard rational choice account, this reduces political information costs and so helps democracy work. Yet I am skeptical that much useful information flows from media to viewers. Instead, like politicians, the media show viewers what they want to see and tell them what they want to hear.[69]

Admittedly, the media, like politicians, have wiggle room. Yet once again, it is slack along the margins of indifference. If a shocking disaster story, bundled with mild liberal reporting bias, remains highly entertaining to a mainstream audience, then predominantly Democratic newscasters can mix in a little left-wing commentary. But if the media stray too far from typical viewer opinion—or just get too pedantic—the audience flies away. So while the conventional view gives the media too much credit—the private good of entertainment vitiates the public good of information—it is even more wrongheaded to treat the media as the source of popular fallacies. As we shall see, the fallacies preceded modern media; they continue to flourish because the audience is *predisposed* to be receptive.

To recap, my story is voter-driven. Voters have beliefs—defensible or not—about how the world works. They tend to support politicians who favor policies that, in the voters' own minds, will be socially beneficial. Politicians, in turn, need voter support to gain and retain office. While few are above faking support for popular views, this is rarely necessary: Successful candidates usually sincerely share voters' worldview. When special interests woo politicians, they tailor their demands accordingly. They ask for concessions along policy margins where the voice of public opinion is silent anyway. The media, finally, do their best to entertain the public. Since scandalous behavior by politicians and interest groups is entertaining, the media are watchdogs. Like all watchdogs, though, the media have a subordinate role. If their coverage, however sound, conflicts with viewers' core beliefs, they change the channel.

Conclusion

To undermine the Miracle of Aggregation, this book focuses on the empirical evidence that voters' beliefs about *economics* are systematically mistaken. This does not imply that their beliefs about other topics are any sounder. In fact, I hope that experts in other fields will use my framework to explain how biased beliefs about *their* area of specialty distort policy.

The reason why I emphasize economics is that it is at the heart of most modern policy disputes. Regulation, taxes, subsidies—they all hinge on beliefs about how policy affects economic outcomes. The modal respondent in the National Election Studies ranks economic issues as "the most important problem" in most election years. In fact, if you classify "social welfare" issues like welfare, the environment, and health care as economic, then economic issues were "the most important problem" in *every* election year from 1972 to 2000.[70] Biased beliefs about economics make democracy worse at what it does most. Understanding these biases is therefore important not just for economists, but for everyone who studies politics. If that is not motivation enough, economists' love/hate relationship with the Miracle of Aggregation—official embrace, punctuated by exasperated under-the-table complaints about economic illiteracy—makes for a juicy story.

The empirics of economic beliefs serve as the springboard for a new perspective on democracy. How can economic theory accommodate the empirical evidence on systematic bias? Conceptually, the necessary change is not radical: Just add one new ingredient—preferences over beliefs—to the rational choice stew. Yet substantively, my account almost reverses the rational choice consensus. I see neither well-functioning democracies nor democracies highjacked by special interests. Instead, I see democracies that fall short because voters get the foolish policies they ask for. Adding one new ingredient to the rational choice stew gives it a starkly different flavor.

Chapter 2

SYSTEMATICALLY BIASED BELIEFS ABOUT ECONOMICS

> Logical minds, accustomed to being convinced by a chain of somewhat close reasoning, cannot avoid having recourse to this mode of persuasion when addressing crowds, and the inability of their arguments always surprises them.
>
> —*Gustave Le Bon,* The Crowd[1]

In their modern theoretical work, economists look almost uniformly hostile to the view that people suffer from systematic bias. Nearly every formal model takes for granted that whatever individuals' limitations, on average they get things right. The approach that Gary Becker championed is now the norm:

> I find it difficult to believe that most voters are systematically fooled about the effects of policies like quotas and tariffs that have persisted for a long time. I prefer instead to assume that voters have unbiased expectations, at least of policies that have persisted. They may overestimate the dead weight loss from some policies, and underestimate it from others, but on the average they have a correct perception.[2]

Journals regularly reject theoretical papers that explicitly take the opposite position on methodological grounds: "You can't assume that." Papers that *covertly* introduce systematic bias risk being "outed."[3] In a well-known piece in the *Journal of Political Economy,* Stephen Coate and Stephen Morris worry that other economists are smuggling in the "unreasonable assumptions" that voters "have biased beliefs about the effects of policies" and "could be persistently fooled."[4] Dani Rodrik similarly laments, "The bad news is that the habit of attributing myopia or irrationality to political actors—whether explicitly or, more often, implicitly—persists."[5] Translation: These eminent social scientists are demanding that their colleagues honor the ban on irrationality in deed as well as word.

Evidence of Bias from Psychology and Public Opinion Research

Economists' theoretical aversion to systematic bias has fortunately not prevented empirical work from moving forward. Beyond the confines of their discipline, economists' strictures have been largely ignored. Psychologists like Daniel Kahneman and Amos Tversky have unearthed a diverse list of biases to which humans are prone.[6] For example, individuals overestimate the probability of vivid, memorable events such as airplane crashes. Other studies confirm that markedly more than 50% of people put themselves in the upper half of the distribution of many favorable attributes.[7] Numerous economists have built on psychologists' work, giving rise to the field of Psychology and Economics.[8]

This body of research proves that systematic mistakes exist. It is a powerful argument for keeping an open mind about the frailty of human understanding. Nevertheless, moving from laboratory to real life is somewhat perilous.[9] It is one thing to show that people fall short of a theoretical ideal of rationality in contrived experimental conditions. It is another to infer that irrational beliefs undermine their real-world choices—the decisions that human beings make in the environment where they were "born and raised."[10] After all, people might be *good at what they do* even though their general cognitive skills make logicians and statisticians cringe. Psychologists call this "ecological rationality"—the ability to choose sensibly in your natural habitat.[11] A mechanic who fails to notice correlations in a laboratory experiment may ably diagnose your car trouble. Voters might have sensible views about the issues of the day even though the clunkiest computer on the market beats them in chess.

It is hard to remain cavalier, however, if your mechanic affirms that cars run on sand instead of gasoline. How could anyone who holds this belief be trusted with a car? The error is directly relevant to practical decisions, and points its adherent in a dangerous direction. Roughly the same is true if voters think that the biggest item in the federal budget is foreign aid. With such a distorted picture of where their tax dollars go, they are likely to spurn responsible politicians with realistic proposals in favor of demagogues who promise to painlessly balance the budget.

The question that naturally presents itself, then, is: Do voters have biased beliefs about questions directly relevant to policy? While economists have shied away from this topic, public opinion researchers have not. They find voter bias to be common and quantitatively significant.[12] To escape their conclusion, one must reject the whole idea of "grading" the quality of public opinion—effectively letting the public act as the judge in its own case.

The simplest way to test for voter bias is to ask questions with objective quantitative answers, like the share of the federal budget dedicated to national defense or Social Security. Since researchers know the true numbers, they can statistically compare respondents' expressed beliefs to the facts. One high-quality example is the National Survey of Public Knowledge of Welfare Reform and the Federal Budget.[13] It presents strong evidence that the public systematically overestimates the share of government spending on welfare and foreign aid, and underestimates the share devoted to national defense and especially Social Security.

The main drawback of these studies is that many interesting questions are only answerable with a degree of ambiguity. Suppose you wonder if the public systematically underestimates the benefits of free trade. You cannot simply compare public opinion to Known Fact from the *Statistical Abstract of the United States*.[14] But several political scientists propose and apply a creative alternative. They estimate voters' "enlightened preferences"—the preferences they would have if they were "fully informed," or, to be more precise, far better informed.[15] This is a three-step process:

1. Administer a survey of policy preferences *combined with* a test of objective political knowledge.
2. Statistically estimate individuals' policy preferences as a function of their objective political knowledge and their demographics—such as income, race, and gender.
3. Simulate what policy preferences *would* look like if all members of all demographic groups had the *maximum* level of objective political knowledge.

Thus, you begin by collecting data on respondents' preferred policies—whether they want more or less government spending, whether they want to reduce the deficit by raising taxes, whether they are pro-choice or pro-life. Next, you test respondents' objective political knowledge. Think of it as a test of their "Political I.Q." See if they know how many senators each state has, who the chief justice of the Supreme Court is, whether Russia is a member of NATO, and so on.

Once you know respondents' Political I.Q., you can use it—along with information on respondents' income, race, gender, and so on—to statistically predict their policy preferences. You can see whether, for example, the average person with high Political I.Q. favors more or less government spending than the average person with low Political I.Q.

Table 2.1
Average Policy Preferences

Income	*Knowledge*	*% of Population*	*Average Response*
High	High	25	3
High	Low	25	5
Low	High	25	4
Low	Low	25	6
Average Preference			4.5
Enlightened Preference			3.5

Armed with this information, you can guesstimate what an individual *would* think if his demographics stayed the same but his Political I.Q. rose to godly heights. If a poor man with a low Political I.Q. learned a lot more about politics but stayed poor, would he change his mind about welfare policy? If so, how?

Finally, once you know how *one individual* would revise his opinions, you can calculate how the *whole distribution* of opinions would change if *everyone* had the maximum Political I.Q. All you have to do is figure out what each and every individual would want given maximum political knowledge, then compare the new distribution to the old.

To work through a simple example, imagine there are two demographic groups—rich and poor—and two knowledge levels—low and high, for a total of four categories. Each category has the same fraction of people—25% each. Respondents rate their preferred welfare policy on the scale from 0 to 10, where 0 means drastic cuts and 10 means drastic increases. The average response for the whole population is 4.5.

To calculate the enlightened preferences of the whole population, replace the actual answers of the low-knowledge respondents with the average answer of high-knowledge respondents *with the same income.* Assign the average preference of the high-knowledge rich respondents—3—to *all* rich respondents. Assign the average preference of the high-knowledge poor respondents—4—to *all* poor respondents. The new average—3.5—is the population's enlightened preference.

One key feature of the enlightened preference approach is that *in the absence of systematic effects of knowledge on policy preferences,* there would be nothing to report. The distribution of enlightened preferences would equal the distribution of actual, "unenlightened" preferences.

In practice, though, the enlightened preference approach has a big payoff: Systematic effects of knowledge on policy preferences are large and ubiquitous. As Althaus explains: "Contrary to the predictions of collective rationality models, the aggregate opinions of ill-informed respondents are usually more one-sided than those of the well informed."[16] He goes on to provide an excellent summary of the three most noteworthy patterns in the data:

1. "First, fully informed opinion on foreign policy issues is relatively more interventionist than surveyed opinion but slightly more dovish when it comes to the use and maintenance of military power."[17] If the public's knowledge of politics magically increased, isolationism would be less popular. More knowledgeable individuals favor an active international role for the United States. At the same time, they are less hawkish: They want to be involved in world affairs, but see a greater downside of outright war.

2. "The second pattern among policy questions is for fully informed opinion to hold more progressive attitudes on a wide variety of social policy topics, particularly on those framed as legal issues."[18] Most notably, a more knowledgeable public would be more pro-choice, more supportive of gay rights, and more opposed to prayer in school.

3. "The third pattern in policy questions is for simulated opinions to be more ideologically conservative on the scope and applications of government power. In particular, fully informed opinion tends to be fiscally conservative when it comes to expanding domestic programs, to prefer free market solutions over government intervention to solve policy problems, to be less supportive of additional government intervention to protect the environment, and to prefer a smaller and less powerful federal government." For example, the 1996 American National Election Study asks which of the following two positions is closer to the respondent's views: "One, we need a strong government to handle today's complex economic problems; or two, the free market can handle these problems without government becoming involved."[19] Fully informed opinion was more promarket. Beliefs about welfare and affirmative action fit the same pattern: While political knowledge increases support for equal opportunity, it decreases support for equal results.

It is hard to swallow the idea that if people knew more, they would agree with you less. Particularly for Althaus's third pattern, it is tempting to dismiss the results. After all, riches and knowledge go together. Why not conclude that more informed people favor free-market poli-

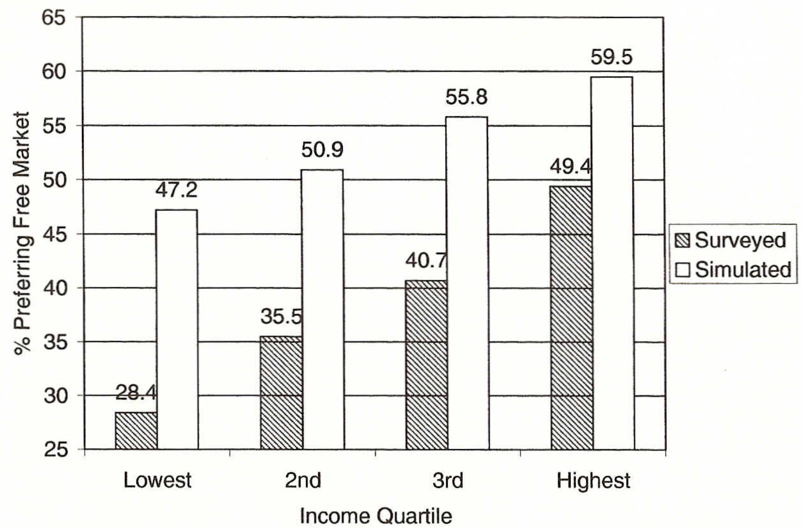

Figure 2.1 "Enlightened Preferences" for Free Market vs. Government
Source: Althaus (2003: 111)

cies because the rich correctly identify their own interests? This objection misses the whole point. The distribution of enlightened preferences is more promarket than the actual distribution of preferences primarily because people of *all income levels* become more promarket as their political knowledge increases. In fact, Althaus shows that as knowledge rises, promarket views increase disproportionately in the *bottom* half of the income distribution.

The effects that Althaus reports are often large. Of those surveyed, 62% expressed a preference for strong government over the free market; 38% took the contrary position. But estimated "enlightened preferences" were 15 percentage points more promarket; the split went from 62/38 to 47/53. The same holds for many other basic policy questions, on everything from deficit reduction (69/31 opposed becomes 52/48 in favor) to abortion on demand (54/46 opposed becomes 56/44 in favor).[20]

Getting Economics Back on Track

Political scientists' findings are frankly embarrassing for economists who study politics. While economists learn more and more about how government would work in theory if voters were immune to system-

atic error, public opinion researchers convincingly show that in practice, systematic voter error is quite real. Indeed, bias is the rule, not the exception.

Economists' blind spot is particularly hard to excuse because they stand at the end of a long tradition with a lot to say about bias. Many of the most famous economists of the past, like Adam Smith and Frédéric Bastiat, obsessed over the public's wrongheaded beliefs about economics, its stubborn resistance to basic principles like opportunity cost and comparative advantage. Today's economists have not merely failed to follow relevant empirical work in a related discipline. They have also turned their backs on what economists used to know.

At least this is what economists have done as researchers. *As teachers*, curiously, most economists honor the wisdom of their forebears. When the latest batch of freshmen shows up for Econ 1, textbook authors and instructors still try to separate students from their prejudices—in the words of Paul Krugman, "to vaccinate the minds of our undergraduates against the misconceptions that are so predominant in educated discussion."[21]

This peculiar disconnect between research and teaching has an important upside. The problem is not that economists have nothing to say about bias. On the contrary, the problem is that economists have a lot to say, but are reluctant to go public, to put their scientific credibility on the line. If this reluctance could be overcome, however, economics would have much to offer. Great economists have been studying systematic bias for centuries, but modern economists have failed to notify psychologists, public opinion specialists, or anyone else. Furthermore, teaching experience has given many living economists shrewd insight into the public's biases. Human knowledge would take several steps forward if economists merely revealed what they already know.

So the glass is half full. Economics is not living up to its potential, but it has a lot of potential. Few economists are currently interested in the vital questions that public opinion researchers are asking. But economists of the past have thought profoundly about these matters, and economists of the present have more to add, even if they keep their cards close to their chest.

Psychologists and public opinion researchers have made an impressive effort to educate economists about the realities of systematic bias. The communication has been largely one-way. It may be jarring, then, to hear that economists can repay the favor. After all their stern admonitions against the assumption of systematic bias, are we to believe that economists have original insights on the topic? It is out of character for economists to hold back.

There is a logical explanation. Few modern economists care about the history of thought, so many of the most penetrating discussions have been ignored or forgotten.[22] Furthermore, in their dual roles as researchers and teachers, economists face starkly different incentives. It is professionally risky to emphasize systematically biased beliefs in the journals, but perfectly respectable to do so in the classroom. This is an ideal climate for ideas to quietly endure.

Very well: What do economists—past and present—have to say about systematic error? Out of all the complaints that economists lodge against laymen, four families of beliefs stand out.[23] This book will refer to these families as *antimarket bias, antiforeign bias, make-work bias,* and *pessimistic bias.* Economists have long seen them as widely accepted but sadly mistaken. The rest of this chapter describes the systematic errors that economists accuse the public of making, and briefly explains why economists think they are right and the public is wrong. Formal statistical evidence waits in the next chapter.

Antimarket Bias

> Commerce is, by its very essence, satanic.
>
> —*Charles Baudelaire*[24]

I first learned about farm price supports in the produce section of the grocery store. I was in kindergarten. My mother explained that price supports *seemed* to make fruits and vegetables more expensive, but assured me that this conclusion was simplistic. If the supports went away, so many farms would go out of business that prices would soon be higher than ever. If I had been more precocious, I would have asked a few questions. Were there price support programs for the other groceries? Why not? As it happened, though, I accepted what she told me, and felt a lingering sense that price competition is bad for buyer and seller alike.

This was one of my first memorable encounters with **antimarket bias**, *a tendency to underestimate the economic benefits of the market mechanism.*[25] The public has severe doubts about how much it can count on profit-seeking business to produce socially beneficial outcomes. They focus on the *motives* of business, and neglect the discipline imposed by competition. While economists admit that profit-maximization plus market imperfections can yield bad results, non-economists tend to view successful greed as socially harmful per se.

Near the end of his life, Joseph Schumpeter eloquently captured the essence of antimarket bias:

> Capitalism stands its trial before judges who have the sentence of death in their pockets. They are going to pass it, whatever the defense they may hear; the only success victorious defense can possibly produce is a change in the indictment.[26]

Arguably the greatest historian of economic thought, Schumpeter elsewhere matter-of-factly speaks of "the ineradicable prejudice that every action intended to serve the profit interest must be anti-social by this fact alone."[27] Considering his encyclopedic knowledge, this remark speaks volumes. Antimarket bias is not a temporary, culturally specific aberration. It is a deeply rooted pattern of human thinking that has frustrated economists for generations.[28]

Economists across the political spectrum criticize antimarket bias. Liberal Democratic economists echo and amplify Schumpeter's theme. Charles Schultze, head of Jimmy Carter's Council of Economic Advisors, proclaims, "Harnessing the 'base' motive of material self-interest to promote the common good is perhaps *the* most important social invention mankind has yet achieved." But politicians and voters fail to appreciate this invention. "The virtually universal characteristic of [environmental] policy . . . is to *start* from the conclusion that regulation is the obvious answer; the pricing alternative is never considered."[29]

Projecting your own preferences onto the majority is a cliché of democratic politics. Pundits rarely proclaim, "The American people want X, but they're wrong." In the face of antimarket bias, however, many economists loudly defy public opinion. It would be hard to find an economist more in favor of free markets than Ludwig von Mises. Yet does he argue that unresponsive elites *force* big government on an unwilling majority? No, he freely grants that the policies he opposes reflect the will of the people: "There is no use in deceiving ourselves. American public opinion rejects the market economy."[30] The problem with democracy is not politicians' shirking, but the public's antimarket bias:

> For more than a century public opinion in Western countries has been deluded by the idea that there is such a thing as "the social question" or "the labor problem." The meaning implied was that the very existence of capitalism hurts the vital interests of the masses, especially those of the wage earners and the small farmers. The preservation of this manifestly unfair system cannot be tolerated; radical reforms are indispensable.
>
> The truth is that capitalism has not only multiplied population figures but at the same time improved the people's standard of living in an unprecedented way.[31]

There are too many variations on antimarket bias to list them all. Probably the most common is to *equate market payments with transfers*, ignoring their incentive properties.[32] (A "transfer," in economic jargon, is a no-strings-attached movement of wealth from one person to another.) All that matters, then, is how much you empathize with the transfer's recipient compared to the transfer's provider. To take the classic case: People tend to see profits as a gift to rich. So unless you perversely pity the rich more than the poor, limiting profits seems like common sense.

Economists across the ideological spectrum find it hard to respond to this outlook with anything but derision. Profits are not a handout, but a quid pro quo: "*If* you want to get rich, *then* you have to do something people will pay for." Profits give incentives to reduce production costs, move resources from less-valued to more-valued industries, and dream up new products. This is the central lesson of *The Wealth of Nations*: the "invisible hand" quietly persuades selfish businessmen to serve the public good:

> Every individual is continually exerting himself to find out the most advantageous employment for whatever capital he can command. It is his own advantage, indeed, and not that of the society, which he has in view. But the study of his own advantage naturally, or rather necessarily leads him to prefer that employment which is most advantageous to the society.[33]

For modern economists, these are truisms, but they usually miss the deeper lesson. If Adam Smith's observations are only truisms, why did he bother to write them? Why do teachers of economics keep quoting and requoting this passage? *Because Smith's thesis was counterintuitive to his contemporaries, and remains counterintuitive today.* A truism for the few is heresy for the many. Smith, being well aware of this fact, tries to shock readers out of their dogmatic slumber: "By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the publick good."[34] Business profit appears to be a transfer but benefits society; business philanthropy appears to benefit society but is at best a transfer.

The same applies to other unpopular "windfalls." Attacks on "obscene profits" dominate antimarket thought in recent centuries, but in earlier times the leading culprit was interest or "usury."[35] In popular imagination, interest has but one effect: enriching moneylenders and impoverishing those who depend upon them. In his classic *Capital and Interest*, Eugen von Böhm-Bawerk observes that prejudice against debt markets goes back millennia:

> The creditor is usually rich, the debtor poor, and the former appears in the hateful light of a man who squeezes from the little that the poor man has, something, in the shape of interest, that he can add to his own superfluous riches. It is not to be wondered at, then, that both the ancient world and especially the Christian Middle Ages were exceedingly unfavorable to interest.[36]

Timur Kuran's dissection of Islamic economics reports that opposition to interest has recently enjoyed a powerful revival:

> To be recognized as an Islamic economist it is not sufficient to be a learned Muslim who contributes to economic debates. One must be opposed in principle to all interest.[37]

Interest is economic enemy number one throughout the Muslim world, and many governments actively favor interest-free "Islamic banking":

> The objective is not simply to make Islamic banking more accessible. It is to make all banking Islamic. Certain campaigns against conventional banking have succeeded in making "interest-laden" banking illegal. In Pakistan all banks were ordered in 1979 to purge interest from their operations within five years, and in 1992 the Sharia court removed various critical exemptions. Interest prohibitions have gone into effect also in Iran and the Sudan.[38]

What is everyone from ancient Athens to modern Islamabad missing? Like profit, interest is not a gift, but a quid pro quo: The lender earns interest in exchange for *delaying* his consumption. A government that successfully stamped out interest payments would be no friend to those in need of credit, for the same stamp would crush lending as well.

Skipping ahead to the present, Alan Blinder blames opposition to tradable pollution permits on antimarket bias.[39] Why let people "pay to pollute," when we can force them to cease and desist? The textbook answer is that tradable permits get you more pollution abatement for the same cost. The firms able to cheaply cut their emissions do so, selling their excess pollution quota to less flexible polluters. End result: More abatement bang for your buck. A price for pollution is therefore not a pure transfer; it creates incentives to improve environmental quality as cheaply as possible. But noneconomists disagree—including relatively sophisticated policy insiders. Blinder discusses a fascinating survey of 63 environmentalists, congressional staffers, and industry lobbyists. *Not one* could explain economists' standard rationale for tradable permits.[40]

The second most prominent avatar of antimarket bias is *monopoly theories of price*. Economists obviously acknowledge that monopolies exist. But the public habitually makes "monopoly" a scapegoat for scarcity.[41] The idea that supply and demand *usually* controls prices is hard to accept. Even in industries with many firms, noneconomists treat prices as a function of their CEO's intentions and conspiracies. Economists understand, however, that collusion is a Prisoners' Dilemma.[42] If an industry has more than a handful of firms, industry-wide conspiracies are unlikely to succeed.

Historically, it has been especially common for the public to pick out middlemen as uniquely vicious "monopolists." *Look* at these parasites: They buy products, "mark them up," and then resell us the "exact same thing." Bastiat attacks contemporary socialists for "hate speech" against the middleman:

> They would willingly eliminate the capitalist, the banker, the speculator, the entrepreneur, the businessman, and the merchant, accusing them of interposing themselves between producer and consumer in order to fleece them both, without giving them anything of value. . . . Then, with the aid of those high-sounding words: *Exploitation of man by man, speculation in hunger, monopoly,* they set themselves to blackening the name of business and throwing a veil over its benefits.[43]

What could these so-called benefits possibly be? Economists have a standard response. Transportation, storage, and distribution are valuable services—a fact that becomes obvious whenever you need a cold drink in the middle of nowhere. And like most valuable services, they are not costless. The most that is reasonable to ask, then, is not that middlemen work for free, but that they face the daily test of competition. Given the large number of firms one typically sees in these markets, economists find accusations of "monopoly" fairly bizarre.[44]

While we are on the subject, we should not forget a conspiracy theory that is as popular as it is preposterous: Capitalists join forces to keep wages at the subsistence level. Many still see Third World economies through this lens, and tell a watered-down version of the same story for the First. But there are literally millions of employers in the First World. Just imagining the logistics of such a plot is laughable. Its more literate defenders point out that Adam Smith himself worried about employer conspiracies,[45] conveniently overlooking the fact that in Smith's time, high transportation and communication costs left workers with far fewer alternative employers.

What about the Third World? The number of employment options is often substantially lower. But if there really were a vast employer conspiracy to hold down wages, the Third World would be an especially profitable place to invest. Query: Does investing your life savings in poor countries seem like a painless way to get rich quick? If not, you at least tacitly accept economists' sad-but-true theory of Third World poverty: Its workers earn low wages because their productivity is low.[46]

Collusion aside, the public's implicit model of price determination is that businesses are monopolists of variable altruism. If a CEO feels greedy when he wakes up, he raises his price—or puts low-quality merchandise on the shelves. Nice guys charge fair prices for good products; greedy scoundrels gouge with impunity for junk. It is only a short step for market skeptics to add, "And nice guys finish last." As John Mueller emphasizes, the public links greed with almost everything bad: Capitalism is "commonly maligned for the deceit, unfairness, dishonesty, and discourtesy that are widely taken to be the inevitable consequences of its apparent celebration of greed."[47] Or as villainous innkeeper Thenardier sings in *Les Misérables*:

> Charge 'em for the lice,
> Extra for the mice,
> Two percent for looking in the mirror twice!
> Here a little slice,
> There a little cut,
> Three percent for sleeping with the window shut!
> When it comes to fixing prices,
> There are a lot of tricks he knows.
> How it all increases,
> All those bits and pieces,
> Jesus! It's amazing how it grows![48]

Never mind that Thenardier is bankrupt before the end of the first act. Presumably he was run out of business by an even greedier competitor.

Where does the public go wrong? For one thing, *asking* for more can *get* you less. Giving your boss the ultimatum, "Double my pay or I quit" usually ends badly. The same holds in business: raising price and cutting quality often leads to lower profits, not higher. Mueller makes the deeper point that many strategies that work as a one-shot scam backfire as routine policies.[49] It is hard to make a profit if no one sets foot in your store twice. Intelligent greed militates against "deceit, unfairness, dishonesty, and discourtesy" because they damage the seller's reputation.

An outsider who eavesdrops on Krugman's or Stiglitz's debates with other economists might get the impression that the benefits of markets remain controversial.[50] To understand the conversation, you have to notice what economists are *not* debating. They are not debating whether prices give incentives, or if a vast business conspiracy runs the world. Almost all economists recognize the core benefits of the market mechanism; they disagree only at the margin.

Antiforeign Bias

> The impressive fact about ordinary Americans is that, despite years of education and propaganda, they still cling stubbornly to their skepticism about the global economy. With their usual condescension, elite commentators dismiss the popular expressions of concern as uninformed and nativist, the misplaced fears of people ill equipped to grasp the larger dimensions of economics.
> —*William Greider,* Who Will Tell the People?[51]

A shrewd businessman I know has long thought that everything wrong in the American economy could be solved with two expedients:

1. A naval blockade of Japan.
2. A Berlin Wall at the Mexican border.

This is only a mild caricature of his position, which is all the more puzzling because he usually gets the mutual benefits of trade. He does well on eBay. But like most noneconomists, he suffers from **antiforeign bias**, *a tendency to underestimate the economic benefits of interaction with foreigners.*[52] When outsiders emerge on the economic scene, they do a mental double take: "Foreigners? Could it really be mutually beneficial for us to trade with *them*?"

Popular metaphors equate foreign trade with racing and warfare, so you might say that antiforeign views are embedded in our language. Perhaps foreigners are sneakier, craftier, or greedier. Whatever the reason, they supposedly have a special power to exploit us. As Newcomb explains:

> It has been assumed as an axiom which needs no proof, because none would be so hardy as to deny it, that foreign nations cannot honestly be in favor of any trade with us that is not to our disadvantage; that the very fact that they want to trade with us is a good reason for receiving their overtures with suspicion and obstructing their wishes by restrictive legislation.[53]

Alan Blinder echoes Newcomb's lament a century later. People around the world scapegoat foreigners:

> When jobs are scarce, the instinct for self-preservation is strong, and the temptation to blame foreign competitors is all but irresistible. It was not only in the United States that the bunker mentality took hold. That most economists branded the effort to save jobs by protectionism shortsighted and self-defeating was beside the point. Legislators are out to win votes, not intellectual kudos.[54]

There is probably no other popular opinion that economists have found so enduringly objectionable. In *The Wealth of Nations*, Smith admonishes his countrymen:

> What is prudence in the conduct of every private family, can scarce be folly in a great kingdom. If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage.[55]

As far as his peers were concerned, Smith's arguments won the day. Over a century later, Newcomb could securely observe in the *Quarterly Journal of Economics* that "one of the most marked points of antagonism between the ideas of the economists since Adam Smith and those which governed the commercial policy of nations before his time is found in the case of foreign trade."[56] There was a little backsliding during the Great Depression,[57] but economists' proforeign views abide to this day. Even theorists like Paul Krugman who specialize in exceptions to the optimality of free trade frequently downplay their findings as curiosities:

> This innovative stuff is not a priority for today's undergraduates. In the last decade of the 20th century, the essential things to teach students are still the insights of Hume and Ricardo. That is, we need to teach them that trade deficits are self-correcting and that the benefits of trade do not depend on a country having an absolute advantage over its rivals.[58]

Economists are especially critical of the antiforeign outlook because it does not just *happen* to be wrong; it frequently conflicts with elementary economics. Textbooks teach that total output increases if producers specialize and trade. On an individual level, who could deny it? Imagine how much time it would take to grow your own food, when a few hours' wages spent at the grocery store feed you for weeks. Analogies between individual and social behavior are at times misleading, but this is not one of those times. International trade is, as Steven Landsburg explains, a technology:

> There are two technologies for producing automobiles in America. One is to manufacture them in Detroit, and the other is to grow them in Iowa. Everybody knows about the first technology; let me tell you about the second. First you plant seeds, which are the raw materials from which automobiles are constructed. You wait a few months until wheat appears. Then you harvest the wheat, load it onto ships, and sail the ships westward into the Pacific Ocean. After a few months, the ships reappear with Toyotas on them.[59]

And this is one amazing technology. The Law of Comparative Advantage, one of most fascinating theorems in economics, shows that mutually beneficial international trade is possible even if one nation is *less productive in every way*.[60] Suppose an American can make 10 cars or five bushels of wheat, and a Mexican can make one car or two bushels of wheat. Though the Americans are better at both tasks, specialization and trade increase production. If one American switches from wheat to cars, and three Mexicans switch from cars to wheat, world output goes up by two cars *plus* one bushel of wheat.

How can anyone overlook trade's remarkable benefits? Adam Smith, along with many 18th- and 19th-century economists, identifies the root error as misidentification of money and wealth: "A rich country, in the same manner as a rich man, is supposed to be a country abounding in money; and to heap up gold and silver in any country is supposed to be the best way to enrich it."[61] It follows that trade is zero-sum, since the only way for a country to make its balance more favorable is to make another country's balance less favorable.

Even in Smith's day, however, his story was probably too clever by half. The root error behind 18th-century mercantilism was unreasonable distrust of foreigners. Otherwise, why would people focus on money draining out of "the nation," but not "the region," "the city," "the village," or "the family"? Anyone who consistently equated money with wealth would fear *all* outflows of precious metals. In practice, human beings then and now commit the balance-of-trade fallacy only when *other countries* enter the picture. No one loses sleep about the trade balance between California and Nevada, or me and Tower Records. The fallacy is not treating *all* purchases as a cost, but treating *foreign* purchases as a cost.[62]

Modern conditions do make antiforeign bias easier to spot. To take one prominent example, immigration is far more of an issue now than it was in Smith's time. Economists are predictably quick to see

the benefits of immigration. Trade in labor is roughly the same as trade in goods. Specialization and exchange raise output—for instance, by letting skilled American moms return to work by hiring Mexican nannies.

In terms of the balance of payments, immigration is a nonissue. If an immigrant moves from Mexico City to New York, and spends all his earnings in his new homeland, the balance of trade does not change. Yet the public still looks on immigration as a bald misfortune: jobs lost, wages reduced, public services consumed. Many see a *larger* trade deficit as a fair price to pay for *reduced* immigration. One peculiar *pro*-NAFTA argument is that if we admit more Mexican goods, we will have fewer Mexicans.[63] It should be evident, then, that the general public sees immigration as a distinct danger—independent of, and more frightening, than an unfavorable balance of trade. People feel all the more vulnerable when they reflect that these foreigners are not just selling us their products. *They live among us.*

It is misleading, however, to think about "foreignness" as either/or. From the viewpoint of the typical American, Canadians are less foreign than the British, who are in turn less foreign than the Japanese. During 1983–87, 28% of Americans in the General Social Survey admitted they disliked Japan, but only 8% disliked England, and a scant 3% disliked Canada.[64] It is not surprising, then, that the degree of antiforeign bias varies by country. Objective measures like the volume of trade or the trade deficit are often secondary to physical, linguistic, and cultural similarity. Trade with Canada or Great Britain generates only mild alarm compared to trade with Mexico or Japan. U.S. imports from, and trade deficits with, Canada exceeded those with Mexico *every* year from 1985 to 2004.[65] During the anti-Japan hysteria of the eighties, British foreign direct investment in the United States always exceeded that of the Japanese by at least 50%.[66] Foreigners who look like us and speak English are hardly foreign at all.

Calm reflection on the international economy reveals much to be thankful for, and little to fear. On this point, economists past and present agree. But an important proviso lurks beneath the surface. Yes, there is little to fear about the international economy itself. But modern researchers—unlike economists of the past and teachers of the present—rarely mention that *attitudes* about the international economy are another story. Paul Krugman hits the nail on the head: "The conflict among nations that so many policy intellectuals imagine prevails is an illusion; but it is an illusion that can destroy the reality of mutual gains from trade."[67]

Make-Work Bias

> What we should wish for, clearly, is that each hectare of land produce little wheat, and that each kernel of wheat contain little sustenance—in other words, that our land should be unfruitful. . . . [O]ne could even say that job opportunities would be in direct proportion to this unfruitfulness. . . . What we should desire still more is that human intelligence should be enfeebled or extinguished; for, so long as it survives, it ceaselessly endeavors to increase the *ratio of the end to the means and of the product to the effort.*
>
> —*Frédéric Bastiat,* Economic Sophisms[68]

I was an undergraduate when the Cold War ended, and I can still remember talking about military spending cuts with a conservative student. The whole idea made her nervous. Why? Because she had no idea how a market economy would absorb the discharged soldiers. She did not even distinguish between short-term and long-term consequences of the cuts; in her mind, to layoff 100,000 government employees was virtually equivalent to disemploying 100,000 people for life. Her position is particularly striking if you realize that her objection applies equally well to spending on government programs that—as a conservative—she opposed.

If a well-educated individual ideologically opposed to wasteful government spending thinks like this, it is hardly surprising that she is not alone. The public often literally believes that labor is better to use than conserve. Saving labor, producing more goods with fewer man-hours, is widely perceived not as progress, but as a danger. I call this **make-work bias**, *a tendency to underestimate the economic benefits of conserving labor.*[69] Where noneconomists see the destruction of jobs, economists see the essence of economic growth—the production of more with less. Alan Blinder explains:

> If you put the question directly, "Is higher productivity better than lower productivity?," few people will answer in the negative. Yet policy changes are often sold as ways to "create jobs." . . . Jobs can be created in two ways. The socially beneficial way is to enlarge GNP, so that there will be more useful work to be done. But we can also create jobs by seeing to it that each worker is less productive. Then more labor will be required to produce the same bill of goods. The latter form of job creation does raise employment; but it is the path to rags, not riches.[70]

For an individual to prosper, he only needs to *have* a job. But society can only prosper if individuals *do* a job, if they create goods and services that someone wants.

Economists have been at war with make-work bias for centuries. Bastiat ridicules the equation of prosperity with jobs as "Sisyphism," after the mythological fully-employed Greek who was eternally condemned to roll a boulder up a hill. In the eyes of the public:

> Effort itself constitutes and measures wealth. To progress is to increase the *ratio of effort to result.* Its ideal may be represented by the toil of Sisyphus, at once barren and eternal.[71]

In contrast, for the economist:

> Wealth . . . increases proportionately to the increase in the *ratio of result to effort.* Absolute perfection, whose archetype is God, consists in the widest possible distance between these two terms, that is, a situation in which no effort at all yields infinite results.[72]

In the 1893 *Quarterly Journal of Economics,* Simon Newcomb explains:

> The divergence between the economist and the public is by no means confined to foreign trade. We find a direct antagonism between them on nearly every question involving the employment of labor. . . . The idea that the utility and importance of an industry are to be measured by the employment which it gives to labor is so deeply rooted in human nature that economists can scarcely claim to have taken the first step towards its eradication.[73]

His last remark is particularly striking. Nineteenth-century economists believed they had diagnosed enduring economic confusions, not intellectual fads, and they were right. Almost a hundred years after Newcomb, Alan Blinder makes the same lament. But Blinder's critique of make-work bias, unlike Newcomb's, did not appear in a leading academic journal like the *QJE.* He had to venture beyond the ivory tower with a popular book to find his audience. Referees would almost certainly have taken issue with Blinder—not because modern economists agree with make-work bias, but because it is disreputable to claim that *anyone* embraces such folly.

But embrace it they do. The crudest form of make-work bias is Luddite fear of the machine. Common sense proclaims that machines make life easier for human beings. The public qualifies this "naive" position by noting that machines also make people's lives harder by throwing them out of work. And who knows? Maybe the second effect dominates the first. During the Great Depression, intellectual fads like Howard Scott's "technocracy" movement blamed the nation's woes on technological progress.

> As Scott saw the future, the inexorable increase in productivity, far outstripping opportunities for employment or investment, must mean permanent and growing unemployment and permanent and growing debt, until capitalism collapsed under the double load.[74]

Economists' love of qualification is notorious, but most doubt that the protechnology position needs to be qualified. Technology often *creates* new jobs; without the computer, there would be no jobs in computer programming or software development. But the fundamental defense of labor-saving technology is that employing more workers than you need wastes valuable labor. If you pay a worker to twiddle his thumbs, you could have paid him to do something socially useful instead.

Economists add that market forces readily convert this *potential* social benefit into an actual one. After technology throws people out of work, they have an incentive to find a new use for their talents. Cox and Alm aptly describe this process as "churn": "Through relentless turmoil, the economy re-creates itself, shifting labor resources to where they're needed, replacing old jobs with new ones."[75] They illustrate this process with history's most striking example: The drastic decline in agricultural employment:

> In 1800, it took nearly 95 of every 100 Americans to feed the country. In 1900, it took 40. Today, it takes just 3. . . . The workers no longer needed on farms have been put to use providing new homes, furniture, clothing, computers, pharmaceuticals, appliances, medical assistance, movies, financial advice, video games, gourmet meals, and an almost dizzying array of other goods and services. . . . What we have in place of long hours in the fields is the wealth of goods and services that come from allowing the churn to work, wherever and whenever it might occur.[76]

These arguments sound harsh. That is part of the reason why they are so unpopular: people would rather feel compassionately than think logically. Many economists advocate government assistance to cushion displaced workers' transition, and retain public support for a dynamic economy. Alan Blinder recommends extended unemployment insurance, retraining, and relocation subsidies.[77] Other economists disagree. But almost all economists grant that stopping transitions has a grave cost.

Exasperating as the Luddite mentality is, countries rarely move beyond rhetoric and turn back the clock of technology. But you cannot say the same about another controversy infused with make-work bias: hostility to downsizing. What could possibly be *good* about downsizing? Every time we figure out how to accomplish a goal using fewer workers, it enriches society, because labor is a valuable resource.

> We have a tremendous stake in allowing the churn to grind forward, putting our labor resources to work raising living standards, to give us more for less. We can't get around it: The churn's promise of higher living standards can't be reaped without job losses. . . . Downsizing companies will be vilified for making what appear to be hardhearted decisions. When passions cool, however, there ought to be time to recognize that, in most cases, the dirty work had to be done.[78]

Inside of a household, everyone understands what Cox and Alm call "the upside of downsizing."[79] You do not worry about how to spend the hours you save when you buy a washing machine. There are always other ways to spend your time. Bastiat insightfully observes that a loner would never fall prey to make-work bias:

> No solitary man would ever conclude that, in order to make sure that his own labor had something to occupy it, he should break the tools that save him labor, neutralize the fertility of the soil, or return to the sea the goods it may have brought him. . . . He would understand, in short, that a *saving in labor* is nothing else than *progress*.[80]

The existence of an exchange economy is a necessary condition for make-work confusion to arise.

> But *exchange* hampers our view of so simple a truth. In society, with the division of labor that it entails, the production and the consumption of an object are not performed by the same individual. Each person comes to regard his own labor no longer as a means, but as an end.[81]

If you receive a washing machine as a gift, the benefit is yours; you have more free time and the same income. If you get downsized, the benefit goes to other people; you have more free time, but your income temporarily falls. In both cases, though, society conserves valuable labor.

Pessimistic Bias

> Two [more] generations should saturate the world with population, and should exhaust the mines. When that moment comes, economical decay, or the decay of economical civilization, should set in.
> —*Henry Adams, 1898*[82]

I first encountered antidrug propaganda in second grade. It was called "drug education," but it was mostly scary stories. I was told that kids around me were using drugs, and that a pusher would soon offer me some, too. Teachers warned that more and more kids would become addicts, and by the time I was in junior high I would be surrounded by them. Authority figures would occasionally speculate about our adulthood, and wonder how a country could function with such a degenerate workforce. Yet another reason, they mused, that this country is going downhill.

The junior high dystopia never materialized. I am still waiting to be offered drugs. By the time I reached adulthood, it was apparent that most people were not going to their jobs high on PCP. Generation X used its share of illegal narcotics, but its entry into the workforce accompanied the marvels of the Internet age, not a stupor-induced decline in productivity and innovation.

My teachers' predictions about America's economic future turned out to be laughable. But they fit nicely into a larger pattern. As a general rule, the public believes economic conditions are not as good as they really are. It sees a world going from bad to worse; the economy faces a long list of grim challenges, leaving little room for hope. I refer to the public's leanings as **pessimistic bias**, *a tendency to overestimate the severity of economic problems and underestimate the (recent) past, present, and future performance of the economy.*[83]

Adam Smith famously ridiculed such attitudes with a one-liner: "There is a great deal of ruin in a nation."[84] His point, which economists often echo, is that the public lacks perspective. A large economy can and usually does progress despite interminable setbacks. While economists debate about *how much* growth to expect, public discourse thinks in terms of stagnation versus decline.

Suppose a congenitally pessimistic doctor examines a patient. There are two kinds of errors to watch out for. For one thing, he would exaggerate the severity of the patient's *symptoms.* After finding a body temperature of 100 degrees, the doctor might exclaim that the patient has a "dangerous fever." But the doctor might also err in his *overall* judgment, giving the patient two weeks to live.

Pessimism about the economy exhibits the same structure. You may be pessimistic about *symptoms,* overblowing the severity of everything from the deficit to affirmative action. But you can also be pessimistic *overall,* seeing negative trends in living standards, wages, and inequality. Public opinion is marked by pessimism in both its forms. Economists constantly advise the public not to lose sleep over the latest economic threat in the news.[85] But they also make a habit of explaining how far mankind has come in the last hundred years, pointing out massive gains we take for granted.[86]

A staple of pessimistic rhetoric is to idealize conditions in the more distant past in order to put recent conditions in a negative light. Arthur Herman's *The Idea of Decline in Western History* asserts that "Virtually every culture past or present has believed that men and women are not up to the standards of their parents and forebears," and asks, "Why is this sense of decline common to all cultures?"[87] In *Primitivism and Related Ideas in Antiquity,* Arthur Lovejoy and George Boas second the view that this pessimistic illusion is nearly universal:

> It is a not improbable conjecture that the feeling that humanity was becoming over-civilized, that life was getting too complicated and over-refined, dates from the time when the cave-men first became such. It can hardly be supposed—if the cave-men were at all like their descendants—that none among them discoursed with contempt on the cowardly effeminacy of living under shelter or upon the exasperating inconvenience of constantly returning for food and sleep to the same place instead of being free to roam at large in wide-open spaces.[88]

Pessimistic bias has a smaller role in the oral tradition of economics than antimarket, antiforeign, or make-work bias. Famous economists of the past frequently overlook it; teachers of economics spend relatively little time rooting it out. But while the voice of oral tradition is softer than usual, it is not silent. Though he did not live to see the Industrial Revolution, Adam Smith declares progress the normal course of events:

> The uniform, constant, and uninterrupted effort of every man to better his condition . . . is frequently powerful enough to maintain *the natural progress of things toward improvement,* in spite both of the extravagance of government, and of the greatest errors of administration. Like the unknown principle of animal life, it frequently restores health and vigour to the constitution, in spite, not only of the disease, but of the absurd prescriptions of the doctor.[89]

However, progress is so gradual that a few pockets of decay hide it from the public view:

> To form a right judgment of it, indeed, we must compare the state of the country at periods somewhat distant from one another. The progress is frequently so gradual that, at near periods, the improvement is not only not sensible, but from the declension either of certain branches of industry, or of certain districts of the country,

things which sometimes happen though the country in general be in great prosperity, *there frequently arises a suspicion that the riches and industry of the whole are decaying.*[90]

David Hume—economist, philosopher, and Adam Smith's best friend—blames popular pessimism on our psychology, not the slow and uneven nature of progress: "The humour of blaming the present, and admiring the past, is strongly rooted in human nature, and has an influence even on persons endued with the profoundest judgment and most extensive learning."[91] Hume elsewhere appeals to pessimistic bias to account for superstition: "Where real terrors are wanting, the soul, active to its own prejudice, and fostering its predominant inclination, finds imaginary ones, to whose power and malevolence it sets no limits."[92]

Despite these promising beginnings, 19th-century economists did little to develop the theme of pessimistic bias. Bastiat and Newcomb say little about it. Nineteenth-century socialists who predicted "immiseration" of the working class met intellectual resistance from economists. But the root of the socialists' forecast was hostility to markets, not pessimism as such. Economists often ridiculed socialists for their wild *optimism* about the impending socialist utopia.[93]

Nineteenth-century opponents of doom and gloom are easier to find in sociology. Alexis de Tocqueville attacks pessimism as "the great sickness of our age."[94] Herbert Spencer finds it exasperating that "the more things improve the louder become the exclamations about their badness."[95] When problems—from mistreatment of women to illiteracy to poverty—are serious, people take them for granted. As conditions improve, the public believes ever more strongly that things have never been worse.

> Yet while elevation, mental and physical, of the masses is going on far more rapidly than ever before—while the lowering of the death-rate proves that the average life is less trying, there swells louder and louder the cry that the evils are so great that nothing short of a social revolution can cure them. In presence of obvious improvements . . . it is proclaimed, with increasing vehemence, that things are so bad that society must be pulled to pieces and re-organised on another plan.[96]

Even leading optimists grant that pessimistic bias has grown worse in the modern era. Herman maintains that it peaked soon after the end of World War I, when "Talking about the end of Western civilization had become as natural as breathing. The only subject left to debate was not whether the modern West was doomed but why." But

pessimism remains at strangely high levels: "While intellectuals have been predicting the imminent collapse of Western civilization for more than one hundred and fifty years, its influence has grown faster during that period than at any time in history."[97]

How can high levels of pessimism coexist with constantly rising standards of living?[98] Though pessimism has abated since World War I, the *gap* between objective conditions and subjective perceptions is arguably greater than ever.[99] Gregg Easterbrook ridicules the failure of the citizens of the developed world to appreciate their good fortune:

> Our forebears, who worked and sacrificed tirelessly in their hopes their descendants would someday be free, comfortable, healthy, and educated, might be dismayed to observe how acidly we deny we now are these things.[100]

Like David Hume, economists Cox and Alm appeal to fundamental human psychology to explain our pessimism: "The present almost always pales when measured against 'the good old days.' " Mild forms of this bias sustain lingering economic malcontent: "Nostalgists often ignore improvements in goods and services, yet remember fondly the prices they paid long ago for the cheapest versions of products."[101] Strong forms make us "open-minded" to paranoid fantasies:

> Some part of human nature connects with the apocalyptic. Time and again, pessimists among us have envisioned the world going straight to hell. Never mind that it hasn't: A lot of us braced for the worst. Whether the source is the Bible or Nostradamus, Thomas Malthus, or the Club of Rome, predictions of calamity aren't easily ignored, no matter how many times we wake up in the morning after the world was supposed to end.[102]

There is an ongoing debate about growth *slowdown.* This is what *relatively* pessimistic economists like Paul Krugman mean when they say that "the U.S. economy is doing badly."[103] Other economists counter that standard numbers inadequately adjust for the rising quality and variety of the consumption basket, and the changing composition of the workforce. The rapid growth of the 1990s raised more doubts.[104] Either way, the worst-case scenario GDP statistics permit—a lower speed of progress—is no disaster. In the face of popular economic pessimism, Krugman, too, exclaims: "I have seen the present, and it works!"[105]

The intelligent pessimist's favorite refuge is to argue that standard statistics like GDP miss important components of our standard of living. The leading candidate is environmental quality, where negative thinking is firmly ensconced—to put it mildly.[106] Pessimists often add that our failure to deal with environmental destruction will soon morph into economic disaster as well. In the 1960s, über-pessimist Paul Ehrlich notoriously predicted that environmental neglect would shortly lead to mass starvation.[107] If resources are rapidly vanishing as our numbers multiply, human beings are going to be poor and hungry, not just out of touch with Mother Earth.

A number of economists have met these challenges. The most wide-ranging is Julian Simon, who argues that popular "doom and gloom" views of resource depletion, overpopulation, and environmental quality are exaggerated, and often the opposite of the truth.[108] Past progress does not *guarantee* future progress, but it creates a strong presumption:

> Throughout the long sweep of history, forecasts of resource scarcity have always been heard, and—just as now—the doomsayers have always claimed that the past was no guide to the future because they stood at a turning point in history. . . . In every period those who would have bet on improvement rather than deterioration in fundamental aspects of material life—such as the availability of natural resources—would usually have been right.[109]

Simon has been a lightning rod for controversy, but his main theses—that natural resources are getting cheaper, population density is not bad for growth, and air quality is improving—are now almost mainstream in environmental economics.[110] Since Michael Kremer's seminal paper "Population Growth and Technological Change: One Million B.C. to 1990," even Simon's "extreme" view that population growth *raises* living standards has gained wide acceptance.[111] The upshot: Refining measures of economic welfare does not revive the case for pessimism. In fact, more inclusive measures cement the case for optimism, because life has also been getting better on the neglected dimensions.[112] The question "Aren't you worried that declining environmental quality is going to destroy our material prosperity?" is therefore reminiscent of "Do you still beat your mother?"

Conclusion

Economists have a love/hate relationship with systematic bias. As theorists, they deny its existence. As empiricists, they increasingly import it from other fields. But when they teach, address the public, or wonder what is wrong with the world, they dip into their own "private stash." On some level, economists not only recognize that systematically biased beliefs exist. They think they have discovered

virulent strains in their own backyard— systematically biased beliefs *about economics.*[113]

Antimarket bias, antiforeign bias, make-work bias, and pessimistic bias are the most prominent specimens. Indeed, they are so prominent that one can hardly teach economics without bumping into them. Students of economics are not a blank slate for their teachers to write on. They arrive with strong prejudices. They underestimate the benefits of markets. They underestimate the benefits of dealing with foreigners. They underestimate the benefits of conserving labor. They underestimate the performance of the economy, and overestimate its problems.

But economists' love/hate relationship with systematic bias raises some doubts. If the leading figures in the history of economics took the existence of these biases for granted, if teachers of economics grapple with them over and over in the classroom, what happens when we put these biases under the microscope of modern research? Do they hold up to empirical scrutiny? Or are they just stories that economists have been telling themselves all these years?