Preface to the Second Edition

In the preface to the first edition of this book, reproduced following this one, I described this book as a study of the millennium stock market boom, the boom that afflicted much of the world in the years leading up to 2000. A number of those who read the book have told me they think this book addressed a much broader subject. They are right: this book is really about the behavior of all speculative markets, about human vulnerability to error, and about the instabilities of the capitalist system.

When I was writing the first edition, mostly in 1999, the stock market boom seemed invincible. The S&P 500 index had gone up 34% in 1995, 20% in 1996, 31% in 1997, 26% in 1998, and 20% in 1999. Similar strings of stock market price increases had occurred in many other countries. So many years in a row of such spectacular increases could not be the result of mere chance, or so it seemed to many people then—and to the experts who encouraged this view. The stock market boom was widely viewed as the harbinger of a new economic era. But my book took a very different, and much dimmer, view of this stock market boom.

When the book appeared on store shelves in March 2000, I was on sabbatical from Yale, and I embarked on an extended ten-country book tour. Obviously, at that point in history, no one knew that March 2000 was to represent the peak of the market. Talking with so many people about the errors I thought they were making led me to ideas about how to strengthen the arguments presented in this new edition.

A few memories still strike me today, years later, about the kind of human errors that I encountered on my tour. I remember appearing on a radio talk show and hearing a woman tell me that she just *knew* I was wrong: the stock market has a pronounced uptrend; it *has* to go up generally. The tremor in her voice made me wonder what accounted for her emotions.

I also recall seeing a man who came to *two* of my book talks, each time sitting in the back and looking agitated. Why did he come back a second time, and what was upsetting him so?

I remember giving a talk presenting my bearish view of the market to a group of institutional investors, and then listening as a major institutional portfolio manager told me that he agreed with me, but was nevertheless going to ignore everything I had just said as he managed his portfolio. He believed that the views I expressed ultimately did not have enough authority to be taken seriously by his clients and colleagues, and that he could not alter his portfolio allocation based solely on what might seem to be one person's idiosyncratic opinion—even if he himself agreed with it.

But most of what I remember is people cheerfully and with apparent interest listening to my talk and then blithely telling me that they did not particularly believe me. Some kind of collective conclusion had been reached about the stock market—and it had a powerful hold on people's minds.

After 2000, the stock market boom abruptly ended; the U.S. stock market, and the markets in the same countries whose stock prices had also soared, came down substantially from their peaks in 2000. By the time the S&P 500 reached bottom in March 2003 it had fallen by half in real inflation-corrected terms. This outcome led to a change in investor psychology.

I remember having breakfast with a woman and her husband at the very end of 2000, when the market was down substantially from its peak, the tech stocks down more than 50%. She said she did the investing for the family, and in the 1990s she had been a genius. He agreed. Now, she confided, her self-esteem had collapsed. Her perception of the market was all an illusion, a dream, she said. Her husband did not disagree.

But, as profound as the psychological reaction to this stock market drop has been for some people, it appears that collective enthusiasm for stocks is more enduring than one might think; it seems, in large measure, that the enthusiasm is still not over. The stock market has not seen as big a drop as would have been predicted by the extreme overpricing of the market in 2000—at least not yet—and this intense psychological correction has not been experienced by most people.

The stock market has not come down to historical levels: the stock market price-earnings ratio as I define it in this book is still, at this writing, in the mid-20s, far higher than the historical average. Moreover, the market for homes has produced a situation in which median home prices are sometimes ten times buyers' per capita income or more. Irrational exuberance really is still with us.

In a broad sense, this book, from its first edition in 2000, has been about trying to understand the change in thinking of the people whose actions ultimately drive the markets. It is about the psychology of speculation, about the feedback mechanism that intensifies this psychology, about herd behavior that can spread through millions or even billions of people, and about the implications of such behavior for the economy and for our lives. Although the book originally focused directly on current economic events, it was, and is, about how errors of human judgment can infect even the smartest people, thanks to overconfidence, lack of attention to details, and excessive trust in the judgments of others, stemming from a failure to understand that others are not making independent judgments but are themselves following still others—the blind leading the blind.

The presumed enlightened opinion that people tend to rely on for economic judgments is often rather like the "man of smoke" in Aldo Palazzeschi's surrealistic 1911 novel *Il Codice di Perelà.* The protagonist is made only of smoke; he is virtually nothing at all, but he acquires a public persona and authority that is a construct of the collective imagination, until the public changes its mind, deciding he is not the font of truth, whereupon he disappears completely. Events such as that represented in Palazzeschi's novel are a reality: unsubstantiated belief systems, insubstantial wisps, do create bouts of irrational exuberance for significant periods of time, and these bouts ultimately drive the world economy.

I have revised the book in this second edition to try to extend its argument that variations caused by changing attitudes, irrational beliefs, and foci of attention are an important factor in our changing economic lives, and to examine the consequences for our economy and our future. I have recast the examples of these variations in terms of more recent events. Notably, I have added a chapter (Chapter 2) about the enormous home price boom that many countries have been experiencing since the late 1990s, and I have broadened the discussion throughout the book to consider speculation in real estate. Beyond that, this edition extends and improves the basic arguments in a number of directions. I have been thinking about the issues in this book for five more years since the first edition, and the research on behavioral economics, which I closely follow, has made substantial progress over that interval as well.

The issues that are treated in this book are serious, and of continuing relevance today. People in much of the world are still overconfident that the stock market, and in many places the housing market, will do extremely well, and this overconfidence can lead to instability. Significant further rises in these markets could lead, eventually, to even more significant declines. The bad outcome could be that eventual declines would result in a substantial increase in the rate of personal bankruptcies, which could lead to a secondary string of bankruptcies of financial institutions as well. Another long-run consequence could be a decline in consumer and business confidence, and another, possibly worldwide,

recession. This extreme outcome—like the situation in Japan since 1990 writ large—is not inevitable, but it is a much more serious risk than is widely acknowledged.

Lest raising these possibilities seem alarmist, one should note that we are already living with some of the unpleasant repercussions of past overconfidence. The stock markets of *many* countries dropped by roughly half from their peak around 2000 by 2002 or 2003, and have rebounded only a little. Overinvestment by corporations, encouraged by the booming stock market, led to a collapse of investment spending in the early years of the twenty-first century, and to a worldwide recession.

The boom years of the 1990s created a business atmosphere akin to a gold rush, and led many people to distort their business decisions, the results of which will weigh upon us for many years to come. Part of this change in business atmosphere was a decline in ethical standards, a decline in the belief in integrity, honesty, patience, and trust in business. A string of scandals affecting corporate boards, accounting firms, and mutual funds surfaced after the market dropped.

These extravagant years eventually led to severe budgetary problems for governments, both national and local. In the 1990s—with the stock market going up, investors reaping capital gains, and the economy booming—tax revenues rose, and many governments found it difficult to restrain increases in expenditures. After the stock market decline, tax revenues fell, throwing many governments into severe deficit crises. The average government financial deficit among member countries in the Organization for Economic Cooperation and Development deteriorated from 0.0% of gross domestic product in 2000 to 3.6% in 2004. The government deficits have in turn led to troubled attempts to restrain spending, with uneven consequences for different constituencies.

An additional consequence of the intense stock market boom of the late 1990s was the home price boom, which began around 1997 or 1998 and then intensified after 2000 throughout many countries of the world. The home price boom appears to have begun around the time in 1997 that the stock market boom was engendering a proliferation of "new era" theories about the economy, and it is still going very strongly in many cities despite a stock market correction. We have yet to see the full consequences of these price changes.

Speculative instability appears to be increasingly important to the world economy. We are focusing more intently on the unpredictable markets. It is not that the existing stock markets are demonstrably becoming more volatile. Volatility occurs in spurts, so it is hard to discern a clear uptrend. But at least the number of people participating in these markets is increasing, and the scope of speculative markets, the kind of risks that are traded, is broadening. More and more electronic markets are being created every year, trading a wider and wider range of risks, and more and more people, in both advanced and emerging countries, are being drawn in to participate in these markets.

People will increasingly fear that their livelihoods really depend on their wealth, wealth that is highly unstable because of market changes. So, over the longer run, people will increasingly pay attention to market movements. There is an increasing perception that the price of assets matters very much to our lives. People increasingly believe that they must defend their private property and doubt that they can depend on social institutions to save them if things turn out badly. They see merciless capitalism as the wave of the future.

There is a name for this economic system—"the ownership society"—and President George W. Bush, among others, likes to use this term. People must take ownership of their own future, and plan for their future as property owners in many senses of the word. There is indeed much to be said for the ownership society in terms of its ability to promote economic growth. But by its very nature it also invites speculation, and, filtered through the vagaries of human psychology, it creates a horde of risks that we must somehow try to manage.

I do not know the future, and I cannot accurately predict the ups and downs of the markets. But I do know that, despite a significant slip in confidence since 2000, people still place too much confidence in the markets and have too strong a belief that paying attention to the gyrations in their investments will someday make them rich, and so they do not make conservative preparations for possible bad outcomes.

Outline of This Book

The book begins with two introductory chapters placing the ups and downs of the stock market and the real estate market in historical context. Chapter 2, new to this edition, presents an analysis of the real estate market that parallels the analysis of the stock market in Chapter 1, from the first edition. Both chapters allow us to see how remarkable recent fluctuations in these markets have been, and to gain overall perspectives on trends in the markets.

Part I discusses the structural factors that drive market bubbles. This part begins, in Chapter 3, with a discussion of the precipitating factors that cause market fluctuations: events outside the markets, such as politics, technology, and demography. The list of twelve precipitating factors that have been driving markets recently has been changed only a little from the first edition, even though the considerations for the list now include real estate as well as the stock market. Chapter 4 argues that the effect of these precipitating factors is enhanced by certain amplifying mechanisms that operate with some lags, so that the relation of market movements to the precipitating factors is never clear. When the events are interpreted as boding well for investments, these amplification mechanisms can, over time, reinforce confidence in the market despite its already high price. Price increases beget further price increases, thus amplifying the precipitating factors and beginning a speculative bubble. When the

events are interpreted as boding ill for investments, the amplification mechanisms can work in a downward direction, with price decreases begetting more price decreases.

Part II considers cultural factors that further reinforce the structure of the speculative bubble. The news media, discussed in Chapter 5, are critical, since they amplify stories that have resonance with investors, often regardless of their validity. Chapter 6 analyzes the "new era" theories that tend to arise spontaneously from time to time. In this edition, the analysis applies to both the stock market and the real estate market. The popularity of these theories is seen to derive from activity in the markets themselves, not from disinterested analysis of the true merit of these stories. Chapter 7 looks at the major stock market booms around the world in the past half century and describes the kind of new era theories that arose in association with many of them.

Part III considers psychological factors that underlie market behavior. Chapter 8 argues that, with the true value of the markets so poorly defined by economic and financial theory, and so difficult for the public to compute, the public relies on some largely psychological anchors for market value. Chapter 9 describes some important results from social psychology and sociology that help us understand why so many different people change their opinions at the same time.

Part IV investigates attempts on the part of academic and popular thinkers to rationalize market bubbles. Chapter 10 considers the efficient markets theory. Chapter 11 discusses the theory, often advanced during a bubble, that the public has just learned some important fact—even though the "fact" either is questionable or has already been widely known for some time.

Part V, Chapter 12, considers the implications of speculative bubbles for individual investors, institutions, and governments. Several prescriptions for urgently needed policy changes are offered at this time of vulnerability in both the stock market and the real estate market, as are suggestions of ways in which individual investors can lower their exposure to the consequences of a "burst" bubble.

I have also created a Web site, irrationalexuberance.com, which will present new information related to the topics in this book and will provide regular updates for some of the data and charts shown in this book.