Introduction

TO UNDERSTAND HOW economies work and how we can manage them and prosper, we must pay attention to the thought patterns that animate people's ideas and feelings, their *animal spirits*. We will never really understand important economic events unless we confront the fact that their causes are largely mental in nature.

It is unfortunate that most economists and business writers apparently do not seem to appreciate this and thus often fall back on the most tortured and artificial interpretations of economic events. They assume that variations in individual feelings, impressions, and passions do not matter in the aggregate and that economic events are driven by inscrutable technical factors or erratic government action. In fact, as we shall discover in this book, the origins of these events are quite familiar and are found in our own everyday thinking. We started work on this book in the spring of 2003. In the intervening years the world economy has moved in directions that can be understood only in terms of animal spirits. It has taken a rollercoaster ride. First there was the ascent. And then, about a year ago, the fall began. But oddly, unlike a trip at a normal amusement park, it was not until the economy began to fall that the passengers realized that they had embarked on a wild ride. And, abetted by this obliviousness, the management of this amusement park paid no heed to setting limits on how high the passengers should go. Nor did it provide for safety equipment to limit the speed, or the extent, of the subsequent fall.

What had people been thinking? Why did they not notice until real events—the collapse of banks, the loss of jobs, mortgage foreclosures—were already upon us? There is a simple answer. The public, the government, and most economists had been reassured by an economic theory that said that we were safe. It was all OK. Nothing dangerous could happen. But that theory was deficient. It had ignored the importance of ideas in the conduct of the economy. It had ignored the role of *animal spirits*. And it had also ignored the fact that people could be unaware of having boarded a rollercoaster.

INTRODUCTION

What Have People Been Thinking?

Traditional economics teaches the benefits of free markets. This belief has taken hold not just in the bastions of capitalism, such as the United States and Great Britain, but throughout the world, even in countries with more established socialist traditions, such as China, India, and Russia. According to traditional economics, free market capitalism will be essentially perfect and stable. There is little, if any, need for government interference. On the contrary, the only risk of major depression today, or in the future, comes from government intervention.

This line of reasoning goes back to Adam Smith. The basis for the idea that the economy is essentially stable lies in a thought experiment which asks: What do free, perfect markets imply? The answer: If people rationally pursue their own economic interests in such markets, they will exhaust all mutually beneficial opportunities to produce goods and exchange with one another. Such exhaustion of opportunities for mutually beneficial trade results in full employment. Workers who are reasonable in their wage demands—those who will accept a wage that is less than what they add to production—will be employed. Why? If such a worker were unemployed, a mutually beneficial trade could be arranged. An employer could hire this worker at the wage she requires and still have some spare extra output for a larger profit. Of course some workers will be unemployed. But they will be unable to find work only because they are engaged in a temporary search for a job or because they insist on pay that is unreasonably high—greater than what they add to production. Such unemployment is voluntary.

There is a sense in which this theory about the economy's stability is remarkably successful. For example, it explains why most people who seek work are employed most of the time—even in the troughs of severe depressions. It may not explain, for example, why 25% of the U.S. labor force was unemployed in 1933 at the height of the Great Depression, but it does explain why, even then, 75% of the workers who sought jobs were employed. They were engaging in the mutually beneficial production and trade predicted by Adam Smith.

So, even at its worst, this theory deserves high marks—at least by the criterion of a schoolboy we once overheard at a restaurant. He was complaining about the C he had received on a spelling test—despite the fact that 70% of his answers were correct. Furthermore the theory does so well even in its worst prediction in two hundred years. Most of the time—as now, when the U.S. unemployment rate is still 6.7% (although rising)—it predicts remarkably accurately.

Consider yet again the Great Depression. Few people ask why *employment* was as *high* as 75% in 1933. Instead the common question is why 25% of the labor force was *unemployed*. To our mind macroeconomics concerns departures from full employment. Failure to be at such full employment must then result from a *departure* from the classical model of Adam Smith.

We do believe, like most of our colleagues, that Adam Smith was basically right regarding why so many people are employed. We are also willing to believe, with some qualifications, that he was essentially correct about the economic advantages of capitalism. But we think that his theory fails to describe why there is so much variation in the economy. It does not explain why the economy takes rollercoaster rides. And the takeaway message from Adam Smith—that there is little, or no, need for government intervention—is also unwarranted.[1]

Animal Spirits

The thought experiment of Adam Smith correctly takes into account the fact that people rationally pursue their economic interests. Of course they do. But this thought experiment fails to take into account the extent to which people are also guided by noneconomic motivations. And it fails to take into account the extent to which they are irrational or misguided. It ignores the *animal spirits*.

In contrast, John Maynard Keynes sought to explain departures from full employment, and he emphasized the importance of animal spirits. He stressed their fundamental role in businessmen's calculations. "Our basis of knowledge for estimating the yield ten years hence of a railway, a copper mine, a textile factory, the goodwill of a patent medicine, an Atlantic liner, a building in the City of London amounts to little and sometimes to nothing," he wrote. If people are so uncertain, how *are* decisions made? They "can only be taken as a result of animal spirits." They are the result of "a spontaneous urge to action." They are *not,* as rational economic theory would dictate, "the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities."[2]

In the original use of the term, in its ancient and medieval Latin form *spiritus animalis,* the word *animal* means "of the mind" or "animating." It refers to a basic mental energy and life force.[3] But in modern economics *animal spirits* has acquired a somewhat different meaning; it is now an economic term, referring to a restless and inconsistent element in the economy. It refers to our peculiar relationship with ambiguity or uncertainty. Sometimes we are paralyzed by it. Yet at other times it refreshes and energizes us, overcoming our fears and indecisions.

Just as families sometimes cohere and at other times argue, are sometimes happy and at other times depressed, are sometimes successful and at other times in disarray, so too do whole economies go through good and bad times. The social fabric changes. Our level of trust in one another varies. And our willingness to undertake effort and engage in self-sacrifice is by no means constant.

The idea that economic crises, like the current financial and housing crisis, are mainly caused by changing thought patterns goes against standard economic thinking. But the current crisis bears witness to the role of such changes in thinking. It was caused precisely by our changing confidence, temptations, envy, resentment, and illusions—and especially by changing stories about the nature of the economy. These intangibles were the reason why people paid small fortunes for houses in cornfields; why others financed those purchases; why the Dow Jones average peaked above 14,000 and a little more than a year later fell below 7,500; why the U.S. unemployment rate has risen by 2.5 percentage points in the past twenty-four months, with the end of this rise not yet in sight; why Bear Stearns, one of the world's leading investment banks, was only (and barely) saved by a Federal Reserve bailout, and why later in the year Lehman Brothers collapsed outright; why a large fraction of the world's banks are underfunded; and why, as we write, some of them are still tottering on the brink, even after a bailout, and may yet be the next to go. And we know not what is yet to come.

Macroeconomics with and without Animal Spirits

Of course there is a rich body of macroeconomics that explains why there are fluctuations in the economy. Indeed that is what the macroeconomics textbooks are all about. We will give just two examples. In the post–World War II period, economists felt that they could explain deviations from full employment by a single type of animal spirit: that workers dislike money wage cuts, and that employers are therefore reluctant to make them.[4] This tradition then morphed into a slightly more sophisticated explanation for why wages are slow to change. It explains fluctuations in employment arising from shifts in demand as due to the fact that wages and prices are not all set simultaneously. This concept in macroeconomics is known as "staggered contracts."[5] The macro textbooks are full of many other departures from the simple thought experiment of Adam Smith, in which there is always a meeting of minds and contracts are negotiated between rational people motivated purely by economic interests.[6]

And that leads us to the philosophical difference between this book and standard economics texts. This book is derived from a different view of how economics should be described. The economics of the textbooks seeks to minimize as much as possible departures from pure economic motivation and from rationality. There is a good reason for doing so—and each of us has spent a good portion of his life writing in this tradition. The economics of Adam Smith is well understood. Explanations in terms of small deviations from Smith's ideal system are thus clear, because they are posed within a framework that is already very well understood. But that does *not* mean that these small deviations from Smith's system describe how the economy really works.

Our book marks a break with this tradition. In our view economic theory should be derived not from the minimal deviations from the system of Adam Smith but rather from the deviations that actually do occur and that can be observed. Insofar as animal spirits exist in the everyday economy, a description of how the economy really works must consider those animal spirits. That is the aim of this book.

In producing such a description, we think that we can explain how the economy works. This is a subject of permanent interest. But, writing as we are in the winter of 2008–9, this book also describes how we got into the current mess—and what we need to do to get out of it.

How the Economy Really Works and the Role of Animal Spirits

Part One of this book will describe five different aspects of animal spirits and how they affect economic decisions—*confidence, fairness, corruption and antisocial behavior, money illusion*, and *stories:*

- The cornerstone of our theory is *confidence* and the feedback mechanisms between it and the economy that amplify disturbances.

- The setting of wages and prices depends largely on concerns about *fairness.*
- We acknowledge the temptation toward *corrupt and antisocial behavior* and their role in the economy.
- *Money illusion* is another cornerstone of our theory. The public is confused by inflation or deflation and does not reason through its effects.
- Finally, our sense of reality, of who we are and what we are doing, is intertwined with the story of our lives and of the lives of others. The aggregate of such *stories* is a national or international story, which itself plays an important role in the economy.

Part Two of this book describes how these five animal spirits affect economic decisions, demonstrating how they play a crucial role in answering eight questions:

1. Why do economies fall into depression?
2. Why do central bankers have power over the economy, insofar as they do?
3. Why are there people who can't find a job?
4. Why is there a tradeoff between inflation and unemployment in the long run?
5. Why is saving for the future so arbitrary?
6. Why are financial prices and corporate investments so volatile?
7. Why do real estate markets go through cycles?
8. Why does poverty persist for generations among disadvantaged minorities?

We see that animal spirits provide an easy answer to each of these questions. We also see that, correspondingly, none of these questions can be answered if people are viewed as having only economic motivations which they pursue rationally—that is, if the economy is seen as operating according to the invisible hand of Adam Smith.

Each of these eight questions is fundamental. They would occur to anyone with a natural curiosity regarding the economy. In providing natural, satisfactory answers to all of them, our theory of animal spirits describes how the economy works.

In answering these questions, in telling how the economy really works, we accomplish what existing economic theory has not. We provide a theory that explains fully and naturally how the U.S. economy, and indeed the world economy, has fallen into the current crisis. And—of perhaps even greater interest—such a theory then allows us to understand what needs to be done to extricate ourselves from the crisis. (We present our analysis and recommendations in the postscript to Chapter 7, the chapter dealing with the powers of the Federal Reserve.)