
INTRODUCTION

IT HAD BEEN WORKING SO EXCEPTIONALLY WELL

ON THE FOURTH THURSDAY OF October in 2008, eighty-two-year-old Alan Greenspan paid a visit to Capitol Hill to admit that he had misunderstood how the world works. Sitting at the witnesses' table in the hearing room on the first floor of the Rayburn House Office Building, the former Federal Reserve chairman started by reading a statement that tried to explain what had gone so wrong with financial markets over the past year. After asking Greenspan a few questions, the chairman of the House Committee on Government Oversight and Reform, California Democrat Henry Waxman, summed up. "In other words," he said, "you found that your view of the world, your ideology, was not right. It was not working."

"Precisely," replied Greenspan. "That's precisely the reason I was shocked, because I had been going for forty years or more with very considerable evidence that it was working exceptionally well."¹

During those forty years—especially the nineteen during which Greenspan was the world's top central banker—financial markets grew to play an ever-larger and less-fettered role. The stock market boomed for most of Greenspan's years at the Fed. Bond markets boomed too, and expanded into new territory as Wall Street whizzes took mortgage loans and auto loans and credit card debt off the

balance sheets of banks and repackaged them into asset-backed securities sold to investors around the world. The most dizzying growth came in over-the-counter derivatives, custom-made financial instruments (options, futures, swaps) that tracked the movements of other financial instruments. With them, traders could insure against or bet on moves in currencies or interest rates or stocks. In recent years it had even become possible to use derivatives to insure against loans gone bad. From 1987 to 2007, the face value of over-the-counter derivatives rose from \$866 billion to \$454 trillion.²

As Fed chairman, Greenspan had celebrated this financialization of the global economy. “These instruments enhance the ability to differentiate risk and allocate it to those investors most able and willing to take it,”³ he said in 1999, referring to derivatives in particular. Greenspan had once expressed the worry, in 1996, that stock markets might be losing themselves in a frenzy of “irrational exuberance.” When they kept rising after that, he took the lesson that the market knew more than he did.

This was Greenspan’s ideology—and it had been widely shared in Washington and on Wall Street. Financial markets knew best. They moved capital from those who had it to those who needed it. They spread risk. They gathered and dispersed information. They regulated global economic affairs with a swiftness and decisiveness that governments couldn’t match.

AND THEN, SUDDENLY, THEY DIDN’T. “The whole intellectual edifice collapsed in the summer of last year,” Greenspan admitted at the October 2008 hearing.⁴ That was when the private market for U.S. mortgage securities collapsed, beginning a fitful unraveling of asset market after asset market around the world. Distrust spread. Many previously thriving credit markets shut down entirely. Bank runs—long thought to endanger only actual banks—threatened any financial institution that ran on borrowed money. After Greenspan’s successor

at the Fed, Ben Bernanke, and Treasury Secretary Hank Paulson decided in September 2008 not to step in to avert such a run on Lehman Brothers, global finance virtually ceased functioning. It took a partial government takeover of the financial system—not just in the United States but in Europe—to bring back even a modicum of calm.

Greenspan struggled to explain what had gone wrong because the intellectual edifice around which he had built his thinking simply didn't allow room for the events of the preceding fourteen months. This was the edifice of rational market theory. The best-known element of rational market theory is the efficient market hypothesis, formulated at the University of Chicago in the 1960s with reference to the U.S. stock market. The belief in the so-called rational market that took hold in the years that followed, though, was about more than just stocks. It held that as more stocks, bonds, options, futures, and other financial instruments were created and traded, they would inevitably bring more rationality to economic activity. Financial markets possessed a wisdom that individuals, companies, and governments did not.

The notion that financial markets know a lot has been around as long as financial markets themselves. In 1889, stock market chronicler George Rutledge Gibson asserted that when “shares become publicly known in an open market, the value which they there acquire may be regarded as the judgment of the best intelligence concerning them.”⁵ Hints of this same attitude could be found in the work of early economists such as Adam Smith—and even the religious thinkers of the Middle Ages. While some medieval ecclesiastical scholars argued that lawyers should set a “just price” for every good to guarantee that producers earned a living wage and consumers weren't gouged, others, St. Thomas Aquinas among them, held that the just price was set by the market.⁶

All these early claims for the correctness and justness of market prices came with caveats—doses of realism, you could call them. George Gibson wrote that stock exchanges were prone to manias

and panics and called for the regulation of “bucket shops” that urged customers to speculative excess.⁷ Adam Smith thought corporations with widely dispersed ownership—the shares of which are what make stock markets go—were abominations. Thomas Aquinas made no claim that the market price was always right, just that it was hard to come up with a fairer alternative.

The twentieth-century version of rational market theory was different—both more careful and more extreme. It started with the observation that the movements of stock prices were random, and could not be predicted on the basis of past movements. This observation was followed by the claim that it was impossible to predict stock prices on the basis of any publicly available information (such as earnings, balance sheet data, and articles in the newspaper). From those starting points—both of which were, it turned out later, not entirely correct—flowed the conviction that stock prices were in some fundamental sense *right*.

Most of the scholars who backed this hypothesis early on didn't mean for it to be taken as a literal description of reality. It was a scientific construct, a model for understanding, for testing and engineering new tools. All scientific models are oversimplifications. The important test is whether they're useful. This particular oversimplification was undeniably useful, so useful that it took on a life of its own. As it traveled from college campuses in Cambridge, Massachusetts, and Chicago in the 1960s to Wall Street, Washington, and the boardrooms of the nation's corporations, the rational market hypothesis strengthened and lost nuance.

It was a powerful idea, helping to inspire the first index funds, the investment approach called modern portfolio theory, the risk-adjusted performance measures that shape the money management business, the corporate creed of shareholder value, the rise of derivatives, and the hands-off approach to financial regulation that prevailed in the United States from the 1970s on.

In some aspects the story of the rational market hypothesis paral-

els and is intertwined with the widely chronicled rebirth of pro-free-market ideology after World War II. But rational market finance was not at heart a political movement. It was a scientific one, an imposing of the midcentury fervor for rational, mathematical, statistical decision making upon financial markets. This endeavor was far from an unmitigated disaster. It represented, in many ways, the forward march of progress. But much was lost, most importantly the understanding—common among successful investors but absent from several decades of finance scholarship—that the market is a devilish thing. It is far too devilish to be captured by a single simple theory of behavior, and certainly not by a theory that allowed for nothing but calm rationality as far as the eye could see.

As far back as the 1970s, dissident economists and finance scholars began to question this rational market theory, to expose its theoretical inconsistencies and lack of empirical backing. By the end of the century they had knocked away most of its underpinnings. Yet there was no convincing replacement, so the rational market continued to inform public debate, government decision making, and private investment policy well into the first decade of the twenty-first century—right up to the market collapse of 2008.

This book offers no grand new theory of how markets truly behave. It is instead a history of the rise and fall of the old theory—the rational market theory. It is a history of ideas, not a biography, or even a collection of biographies. But it is full of characters—most of them economists and finance professors—who were actors in many of the great dramas of the twentieth century, from 1920s boom to 1930s Depression to war and then peace and prosperity, then 1960s boom and 1970s bust and so on. These characters weren't the lead actors, for the most part. But they were crucial to the plot. (A reference list of key players can be found on page 322.)

“The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood,” wrote John Maynard Keynes, who plays a

supporting role in the story to follow. "Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist."

The defunct economist with whom this tale begins is Keynes's contemporary Irving Fisher.