CHAPTER 1

The Death of Capital

Capital is a powerful and complex phenomenon that many thinkers have wrestled to define over the centuries. The statement that capital died in 2008 is intended to mean that after years of being misunderstood, abused, and wasted, capital stopped flowing around the world and became totally frozen in place. The manifestation of its death was the abrupt slowdown in economic activity that occurred in September 2008, around the time the U.S. investment banking firm Lehman Brothers declared bankruptcy and the U.S. government stepped in to prop up AIG with $85 billion of loans.

One of the most graphic illustrations of the cessation of economic activity that occurred in late 2008 is what happened to the Baltic Dry Index, a daily measure of global shipping activity.[1] (See Figure 1.1.)

Figure 1.1 shows this index falling off a cliff in September 2008, signaling the sudden collapse of global economic activity as capital flows came to a standstill. This index is considered to be a leading indicator of global economic activity and measures the price of moving the world's

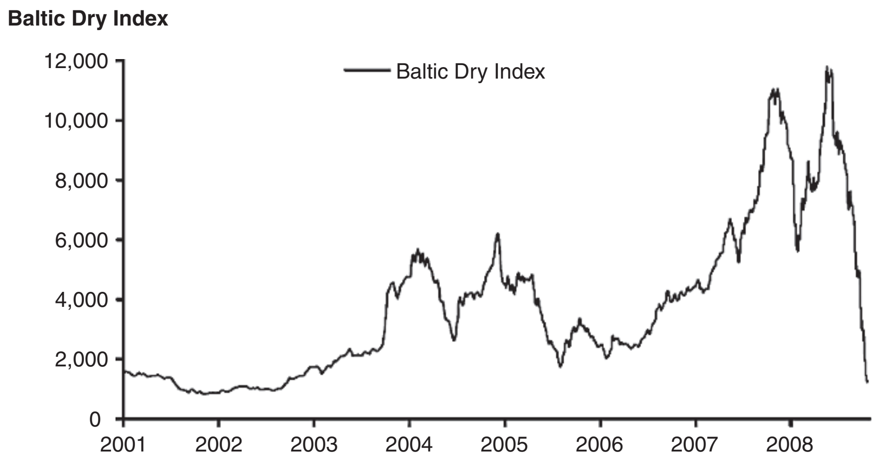

Figure 1.1 Capital RIP September 2008
SOURCE: Bloomberg.

raw materials around the globe. By the end of 2008, nothing was moving around the globe. Capital had indeed died.

One of the key characteristics of capital is that it is a process and not a structure or a category or a thing. Capital is a process because it is the embodiment of the human relationships that generate economic activity. That relationship can be one of equality or inequality (almost always the latter), but it is a relationship nonetheless. A relationship involves some type of connection in which the parties interact and affect the behavior of the other. In the autumn of 2008, the world saw a temporary but complete breakdown in this relationship.

In the first decade of the twenty-first century, capital had come to have virtually no connection with the underlying social relations that generate economic value. As the embodiment of the economic value created by human labor, capital has always maintained an indirect relationship with the actual act of wealth generation, so this is not a new phenomenon. But the distance between capital and wealth generation had been attenuated beyond all previous bounds by the changes wrought by modern finance. The very concept of capital—not to mention capital itself—had been devalued by modern financial practices. Rather than a precious resource that can be used to improve the human condition through the provision of jobs, health care, education, and the like, capital has become further alienated from these social purposes than in earlier historical periods.

The world experienced the death of capital that had been building up for decades due to a combination of counterproductive political and economic forces. In the autumn of 2008, in the wake of the bankruptcy of Lehman Brothers, capital froze, and with it the functioning of the global economy, when these forces coalesced into an overpowering wave of debt and disillusion. Capital was ultimately thawed out by the blowtorch of massive government stimulus and support, but its transformation into an object completely disembodied from its generative sources remained in place. Capital was placed on life support by emergency measures taken by the world's wealthiest governments and central banks; these entities threw trillions of dollars at the symptoms in order to temporarily restart the flow of capital around the globe. But the measures taken in late 2008 and early 2009 to keep the patient alive were only temporary and will have deleterious long-term effects, the most harmful ones likely being inflation and the devaluation of fiat currencies (in particular the U.S. dollar). In order to return capital to permanent health instead of merely the walking dead, proper long-term economic policies must be put into place. But those policies cannot be implemented without a thorough understanding of what capital is and how it functions. In order to be properly managed and regulated, capital must be understood in view of current market conditions. The very fact that capital died in the first decade of the twenty-first century suggests that those charged with shepherding it did not understand its true nature.

How did modern capitalism manage to place capital on the endangered species list? After all, modern society has developed far more advanced tools to manage risk—particularly man-made risk—than ever before in its history. Computer technology and mathematical ingenuity were ostensibly put to work to protect the financial system from precisely the disruptions that it suffered in 2008. Instead, in the ultimate irony, tools designed to reduce risk ended up increasing it—to reckless and systemically threatening levels. Students of capitalism have long known that there is something inherent in the nature of capital that renders it unstable. But what is it exactly that makes capital so difficult to manage?

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The Four Essential Characteristics of Capital

Coming to a working definition of capital that reflects its real-world complexity is an imposing task. But avoiding it would be like performing an autopsy without touching the corpse. If the academics who have exercised such undue influence on markets have taught us anything, it is that markets work in theory but they do not work in practice. Accordingly, capital needs to be understood as it really is, not as we imagine it to be. That is why we cannot leave the definition to the professors. In order to define capital, we must combine theory and practice into a formulation that reflects the real world.

As noted previously, capital is a process. Because it is a process, it remains in constant motion. Below are the four characteristics of capital that are essential to a proper understanding of how it functions in the flesh-and-blood markets where money is made and lost every day.

Capital as It Is, Not as We Want It to Be

1. It is a process, not a structure or a category.
2. It is constantly changing form.
3. It is a construct of the human mind.
4. It is unstable.

The Oxford English Dictionary describes financial capital as "the accumulated wealth of an individual, company or community, used as a fund for carrying on fresh production; *wealth in any form used to help in producing more wealth,*" (emphasis added).[2] "Wealth in any form used to help in producing more wealth" is the key to understanding capital because it describes a process, not an object or a structure or a category.

Capital Is a Process

First and foremost, capital is a living, breathing phenomenon. It is an expression of the human relationships that generate economic value. Just as these relationships are dynamic in nature, so is capital. Static capital is dead capital.

Without human labor producing it, capital cannot come into being. Both the creation of capital and the investment of capital originate in human relationships. For this reason, labor must be understood as another form of capital. Labor is exchanged for other forms of capital in the form of commodities (such as food, clothing and shelter) or for capital in the form of money. In today's knowledge economy, intellectual labor is the most valuable form of capital. The analysis of capital as the product of labor is well-rehearsed. What is less appreciated is the fact that invested capital is also representative of human relationships.

The world's financial markets are driven by investments made on behalf of institutions that represent charities, universities, labor unions, and municipalities. Their investments are made in order to support the basic human needs of their beneficiaries—education, health care, retirement funds, disability payments if individuals lose their ability to work. When we speak about the public utility function that certain parts of the financial system are designed to serve, such as banks, we are speaking about these institutions' function to provide for the betterment of human life. That function originates in the most basic economic act, the labor that creates capital. Capital is always one step removed from that labor, which was one of Karl Marx's great insights (as I will discuss in Chapter 2). But today capital has become so many steps removed from labor that it has lost its essential character as the motivating force behind improving human life. We cannot understand capital until we understand that it originates in human labor and that it has become more alienated from labor than perhaps ever before in history.

The most important attribute of capital as it functions in the real world is that because it is a process, it is a relationship and not a category or a structure. Capital is anything that can be exchanged for any other form of capital—money, property, labor. In the modern world, increasing amounts of capital are intangible in form such as patents, trademarks, copyrights, and other forms of intellectual property, as well as contract rights such as derivative financial instruments. Accordingly, the forms in which capital are represented have become increasingly complex. Finally, because capital is by its very nature a representation of something else, it is an indirect indication of the value of the underlying thing it represents.[3]

Capital Constantly Changes Form

Another essential characteristic of capital is that it has the potential to change form. Capital is chameleon-like. This is related to what is

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called its liquidity function. Illiquid capital is an oxymoron. In order for something to be considered capital, it has to have the potential to be turned into another form of capital, such as goods (food, clothing, housing), labor (which creates goods), or money (which purchases goods and labor). Turning one form of capital into another is perhaps the most important characteristic of capital; this characteristic is often taken for granted, always at an enormously painful, even financially fatal, cost. Many long-term investors learned this lesson about liquidity the hard way in 2008. People joke about John Maynard Keynes' remark that the market has the ability to remain irrational longer than an investor can remain solvent, but the great economist's point was a deadly serious one. Many institutions that view themselves as long-term investors and followed what came to be known as the "endowment model" of investing failed to realize that they also need liquidity in order to fund their operations.[4] Companies go bankrupt because they run out of liquidity and are unable to pay their bills even if the value of their assets exceeds the face amount of their liabilities (although they quickly discover that the value of their assets plunges if they file for bankruptcy). One of the keys to long-term investment survival is living to play another day, and liquidity crises are the single biggest threat to that ability.

Capital Is a Human Construct

Capital is also not something that is found in nature or subject to natural laws like physics and mathematics. Capital is a construct of the human mind. It is the tangible or intangible product of human labor, but as already noted it can also be human labor itself that can be exchanged for another form of capital (property or money, for example). As a human construct, it is a product of human perception. Capital only has value to the extent economic actors (human beings, or entities or organizations controlled by human beings) are prepared to place a value on it. This means that they are willing to exchange it for another form of capital that they believe to be of equal (or lesser) value. The concept of value introduces the psychological or subjective component of human nature into the mix. Value is a highly unstable concept that is constantly subject to changing human perceptions. While minions labor away in markets around the world each day purporting to place precise values on different types of securities and financial instruments, the only certainty about these values is that they are wrong. Values are changing constantly (the image of the blinking computer screen aptly captures this phenomenon) as the assumptions and circumstances used to determine value are adjusted. While this may seem an obvious point to make, the world's financial markets operate as though there is a Holy Grail of value that is constantly within reach. Nothing could be further from the truth. Chasing value is like chasing a mirage. Capital is the economic form of that mirage.

Capital Is Unstable

These three essential attributes of capital lead to one inevitable conclusion—capital tends toward instability rather than stability. A process that can change form and is subject to human perception is hardly a candidate for stability. And that is exactly what we find throughout history: Capital is a highly unstable concept. This quality remains poorly appreciated, and as a result, capital remains poorly regulated and managed. If we can come to a better understanding of capital, how it lives and how it dies, we can hope to corral it to better uses.

How Capital Dies

Once we understand what capital is, we can also understand how it ceases to exist. Capital's essential quality is change. When capital loses the ability to change, it dies. This is another way of saying what was said above: Capital must remain in motion at all times or retain the potential to be in motion. Static capital is dead capital. Unrelated, unconnected, or isolated capital is dead capital. When investors speak about "dead money" or "dead capital," they are speaking metaphorically about an investment that is neither generating a return nor likely to generate a return in the foreseeable future. The reasons for this are legion; the primary one is that it can't be turned into another kind of asset that can generate a return. When Western capitalism came to a grinding halt in the fourth quarter of 2008, capital stopped living and breathing. Capital literally and figuratively stopped moving and changing.

Because it is a relationship, capital requires at least two parties to bring it to life. This is where markets come into being. Capital requires some type of mechanism of exchange, initially of information about capital and ultimately of capital itself. Understanding market information requires market participants to share certain intellectual and moral assumptions. The parties do not have to like each other, they do not even have to trust each other, but they have to be able to agree on the value of something and believe that the system in which they are acting will enforce their bargain. There must be some kind of meeting of the minds, which is a human and social phenomenon. So we see again that at the all-important level of exchange, where capital creates value, capital is a social construct. Capital dies when it loses its human and social content. Inhuman capital is dead capital.

Capital is Misunderstood

It is apparent from observing the evolution of financial markets that too few people in positions of influence properly understand what financial capital is, how it functions, and how it should be managed and regulated. That is not to say that many of these same people have not figured out how to make money, in some cases enormous sums of it. But making money and understanding capital are two entirely different accomplishments. Society's confusion of wealth with talent and intelligence is only one of the illusions that needs to be dispelled in order to establish more stable markets and a more just society. But understanding capital is quite another matter. This lack of understanding is what led to capital's death and the economic and human chaos and suffering that ensued. It is also why capital virtually always provides less than optimal returns to its holders. The failure to understand capital is why all types of societies, whether they call themselves capitalist, socialist, communist, or some variation thereof, operate well below their full economic potential.[5] It is also why all economies, in particular those that call themselves capitalist, remain highly unstable even in the so-called age of advanced risk management.

Among other lessons, the financial collapse of 2008 demonstrated that the U.S. economic system was not built on stable and enduring intellectual and moral underpinnings. Instead, it was built on an ideological and intellectual house of cards on top of which was constructed an economic house of cards. Financial Armageddon finally arrived in 2008, as a number of market observers (myself included) had predicted, as a result of noxious regulatory and business trends that had gone unchecked for several decades. The external manifestations of these trends were excessive leverage at all levels of the financial system and a highly politicized and profoundly ineffective regulatory scheme governing financial markets. These were symptoms of a profound misunderstanding of capital, the basic building block of economies, and an equally deep failure to understand markets, the places where capital is exchanged. There was no appreciation of the fact that capital is an unstable social phenomenon, or that eradicating the relationship between capital and the labor that creates it would have serious (and potentially fatal) consequences. The nature of capital was badly misunderstood by its practitioners and guardians, and the result was a near-death experience for the Western banking system and the free markets themselves. *The Death of Capital* was written as a kind of post-mortem on a financial system that is now trying to be brought back to life. A healthy capitalist body still has a chance of being resurrected if those in positions of influence can come to understand how the *corpus economicus* really functions in a radically changing and unstable world.

The Failure of Risk Management

Ironically, the incessant march toward financial instability occurred in a world that had claimed to master risk. In 1992, the late Peter Bernstein wrote what is still rightly considered to be a modern classic on the subject of finance, *Capital Ideas*. Bernstein's book was widely admired for its insightful discussion of the academic theories that laid the groundwork for the revolution in finance that led to the development of derivative products, portfolio management techniques, and what many believed to be the advanced management of risk. In an early passage, Bernstein wrote the following:

> Today investors are more keenly aware of risk, and better able to deal with it, than at any time in the past. They have a more sophisticated

> understanding of how financial markets behave and are capable of using to advantage the vast array of new vehicles and new trading strategies specifically tailored to their needs. Innovative techniques of corporate finance have led to more careful evaluation of corporate wealth and more effective allocation of capital. The financial restructuring of the 1980s created novel solutions to the problems arising from the separation of ownership and control and made corporate managers more responsive to the interests of shareholders.[6]

Bernstein's endorsement of improved risk management techniques exercised an immeasurably powerful influence on the financial markets and society in general. Investors and regulators came to believe—falsely as it turned out—that new products such as securitization and credit derivatives were effectively dispersing risk throughout the global financial system where it could better be absorbed. Bernstein's imprimatur regarding the ability of the new tools of finance carried a great deal of weight, particularly within the financial industry; unfortunately it was profoundly misplaced.

The risk management techniques praised by Bernstein relied on advanced computer power to better capture relationships between the prices of different securities and markets and to better measure the correlation among different securities and asset classes. The intellectual assumptions underlying such risk management approaches, however, included reliance on two basis premises that were completely unfounded: first, markets are efficient; and second, investors are rational. Beyond these erroneous assumptions lay other flawed theories, such as the belief that diversification of portfolios would protect investors from losses and that relying on historical performance would serve as a valid means of forecasting future price movements. Among other errors, all of these assumptions failed to adequately account for small-probability high-impact events (what have come to be known as "Black Swans" thanks to the insights of Nassim Nicholas Taleb). Accordingly, risk management models assumed normal distributions of events and did not stress test for fat tail distributions that came to occur with increasing regularity during the past 20 years. This turned out to be a fatal omission.

Another problem was that the models guiding investors failed to evolve to reflect the increasingly networked nature of financial markets, which created a situation in which the actions of a single large financial institution could have a systemic impact. The technical term for such effects are "network externalities," which means that market developments will induce different firms to react in similar manners rather than act independently. Thus, the financial condition of an individual company proved to be an inadequate measure of systemic risk, and systemic disturbances increased the riskiness of individual companies that on their own may have looked stable. Finally, such risk management techniques sought to apply the laws of mathematics and physics to financial markets, which are socially and economically driven worlds that do not operate according to physical laws. Markets tend to be irrational; subjecting them to the rational laws of science is unlikely to lead to meaningful results. The damage wrought from such intellectual confusion has been extreme.

Four years later, in an enlightening 1996 book on the subject of risk, *Against the Gods*, Bernstein sounded a warning about undue reliance on some of the forecasting tools he had praised in *Capital Ideas*:

> Likeness to truth is not the same as truth. Without any theoretical structure to explain why patterns seem to repeat themselves across time or across systems, these innovations provide little assurance that today's signals will trigger tomorrow's events. We are left with only the subtle sequences of data that the enormous power of the computer can reveal. Thus forecasting tools based on nonlinear models or on computer gymnastics are subject to many of the same hurdles that stand in the way of conventional probability theory: the raw material of the model is the data of the past.[7]

And of course the history of financial markets since Bernstein wrote *Capital Ideas* and *Against the Gods* belies any rational observer's optimism about the ability of investors to properly utilize and profit from scientific, computer-driven risk management tools. In the last two decades alone, there have been five severe disruptions in the credit markets—four manageable ones in 1990–1991, 1994, 1998, 2001–2002 and the truly catastrophic collapse in 2007–2008 that required unprecedented global governmental intervention. Even though the financial system emerged basically intact from the first four of these debacles, it clearly gained little wisdom about the risks it was running. In fact, each succeeding market crisis revealed that the financial system had increased its risk profile after the previous one. The underlying causes of instability were being left unaddressed, and the imbalances bred by increasing global debt levels were increasing.

One clear lesson of episodes such as the junk bond/savings and loan scandal of 1990–1991, the Long Term Capital Management crisis of 1998, and the credit crisis of 2001–2002 was that neither investors nor regulators had learned very much from their mistakes. That, or they were too brainwashed with free market and risk management mantras to open their minds to the possibility that the conditions of underlying instability were worsening. In their blindness, they continued to cling to flawed assumptions and blatant misunderstandings about the basic ways in which markets work and the nature of capital itself. A system that is unwilling to question its assumptions is unlikely to be prepared for the adverse consequences that result from them.

The risk management ideology lauded in *Capital Ideas* exercised an enormous influence on the thinking of market practitioners, politicians, and regulators throughout the 1990s and early 2000s. This was extremely unfortunate because confidence in mankind's ability to master risk was profoundly misplaced. Moreover, the almost religious belief that computers and mathematical models could master risk and that regulation was increasingly unnecessary came at the worst possible time in history in terms of man's ability to inflict damage on the economic system, because radical changes in human economic and political arrangements were occurring.

At the beginning of the 1980s, Ronald Reagan and Margaret Thatcher entered office a year apart and led the ideological charge in favor of free markets. By the time Ronald Reagan left office in 1988, Soviet-style communism was coming apart and the Chinese version had been tossed aside by Deng Xiaoping in favor of a market-based economy. Less than a year after Ronald Reagan left the presidency, he watched the fall of the Berlin Wall that he had implored Mikhail Gorbachev to tear down. The victory of capitalism over communism that Reagan had led was complete.

It is all too rare when external events validate a political ideology, but this is what occurred when the Berlin Wall fell, the Soviet Union split apart, and China embraced capitalism. This historic endorsement of free markets validated capitalism throughout the world, overlooking the fact that communism collapsed due to its own flaws rather than the genius of capitalism. Nonetheless, the fall of communism was an unequivocally positive development for mankind. Billions of people around the world began to taste economic freedom for the first time. But the collapse of one flawed system was accompanied, particularly in the United States and the United Kingdom, by a virtually blind adoption of another flawed system: unfettered free market capitalism—a belief in the ability of the markets to cure all ills and to effectively manage all risks.

During this period, Alan Greenspan was anointed the high priest of free market capitalism as chairman of the Federal Reserve. Many books have already been written criticizing his ostensible adherence to free market dogma,[8] yet it should not be overlooked that Greenspan's own Federal Reserve was all too willing to bail out markets on numerous occasions. Greenspan was more than prepared to toss his free market principles out the window in the face of true systemic risk. The bailout of Mexico in 1994, the Asian financial crisis of 1997–1998, Russia's debt default in 1998, Long Term Capital Management's collapse in 1998, the Enron and WorldCom frauds in 2001, the 2001–2002 credit market collapse—in each of these cases, Greenspan's Federal Reserve intervened in the markets in one form or another. It did so either by radically and excessively lowering interest rates or directly or indirectly intervening in financial markets. Greenspan's frequent exercise of the central bank's lender of last resort function stood as a constant warning (for those who wanted to heed it) that the free market was not as free as it was cracked up to be, and that if allowed to continue functioning as it was, it would end up cracking up. Sadly, we came to discover in 2008 that the Soviet Union wasn't the only empire capable of being driven into insolvency and instability by the potency of the free market.

But despite the fact that the world's most esteemed central banker's actions did not live up to his free market reputation, the political and thinking classes continued to worship free markets (and Mr. Greenspan). The Glass-Steagall Act, which separated commercial and investment banking, fell by the wayside in 1999 under the lobbying of Citigroup, the now failed financial supermarket that spent the late 1990s and first decade of the 2000s engaged in a desperate attempt to combine its different businesses while engaging in a series of ethical, legal, and financial breaches that should have shamed its executives and board members rather than lifting them higher and higher in public esteem. Once the barrier between deposit-taking and risk-taking institutions had fallen, the next step was to eliminate regulations that limited the amount of leverage that these newly empowered investment banks could employ in their businesses. In 2004, the Securities and Exchange Commission, under heavy lobbying from the leaders of two firms that survived 2008 after agreeing to turn themselves back into commercial banks (Morgan Stanley and Goldman Sachs) and three that did not (Merrill Lynch, Lehman Brothers, and Bear Stearns), decided to lift the 12-to-1 limit on balance sheet leverage on the large Wall Street investment banks. Few questioned the wisdom of these moves and most praised the freeing of the financial industry from rules that were considered archaic and antigrowth. A few Cassandras suspected that the old rule was necessary to prevent Wall Street from destroying itself. But proponents of what turned out to be a suicide pact argued that Wall Street would lose business to London and other jurisdictions that permitted higher leverage, and the race to the bottom was on. By the time the walls came crashing down, several of the largest investment banks sported debt-to-equity ratios in excess of 30 to 1. When the public learned about how leveraged these firms had become, regulators and politicians began tripping over themselves to express their shock that gambling had been allowed at Rick's Cabaret. But by then it was too late—the chips were being called in, and the casino was no longer extending credit to even its best customers.

To the bitter end, however, free market acolytes continued to carry forward the belief that risk had been conquered and the markets could handle whatever came their way. In early 2007, shortly before the financial markets all but completely collapsed, Bernstein published a sequel to *Capital Ideas*, which he titled *Capital Ideas Evolving*. He should have named his new book *Capital Ideas Devolving,* for the net result of these ideas turned out to be the near obliteration of the Western financial system. On the eve of financial Armageddon, Bernstein wrote:

> It may sound ironic, but as investors increasingly draw on Capital Ideas to shape their strategies, to innovate new financial instruments, and to motivate the drive for higher returns in relation to risk, the real world itself is on a path toward an increasing resemblance to the

> theoretical world described in *Capital Ideas*. Subsequent pages repeat that observation on more than a few occasions. Baloney those ideas were not.[9]

It is too late for Bernstein to retract that last sentence, but I will be presumptuous enough to do it for him. For if the financial world has come to resemble anything, it is the aftermath of the attack of the Martians in H.G. Wells' *The War of the Worlds*. Never have so many technically overeducated but morally undereducated people done so much damage to so many. The models and products that were developed to conquer risk instead turned on their inventors and destroyed them. The finance professors who concocted portfolio theory, the Black-Scholes model, credit default swaps, and collateralized default obligations have done little more than demonstrate the truth of the adage, "Markets work in theory but they don't work in practice."

Even worse, the post-World War II economic model that had served as the basis of so much apparent prosperity turned out to have been built on an edifice of debt and delusion. This model took a sharp turn for the worse in the 1980s, when debt assumed a much greater role in all levels of the U.S. economy. The ideological and intellectual assumptions that supported rampant debt incurrence, and the triumph of speculation over production, turned out to be profoundly flawed in their basic precepts.[10] As always happens in markets, which are primarily driven by emotion, the pendulum swung too far. Free markets required regulation, and computer technology and quantitative thinking cannot free the world from the demons of risk. In order to understand how the Western financial system destroyed itself, and to place this system back on a sound economic track, the post-World War II understanding of markets and capital must be revised. New answers are needed. The best place to start looking for them, as the next chapter suggests, is by rereading some great philosophers who happened to write about economics.