ANATOLE KALETSKY

'This brilliant book will add greatly to our understanding of the future of the global economy' George Soros

CAPITALISM 4.0

The Birth of a New Economy

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CHAPTER TWO

Political Economy and Evolution

Anatole Kaletski

The King is dead. Long live the King!

—Traditional proclamation on the death of an English monarch

IN THE WINTER OF 2008–09, twenty years after the collapse of communism, capitalism also seemed on the brink of collapse. Karl Marx's prediction that capitalism would be destroyed by its own internal contradictions appeared to be coming true. The result was the intellectual equivalent of a nervous breakdown. As all the major banks of America, Britain, and Europe suddenly required government support for their survival, as General Motors was nationalized, and as the personal wealth accumulated in the decade of capitalism's global triumph went up in smoke, believers in free-market ideology were intellectually shattered.

From Presidents Chavez of Venezuela and Sarkozy of France to the editors of the *Wall Street Journal*, everyone agreed that the era of Anglo-Saxon capitalism was over. American conservatives, politically disenfranchised by the crushing defeat of George W. Bush, far from supporting the U.S. government's attempts to save the economy and financial system, formed an unholy alliance with neo-socialists and unrepentant Marxists to declare that free-enterprise capitalism was dead. Instead of the American Century, proclaimed by neo-conservatives a few years earlier, China's rise to global dominance in the decades ahead now seemed as inevitable. Around the world, finance ministers and diplomats prepared to abandon the Washington Consensus presented to developing countries throughout the previous twenty years as the only way to achieve economic progress.[1] The Beijing Consensus was the new buzzword, even if no one was quite sure what it meant.[2]

Yet within a few months of the collapse of Lehman and the election of a new American government, it became obvious that reports of capitalism's death were exaggerated and premature. Capitalism had not collapsed, banks had not lost the trillions of dollars predicted, and the highly leveraged U.S. and British economies had suffered no more damage than the supposedly prudent Germans and Japanese. So what was the world to conclude as finance returned to normal and economies started to recover? Was it possible that Anglo-Saxon capitalism would survive and might even reestablish its global leadership in defiance of the apocalyptic prophesies?

The answer is, "Yes and no." The rest of this book will show why this answer is not as vacuous and evasive as it appears. Yes, the capitalist economy and financial system will return to global dominance, and probably do so under American leadership. But no, this will not be the same capitalism and the same American leadership that bestrode the world for three decades up to 2009.

With the benefit of hindsight, the schoolchildren of the future may be taught that the history of the twenty-first century really started in 2010, after the astonishing financial crisis that transformed global capitalism in 2007–09, just as the history of what we now think of as the twentieth century started after the Great War in 1918, , and nineteenth-century history started in 1815, after Wellington's victory over Napoleon at Waterloo.

Capitalism is an adaptive system. It is formed and reformed by a constantly shifting interaction between an arrow of technological progress and a ring of repetitive financial cycles. As a result, its economic and political arrangements are continually evolving. This is why capitalism, despite its natural propensity to suffer financial crashes, has defied all Marxist, Malthusian, and neo-fascist predictions of terminal crisis—and will doubtless continue to defy them for decades or centuries to come. The irony of capitalism's amazing resilience, however, is that this same ability to mutate keeps subverting the conservative ideologies most zealous in their devotion to each successive variant of the system. These votaries of the social status quo invoke the iron laws of economics to claim apolitical legitimacy for prevailing social conditions, be they wide disparities of income or so-called entitlements to government-financed healthcare and public sector jobs for life. Yet there is nothing objective or permanent about such inherently political arrangements.

Marx was right in believing that capitalism and the "bourgeois democracy" it created are full of internal contradictions. But he misunderstood both history and economics when he jumped to the conclusion that such contradictions would prove to be capitalism's fatal flaw. In fact, the ability to cope with internal contradictions is the greatest strength of the capitalist system. Because capitalism is always in the process of self-destruction, it is always recreating itself and, like a species evolving through natural selection, this protean creature emerges from each mutation stronger than it was before.

Focusing on the evolutionary nature of capitalism draws attention to the inevitability of radical change in political institutions, as well as in economic life. This mutability is the key condition for capitalism's prosperity and long-term survival. Yet politicians, businesspeople, and economists to the right of the ideological spectrum, the people supposedly most dedicated to capitalism's historic triumph, are mostly blind to the most important reason for its success. They extol the virtues of Joseph Schumpeter's process of "creative destruction,"[3] whereby dying industries are replaced by previously unimagined new technologies and managerial systems, but they wilfully ignore the same process of creative self-destruction that renews the system as a whole.

Why should the politico-economic structure of the capitalist system be considered immutable, while its microfoundations are in constant flux? This mystery has never been properly addressed. Why, for example, do conservatives predict that any increase in taxes will destroy all initiative and enterprise, when previous versions of the capitalist system worked quite successfully with taxes that were much higher? And why does the Left proclaim with equal confidence that any reductions in government spending will irreparably fracture society, when many state "entitlements" did not ex-

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ist in the stable and orderly societies a generation ago? Why do both sides not accept that institutional and political flexibility are natural and necessary features of the capitalist system's evolutionary progress, just as the flexibility of technologies, skills, and managerial practices have been natural and necessary features of capitalism's microeconomic progress, driving the replacement of stagecoaches with jet aircraft, stevedores with telecommuters, and telegraphs with mobile phones? The purpose of this chapter is not to resolve this intellectual puzzle but to examine the flexibility of capitalism's politico-economic arrangements and argue that this has been the key characteristic allowing the system to survive crashes, revolutions, and wars.

Every few decades, the institutions of capitalism have had to be dismantled, carefully examined, and then, where necessary, replaced. The reason why the system has survived the recurrent crises that Marx correctly predicted can be summarized by a simple sentence from the preceding chapter: Capitalism doesn't break because it bends. Specifically, history shows that the capitalist system has experienced big swings in the balance between politics and economics, between the power of government and the power of the market, between one-man one-vote and one-dollar one-vote. These swings can be illustrated by two ideologically opposite examples.

Until the late nineteenth century, the idea of a progressive income tax was widely considered to be incompatible with the basic principles of capitalism and private property rights. In the United States, income tax was declared unconstitutional by the Supreme Court in 1895 and could not be levied by the federal government until the ratification of the Sixteenth Amendment, in 1913. At that point, a top tax rate of 7 percent was applied to incomes above $500,000 (roughly $10 million in today's money). This tax was denounced at the time as an expropriation of property and a threat to the existence of the free-enterprise system.[4] In Britain, the People's Budget of 1909, in which Lloyd George, backed by Winston Churchill, proposed the first progressive income tax in the country's history (with a top rate of 11.25 percent), was considered so revolutionary that it precipitated a constitutional breakdown that led eventually to the Parliament Act of 1911, ending the power of the hereditary House of Lords.[5] Yet despite these apocalyptic contemporary views, few would deny today that the

United States and Britain both survived as capitalist countries after the introduction of income tax. And the few conservative extremists who assert that the United States ceased to be a truly capitalist economy when it adopted progressive taxation must explain the remarkable success of America's crypto-socialist system in the decades after World War II, when even Republican administrations kept income tax rates as high as 91 percent.[6] Some market fundamentalists may maintain that capitalism narrowly survived in the 1950s and 1960s *despite* such handicaps as progressive taxation and the growth of government spending. But the truth is that capitalism has survived *because* of these reforms—not because they were economically beneficial but because they were necessary in specific historical conditions to create the political consensus for the survival of free enterprise.

Now consider an example from the other end of the ideological spectrum. In the 1970s, European advocates of progressive mixed-economy capitalism believed almost unanimously that governments, rather than markets, should be responsible for managing exchange rates, running utilities such as electricity, telephones, and water, and even controlling wages and prices across the economy. The capitalist system was considered too fragile and unstable for such important decisions to be left to unpredictable markets. Yet in the 1980s, politicians all over the world, led by Margaret Thatcher and Ronald Reagan, abandoned these roles, defying warnings that society could not survive such radical reforms. The predicted collapse of society never happened, but for many years, progressives and social democrats continued to believe that the postwar consensus in favor of mixed-economy capitalism only narrowly survived despite deregulation and privatization. As the new market-oriented system prospered, however, it became obvious that the postwar welfare state had survived *because* progressives made the historic compromises involved in privatization, deregulation, and reduction in trade union power.

Systemic transformations in capitalism are, by the hectic standards of financial markets and modern politics, a slow, almost geological, process—so far, three truly fundamental changes have occurred in 250 years. But the correct geological analogy is with seismic, rather than glacial, changes. History shows that systemic evolutions of the kind described generally occur through discontinuous, not gradual, changes.

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Andrew Gamble, the Cambridge political scientist, distinguishes between such truly transformative crises *of* capitalism and mere crises *in* capitalism,[7] the regular financial cycles that have produced busts and crashes throughout economic history and have helped to reorganize businesses through Schumpeter's process of "creative destruction." In a crisis *of* capitalism, what is reorganized is not just a group of businesses and industries but the capitalist system itself. Such events are rare and, as Gamble says, "intensely political in nature . . . they become the occasion for far-reaching change both within states and between states. They create conditions for the rise of new forms of politics and policy regimes . . . new institutions, new alignments, new policies, and new ideologies." Gamble points out, consistently with this book's classification, that there were only two such general crises of capitalism since the nineteenth century: in the 1930s and the 1970s. Far from destroying capitalism, as many contemporaries from both ends of the political spectrum had expected, these upheavals "can be seen in retrospect as creating the conditions for [the capitalist system's] renewal, and for a further period of expansion."[8]

The distinction between crises *in* capitalism and crises *of* capitalism, between humdrum cyclicality and extreme instability leading to regime change, is all-important but often overlooked. The question, then, is which kind of crisis occurred between February 2007 and March 2009? Was this upheaval so fundamental that it would alter the entire system? Or was it merely a cyclical event, leading to the reorganization of just one or two industries, for example, house building and international finance?

In the depths of the crisis and for a year or so after, there seemed to be no doubt. Entire libraries could be filled with the books predicting the death of the market system, the demise of America, the rise of China, and so on. But by early 2010, a very different mood had settled on the world. Oddly, the people most convinced of the total collapse of the global economy during the crisis were the ones who migrated fastest to the complacent camp who sneered that nothing much had really changed.

Cynics on the Left started to complain that the crisis had been a non-event because the banks were never nationalized, finance was not tamed, and human greed was not abolished. Like Jehovah's Witnesses or votaries of Nostradamus who keep revising their calculations about the Day of

Judgment, they began to predict that the 2007–09 crisis was merely preparing the way for another even more catastrophic crash—and that this really, truly would be the final crisis that brings the world to an end. The prophets of doom on the Right showed even more chutzpah when their jeremiads proved wrong. Having predicted that the free-market system would be ruined by government interventions and that fiscal stimulus plans were doomed to failure, what did they say when government interventions saved the system and fiscal stimulus plans revived economic growth? They insisted that unfettered free enterprise had proved its resilience, *despite* all the government interference, and that the postcrisis recovery would have been even stronger if only the politicians had refrained from meddling and allowed markets to solve the problems on their own.

Will public opinion begin to accept this diagnosis as memories of the crisis recede? It seems unlikely. Business and financial lobbies will, of course, regroup their forces to oppose new regulations and argue that only minor tinkering is needed to restore the free-market status quo. But the economic consequences of the crisis, though less catastrophic than the zealots of the Left and the Right predicted, have been extremely costly and will be felt for decades ahead. Even more importantly, the crisis has shaken economic assumptions and political beliefs. For a generation who almost saw their savings wiped out and their jobs destroyed by the failure of every major bank and auto manufacturer in the world, faith in unfettered free-market capitalism and minimal government will never be the same. It is likely, therefore, that 2007–09 really will turn out to have been a historic crisis *of* capitalism—the kind of crisis that creates a new version of the capitalist system. Why describe this new version as Capitalism 4.0?

Chapter 4 explains in greater detail capitalism's evolution before the crisis went through three broad stages, each initiated by a period of upheaval. Identifying each stage with the politicians or economists who codified and then destroyed it, these three historical stages can be defined as follows:

Capitalism 1: from Adam Smith and Alexander Hamilton to Lenin, Hoover, and Hitler

Capitalism 2: from Roosevelt and Keynes to Nixon and Carter

Capitalism 3: from Thatcher, Reagan, and Milton Friedman to Bush, Paulson, and Greenspan

The most important distinctions between these three phases concern the relationships between politics and economics, between governments and markets, between decision-making on the basis of one-man one-vote and one-dollar one-vote. To oversimplify an oversimplification (a practice with long and distinguished provenance in economics, as discussed in Chapter 11), the three stages of capitalism's evolution thus far can be briefly characterized from the following point of view.

Capitalism 1 lasted from 1776 until the 1920s and went through several lesser variations described in the next chapter as Capitalism 1.0, 1.1, 1.2, and 1.3. This system of social organization treated economics and politics as two almost unrelated spheres of human activity. Its most articulate spokesmen advocated keeping markets and government far apart. But, they also took it as axiomatic that the capitalist economy and polity would rise or fall together. Either both capitalist politics and economics would progress in parallel toward the sunlit uplands of ever-greater prosperity and human happiness, as implied by the optimistic "Whig view of history."[9] Or injustice, poverty, and class wars, which were unavoidable by-products of free markets, would doom both the capitalist economy and polity to collapse and revolution, as communists, fascists, and some pessimistic conservatives of the Malthusian school averred. The idea that the systemic tensions created by unbridled capitalism might be resolved by political reforms effective enough to control class conflict, yet moderate enough to preserve the fundamentals of the private enterprise system, hardly figured in theories of economics, even though pragmatic action to ameliorate the harshest excesses of free markets—slavery, illiteracy, child labor, pauperism, and so on—dominated political debate throughout the nineteenth century. The unifying ideology of this long historic phase, therefore, was that the iron laws of market economics required that government intervention in business activity be strictly a last resort.[10]

This separation of politics and economics ended with Capitalism 2, the social democratic Keynesian approach that started in the Great Depression. Economics became essentially a branch of politics in Capitalism 2, which started with the New Deal of the 1930s, passed through military Keynesianism and ended with the spectacularly successful postwar Golden Age, before disintegrating in the stagflation of the 1970s. The chief theorists and political leaders of this forty-year period assumed that market forces were often wrong and that the single most important function of government was to manage the economy, by taming and controlling unstable market forces.

Capitalism 3, the Thatcher-Reagan monetarist counterrevolution that culminated in the Bush–Greenspan market fundamentalism described in this book as Capitalism 3.3, adopted the opposite approach. Instead of treating economics as a branch of politics, it treated politics as a branch of economics. Its most important leaders believed that governments were usually wrong and always inefficient; therefore markets should be empowered wherever possible to discipline and control venal politicians.

Assuming that the era of market fundamentalism ended with the 2007–09 crisis, what should we expect as the defining characteristic of Capitalism 4? It will probably be a recognition that governments and competitive markets can both be wrong and that the world is too unpredictable and complex to be managed by any immutable institutional structure. This conclusion may seem paralyzing and depressing, but it is actually empowering. If markets and political institutions are both recognized as fallible, the rational response must be a willingness to experiment and a preference for reversible policies and business decisions, initially conducted at a modest scale and in a decentralized way. Luckily, such decentralized experimentation is consistent with both modern technology and social trends. The benefits of small-scale reversible experimentation are already becoming visible in business, social policy, and even diplomacy. The postcrisis transition from the hubristic dogmas of neo-conservative market fundamentalism to the humble scepticism of Capitalism 4.0 should promote and accelerate these trends.

Before imagining how capitalism might evolve in the future, however, we need to look more closely at the present and the past. We have to do this to answer the question left hanging earlier in this chapter: If economic history does progress through once-in-a-generation seismic changes, has the world just witnessed such a sudden break? Part II tries to answer this question by putting some historic and theoretical context around the extraordinary events of 2007–09. To prepare the ground requires a fuller stylized history of capitalism, which the next chapter provides.

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CHAPTER THREE

The Four Ages of Capitalism

① What's Capitalism? How do we define it?

The lion, the tiger, and the leopard are three species of the same genus— obviously different and obviously alike.

THE WORD *capitalism* in its modern sense is only 150 years old.[1] But the two human characteristics on which it is founded are universal, stretch back into the mists of history, and explain why efforts to replace the chaos and injustice of the markets with more rational or moral systems have always failed. These two basic human qualities are the competitive spirit (ambition) and the desire for sensual gratification and mastery of the material world (which can be described pejoratively as greed). However, these emotions are not sufficient to define capitalism. As expounded by Max Weber in his classic *The Protestant Ethic and the Spirit of Capitalism,* there are two additional requirements: 1 acceptance of profit and capital accumulation as motives with genuine moral legitimacy, as opposed to deplorable, though ineradicable, human vices; and 2 the recognition of voluntary exchange and cooperation, rather than heredity and coercion, as the main organizing principles of economic life.[2]

③ Decolonize?

These concepts emerged from the Calvinist ideology of the late seventeenth century, according to the standard view of social history pioneered by Weber. But they were crystallized by Adam Smith in *The Wealth of Nations,* producing some astonishingly counterintuitive revelations. Smith

② Where is your country standing?
& How many ages of Capitalism? &

observed that a market economy, although it involves millions of unconnected individuals who work at highly specialized and narrow tasks, is a naturally self-organizing mechanism provided a few simple rules of commerce and mutual trust are generally obeyed and enforced. This self-organizing system produces mutually satisfactory outcomes as if it were guided by an "invisible hand," but without the need for supernatural or divine intervention. And individuals, as long as they act predictably within this mutually agreed social framework, can satisfy each other's material needs simply by pursuing their own self-interest. To provide useful services to other people, we do not need to know them, love them, or anticipate their desires. As Smith said: "It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own self-interest."[3]

The miraculous efficiency of the market system, taken for granted everywhere today, was far from obvious to half of humanity just a few decades ago, as illustrated by the famous, though probably apocryphal, anecdote about Nikita Khrushchev's first trip to the United States. The Soviet leader, after visiting some supermarkets in Manhattan and finding them filled with fresh food, in contrast to the empty shelves of Moscow, turned to his host, Vice President Richard Nixon, and asked, "Who is responsible for the supply of bread to New York City? I want to meet this organizational genius." In *The Company of Strangers,* a brilliant book about the roots of economic cooperation in the biology of human evolution, the Anglo-French economist Paul Seabright delightfully describes the wonder that market forces ought to inspire:

> This morning I went out and bought a shirt. There is nothing very unusual about that; perhaps twenty million people did the same. What is more remarkable is that I, like most of those twenty million, had not informed anybody in advance . . . Yet the shirt I bought, although a simple item by the standards of modern technology, is a triumph of international cooperation. The cotton was grown in India, from seeds developed in the U.S., and the material in the dyes came from at least six other countries . . . the machinery for cutting it came from Germany and the shirt itself was made up in Malaysia. The project of making a shirt and delivering it to me has been a

> long time in the planning. And yet nobody knew I would be buying a shirt of this kind today . . . If there were any single person in charge of supplying shirts to the world's population, the challenge facing them would bring to mind the predicament of a general fighting a war. One can imagine an incoming president of the United States being presented with a report entitled 'The World's Need for Shirts,' trembling at the contents and immediately setting up [a] Presidential Task Force. . . . The Pope and the Archbishop of Canterbury would issue calls for everyone to pull together to ensure the world's shirt needs were met.
>
> Citizens of the industrialized world have lost their sense of wonder that they can go out spontaneously in search of food, clothing, furniture, and thousands of other useful items and . . . somebody will have anticipated their actions, and thoughtfully made such items available for them to buy. For our ancestors, who wandered the plains in search for game, or scratched the earth to grow grain under a capricious sky, such a future would have seemed truly miraculous, and the possibility that it might have come about without the intervention of any overall controlling intelligence would have seemed incredible.[4]

Adam Smith's pioneering analysis and explanation of this miracle was published in the spring of 1776.[5] By a telling coincidence, it was on July 4 of the same year that the U.S. Continental Congress issued its Declaration of Independence, creating the first self-consciously capitalistic nation—one that was quickly to become the incomparably successful paragon of economic and social progress and eventually to set the standard for political development for all other nations around the world.

To establish the dominance of the broad politico-economic model created by these breakthroughs took forty years of war and revolution—the American War of Independence, the French Revolution, and the Napoleonic Wars. But from the Battle of Waterloo in 1815 onward, the increasingly liberal political and economic systems established in America and Britain spread rapidly to Europe and, by way of the age of imperialism, to the rest of the world. This system of classical imperialist capitalism, underpinned by British and American politico-economic thinking, prospered for roughly one hundred years, until the period of disintegration that started with World War I in 1914 and climaxed with the Great Depression and World War II. This age of classical capitalism could be subdivided into several subperiods, marked out by financial and military crises:

Capitalism 1.0: from 1776, the U.S. Declaration of Independence and *The Wealth of Nations,* to 1815, the defeat of Napoleon at Waterloo
Capitalism 1.1: from 1820 to 1849
Capitalism 1.2: from 1848–49, Europe's Year of Revolutions, the repeal of the Corn Laws, and the Navigation Acts, until the late 1860s, during the aftermath of the U.S. Civil War and the Franco-Prussian War
Capitalism 1.3: from 1870 to 1914, the United States' Gilded Age or the Second Industrial Revolution
Capitalism 1.4: from 1917 until 1932, the period of disintegration, when capitalism came closer to genuine collapse than ever before or since

Some of the upheavals that punctuated the transitions from one of the subperiods to another were bloody and traumatic—for example, the American Civil War and the slaughter of the Paris Commune—but they did not turn out to be systemically transformational crises of capitalism, as described in Chapter 2. Nevertheless, serious historians will justifiably point out that the 150 years from 1776 to 1929 saw more radical political and economic changes than any previous period in human history and thus it is ludicrous to lump them together into a single epoch—and if this were a work of history they would be right. But economics relies on simplifications and stylized facts. And one consistent theme ran through all the politico-economic variations of the nineteenth century and justifies, at least for this discussion, the single label of Capitalism 1.

This entire epoch had in common a clear and unquestionable ideology: a belief that the capitalist system based on private property and the profit motive was an elemental force of nature, governed by iron laws of economics that were as immune to human manipulation as a hurricane or a tidal wave.

The general philosophy of laissez-faire[6]—a belief that economics and politics are two distinct spheres of human activity and emotion that must

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remain as distinct as possible in the interests of both economic and political progress—was dominant throughout this 150-year period. Government intervention in the economy was quite extensive, mainly through high and variable trade tariffs and excise taxes. These were used not only for raising revenues, but also for what would now be described as protectionist industrial policies to favor influential industries or social interests, such as textile manufacturers or yeoman farmers. But economic thinkers were virtually unanimous in believing that such government interventions were relics of a precapitalist feudal period and were destined to disappear.

Protectionist or paternalistic precapitalism was seen not as a serious long-term rival, but as a temporary roadblock to the onward march of liberalism and free trade.[7] The only alternative to classical laissez-faire capitalism—and one that was viewed seriously as a potential rival—appeared to be the abolition of private property, money, and even mankind's competitive instinct, predicted not only by Marxists but also by anarchist revolutionaries, Utopian Christians, and socialists of many stripes.

In one crucial respect, however, the friends and foes of capitalism were alike. Neither side had any concept of a governmental duty or capacity to create jobs, support private industries, guarantee the soundness of financial institutions, or stabilize economic cycles. To the extent that government impinged on private business, it was as a judicial disciplinarian or sometimes a predatory looter. A strong and well-organized state was needed to enforce contracts and protect private property, but an overweening state would stunt economic progress by favoring politically powerful vested interests and by squeezing private enterprise for revenues to support aristocratic luxury or to fight wars.

For most nineteenth-century thinkers, therefore, government was considered most legitimate when confined to what the French called the regalian responsibilities of the state: justice, lawmaking, and national defense, to which liberal thinkers gradually added the provision of basic education and relief from extreme poverty and physical exploitation.[8] Managing economic activity and employment was emphatically not among these regalian duties—and this disconnect between government and the economy was something everyone could agree on, from bourgeois liberals and conservative oligarchs to Marxist revolutionaries and Utopian social-democrats.

The last, most successful phase of Capitalism 1—and the one that came nearest to the laissez-faire ideal—began around 1870. More precisely, it can be dated from the late 1860s, a remarkable period that witnessed the end of the U.S. Civil War and the abolition of slavery (1865), Britain's Second Reform Act (1867), which dramatically extended voting rights, and the start of the Second Industrial Revolution, a period of dramatic economic acceleration from around 1860 onward, based on the new technologies of electricity, chemical engineering, and petroleum. This triumphant decade of accelerating progress was also, ironically, the age when classical capitalism suddenly seemed under the greatest threat. Despite the technological and social progress, this period also saw an upsurge of anticapitalist thinking and action with the publication of Marx's *Das Kapital* (1867); the foundation of the first American trade union (1869), the Knights of Labor; and the revolutionary uprising of the Paris Commune in 1871.

These social and technological upheavals, far from undermining capitalism, laid the foundation for a period of unprecedented prosperity and peace that Keynes described in a poetic passage suffused with his characteristic blend of irony and affection: "After 1870, there was developed on a large scale an unprecedented situation [of rising living standards and expanding production] . . . In this economic Eldorado, in this economic Utopia, as the earlier economists would have deemed it, most of us were brought up."[9] It is impossible to better Keynes's wistful evocation of capitalism's exuberant spirit in this prelapsarian Golden Age:

> What an extraordinary episode in the economic progress of man that age was which came to an end in August, 1914! The greater part of the population, it is true, worked hard and lived at a low standard of comfort, yet were, to all appearances, reasonably contented with this lot. But escape was possible, for any man of capacity or character at all exceeding the average, into the middle and upper classes, for whom life offered, at a low cost and with the least trouble, conveniences, comforts, and amenities beyond the compass of the richest and most powerful monarchs of other ages. The inhabitant of London could order by telephone, sipping his morning tea in bed, the various products of the whole earth, in such quantity as he might see fit, and reasonably expect their early delivery upon his doorstep; he could at the

same moment and by the same means adventure his wealth in the natural resources and new enterprises of any quarter of the world, and share, without exertion or even trouble, in their prospective fruits and advantages; or he could decide to couple the security of his fortunes with the good faith of the townspeople of any substantial municipality in any continent that fancy or information might recommend. He could secure forthwith, if he wished it, cheap and comfortable means of transit to any country or climate without passport or other formality, could despatch his servant to the neighbouring office of a bank for such supply of the precious metals as might seem convenient, and could then proceed abroad to foreign quarters, without knowledge of their religion, language, or customs, bearing coined wealth upon his person, and would consider himself greatly aggrieved and much surprised at the least interference. But, most important of all, he regarded this state of affairs as normal, certain, and permanent, except in the direction of further improvement, and any deviation from it as aberrant, scandalous, and avoidable. The projects and politics of militarism and imperialism, of racial and cultural rivalries, of monopolies, restrictions, and exclusion, which were to play the serpent to this paradise, were little more than the amusements of his daily newspaper, and appeared to exercise almost no influence at all on the ordinary course of social and economic life.[10]

As he wrote those words in 1919, Keynes clearly saw that classical capitalism was dying after the mortal blow of the Great War. But even he did not fully imagine how venomous were the serpents that had bred in the lost Eden he evoked. Far more insidious than the monopolies and cultural rivalries he mentioned were the monsters of communism, fascism, and class conflict, fed by the widening inequalities of nineteenth-century capitalism, which finally become intolerable after the shared sacrifices of the World War. As Keynes's bourgeoisie were sipping their tea in bed and chancing their fortunes on foreign ventures, the working classes in the prewar Golden Age were growing restive and then being crushed by Knickerbockers, Special Constables, and Cossacks. During and after the war, they started to fight back in earnest.

Marx had predicted correctly, albeit prematurely, that laissez-faire capitalism would succumb to its internal contradictions, even as it grew stronger. And he had been proved right. The newly enfranchised working classes were organizing in unions and political parties—and where the right to organize legally was denied them, political oppression was inspiring revolutionary movements and anarchist bands. These movements were reinforced and ultimately led, again much as Marx had predicted, by middle-class intellectuals and anarchist romantics repulsed by the crass, inhuman materialism of their age. One of the characteristic media images of the golden period was the caped, black-hatted anarchist with a fizzing bomb under his arm. And this was not just media hysteria, as Keynes's description suggested, because the revolutionary groups of the 1880–1915 period far exceeded in their destructive political impact anything achieved in our age by the terrorists of the PLO, the IRA, or even Al-Qaeda.[11]

By 1914, the classical free-market capitalism of the Victorians was already declining. Never could it return to the happy complacency that Keynes described before World War I and the Russian Revolution. Never could it reverse the growing power of the working classes, the result of democracy and the steady expansion of voting rights.[12] The internal contradictions identified by Marx were moving inexorably toward a systemic breakdown, though how or when this crisis might happen was impossible to predict. In 1919, when Keynes was warning of the economic catastrophe foreshadowed by the Versailles Treaty, the danger was still invisible to less acute observers.[13]

It was not until the financial earthquakes of hyperinflation in Weimar Germany and the Great Depression of the 1930s that the rest of the world began to understand what Keynes was elegantly dissecting in his papers and what communist and fascist radicals had been shouting from the rooftops since 1918: The nineteenth-century politico-economic system was in its death throes. Capitalism had to reinvent itself or become extinct. The system opted for reform and survival.

The new species of capitalism born out of the economic disasters of the interwar period is what I call Capitalism 2. It can be dated from Britain's abandonment of the gold standard on September 21, 1931. It gained strength with Franklin Roosevelt's election as president in November 1932. Its intellectual symbol was Keynes's *General Theory*,[14] whose publication in 1936 crystalized the new economic and political ideas that were gaining influence

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in the same way that *The Wealth of Nations* had codified the ideas of Capitalism 1 in 1776. And it grew to horrifying force as Hitler revived the German economy from 1933 onward with what can be seen with hindsight as the only wholehearted attempt to implement the policies that Keynes had been vainly recommending to the British government for the previous five years.[15]

This new species of capitalism thrived for roughly forty years and passed through the following four stages:

Capitalism 2.0: from 1931–38, the abandonment of gold and New Deal experimentation
Capitalism 2.1: from 1939–45, government-led militarism
Capitalism 2.2: from 1946–69, the Keynesian Golden Age
Capitalism 2.3: from 1970–80, inflation, the energy crisis, and the breakdown of the postwar gold-backed currency system

Of the many transformations that occurred in the 1930s, one of the most remarkable and historically resonant was the invention of a heroic government economist. Robert Skidelsky aptly subtitled the second volume of his magisterial biography of Keynes "The Economist as Hero." And soon there were odder juxtapositions: the heroic central banker and the heroic finance ministry bureaucrat. The newfound importance of government economic policy would have been inconceivable to anyone who lived just a few decades before. The interactions between the government and the market in Capitalism 1 had been considered incidental to economic activity and generally damaging to it: Governments needed to raise revenues through tariffs and taxes, mainly for fighting wars. Guilds, landowners, and manufacturers lobbied for tariffs to protect them from low-cost foreign competition. And artisans tried to sabotage factories and mass production. Governments chose sometimes to satisfy such special interests and other times to resist them, but that was the limit of economic politics.

Until the 1930s, almost no one, especially those in the nerve center of the global economy that was nineteenth-century Britain, believed that politicians could or should do anything to improve or stabilize the workings of the market. The cycles of finance and economic activity were treated as forces of nature, which politicians could no more moderate than they could influence the tides. Even the interventions of the Bank of England to quell panics in the money markets were seen mainly as private matters, motivated by the self-interests of the City of London and British finance, rather than a core responsibility of the state.[16] Prime Minister Gordon Brown has described in several speeches a document in the Treasury archives that shows the government's reaction to Keynes's early proposal to lift the British economy out of the Great Depression. His advocacy of what would now be described as demand management was dismissed by the permanent secretary of the Treasury in three scribbled words: *Extravagance, Inflation, Bankruptcy.*[17]

The view that government had no responsibility for macroeconomic conditions such as unemployment changed gradually after the First World War and was transformed by the collapse of global trade and industry in the early 1930s. As public outrage intensified over mass unemployment, the twin threats of socialist revolution and fascist dictatorship forced democratic politicians to engage with the economy in ways that classical economist had never imagined. At the same time, the breakdown of the gold standard suddenly offered governments a freedom of action never imaginable before. "Nobody told us we could do that" was how Sidney Webb, the founder of the London School of Economics and a prominent Labour politician, famously described the sudden sense of liberation for Ramsay MacDonald's government in Britain after its decision to abandon gold in September 1931.[18]

The upshot was that economists, politicians and voters gradually realized that markets and governments were enmeshed in ways that no one had previously understood. This realization led, in turn, to the defining characteristic of Capitalism 2: a belief that capitalism, if unguided by government, was ruinously and intrinsically unstable. Electing benign and competent governments to protect the public and the economy from the inevitable chaos of free markets thus became the most important function of politics, at least in peacetime.

The philosophy that the market was usually wrong, while the government was always right, reached its apotheosis in the Golden Age of Keynesian economics, from 1946 to 1969. This was the most successful period of economic management, in terms of living standards, technological progress, and financial stability, in the history of the world. But like the Ed-

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wardian Golden Age eulogized by Keynes in 1919, this "economic Eldorado" also came to an abrupt end.

From the late 1960s onward, the world was hit by a succession of economic crises. Arguably, these started with the inflationary financing of the Vietnam War and Great Society welfare spending under Lyndon Johnson, but other countries, including Britain, Italy, France, and even Germany, also faced severe disruptions, ranging from inflation to assassination and terrorism from the extreme Left and the extreme Right. The deathblows to Capitalism 2 were the breakdown of the international monetary system in 1971, when President Nixon unilaterally closed the U.S. Treasury's "gold window,"[19] and the 1973 Arab embargo, which quadrupled the price of oil. The result was a lethal combination of high inflation and mass unemployment that came to be known as *stagflation*, an economic malady the world had never seen before. By the time of the second oil shock, after the 1979 Iranian Revolution, capitalism faced the same dilemma as it did in the early 1930s: It had to transform itself or become extinct.

What emerged from the wreckage of stagflation was Capitalism 3. This period began with the election of Margaret Thatcher in June 1979, closely followed by Ronald Reagan's election in November 1980 and the taming of inflation by Paul Volcker's application of monetarism in 1981–82. The intellectual inspiration for this great transition came from Milton Friedman and his monetarist followers at the University of Chicago. Monetarism was closely related to other "new classical" economic doctrines, which revived the assumption that free, competitive markets, provided they were not distorted by state intervention, would always keep a capitalist economy in balance, producing efficient and rational outcomes, including economic stability and full employment.

According to modern economic orthodoxy, the fundamental cause of the great inflation of the 1970s was loose monetary policy, especially in America, as Presidents Johnson and Nixon printed money to finance the Vietnam War and the Great Society welfare programs. But many other countries, including Britain, Italy, Germany, and France, experienced even greater turmoil, ranging from inflation and labor unrest to student uprisings, cultural revolutions, and political assassinations, committed by both Left and Right. To explain the crisis of capitalism in the 1970s simply as a consequence of errors in monetary policy is therefore naïve. There were deeper reasons for the great inflation and the breakdown of state-led Keynesian capitalism than the financial profligacy of the U.S. and other governments. Conservative explanations of the breakdown stress the disincentive effects of high taxes, the stifling of private enterprise by overbearing governments, and the militant unions they empowered. Marxist accounts, ironically, emphasize some of the same factors, especially the class conflict and pressure for income redistribution promoted by an increasingly powerful labor movement. Indeed, the great inflation can be viewed more accurately as a symptom of the breakdown of Keynesian capitalism in the 1970s, rather than the cause. Economic theory today treats inflation as a purely monetary phenomenon, determined by the amount of money created by central banks. But there were deep political and sociological reasons why monetary expansion began to produce inflation in the late 1960s, instead of fueling rapid growth of employment and real output, as it had in the previous twenty years.

The Keynesian full-employment policies of the postwar period sowed the seeds of their own destruction. In an economic system built on natural tensions over the distribution of wages and profits between workers and capitalists, unemployment, or at least the fear of unemployment, has a crucial disciplining effect. By the late 1960s , a postwar generation of workers had grown up with no experience of mass unemployment and no memories of the Great Depression. As a result, labor militancy intensified and pay demands escalated; and in an economic system where the top priority of government policy was maintaining full employment, companies felt confident that enough money would be printed to accommodate whatever pay offers were needed to stave off labor militancy and strikes. Inflation was the inevitable result. The only way to stop this inflationary spiral and restore discipline in the labor market was for governments to abandon full-employment policies and create conditions in which millions of workers would lose their jobs. This is exactly what happened after 1979.

The self-destruction of Keynesian full-employment policies was anticipated in 1943, in one of the most prescient economic papers ever published. The Polish economist Michal Kalecki, who had collaborated with Keynes in Cambridge and Oxford in developing the policies that had solved capitalism's crisis of unemployment, argued that this solution would itself create a new crisis of capitalism, triggered by labor militancy and inflation. This inflationary crisis would, in turn, force the capitalist system to reinvent itself again—and economic theory would devise retrospective justifications for whatever new policies the survival of capitalism demanded:

> The assumption that a government will maintain full employment in a capitalist economy if it knows how to do it is fallacious . . . Under a regime of permanent full employment "the sack" would cease to play its role as a disciplinary measure. Continuous full employment would cause social and political changes which would give impetus to the opposition of business leaders . . . The self-assurance and class-consciousness of the working class would grow. Strikes for wage increases and improvements in working conditions would create political tension . . . Popular pressure for jobs would reach its height at or near election times, leading to government-induced preelection booms. The workers would get out of hand and the "captains of industry" would be anxious "to teach them a lesson" . . . A powerful bloc is likely to be formed between big business and *rentier* interests, and they would probably find more than one economist to declare that the situation was manifestly unsound.[20]

The economist found to "declare the situation manifestly unsound" was Milton Friedman. The transition from Capitalism 2 to Capitalism 3 proceeded almost exactly as Kalecki had foreseen. The Thatcher-Reagan political revolution was paralleled by the monetarist revolution in economic theory, and between them they overturned the faith in active government inspired by Keynes. Like the previous phases of capitalism, this new era could be roughly divided into several subperiods:

Capitalism 3.0: from 1979–83, early monetarism and confrontations with unions
Capitalism 3.1: from 1984–92, Volcker and Greenspan, Thatcher-Reagan booms
Capitalism 3.2: from 1992–2000, the Great Moderation
Capitalism 3.3: from 2001–08, market fundamentalism under Greenspan and George W. Bush

This thirty-year epoch started with Thatcherism in 1979 and ended with the crisis of 2007–09. As Capitalism 3 dies out, a new creature, related but distinct, could be seen emerging from the undergrowth and preparing to become the dominant species.

We will consider the characteristics that Capitalism 4 will need to develop to prosper in the new politico-economic landscape in Parts IV and V. But before turning to the development and survival of the new species, let us consider in detail the reasons for the extinction of the previously dominant species. This is the subject of Parts II and III.

CHAPTER FOUR

Annus Mirabilis

Why did I free Nelson Mandela in February 1990? Because of the Berlin Wall. Once Communism collapsed in 1989, I felt sure that the ANC would abandon its revolutionary aspirations. This meant we had a chance to negotiate a peaceful end to Apartheid.[1]

—F.W. de Klerk, president of South Africa, 1989–94

You ask me why India broke out of the Hindu rate of growth in 1991. It is quite simple really. When we saw what happened to the Soviet Union in 1989, we realized that our reliance on central planning had been an historic mistake. The only alternative was to liberalize the economy. We started to do that in 1991.[2]

—Jaswant Singh, foreign minister and finance minister of India, 2004–06

In September 2006, at the Annual Meeting of the World Bank and International Monetary Fund (IMF) in Singapore, the IMF's chief economist, Ranghuram Rajan, presented probably the most optimistic *World Economic Outlook* in this august institution's sixty-year history.[3] Unaware that the first tremors of the 2007–09 crisis were about to shake the world economy just six months later, in February 2007, he began his presentation with a self-deprecating joke: "I have been told to smile more often. Now, since my natural disposition is to be serious, I might seem a little

schizophrenic. But this in a sense accords well with the state of the outlook."[4]

Dr. Rajan's cheerful schizophrenia was understandable. The surest way to be taken seriously as an economist is always to predict disaster, regardless of what is going on. Finance ministers are expected to be dour and stingy. Central bankers pride themselves on their pessimism and repeat as often as possible their sadomasochistic catchphrase: "I am paid to worry." Although economics was invented by Adam Smith as an optimistic study of the boundless possibilities of human freedom and its ability spontaneously to create prosperity, by the early nineteenth century its reputation had changed. Economics came to be viewed as a miserly obsession with money and a devotion to everything in Victorian society that was destructive of the human spirit. Its symbols were the "dark satanic mills" of William Blake, the sadistic workhouses of Dickens, the hypocritical bourgeois of Balzac, and the starving match girl of Hans Christian Andersen. No wonder economics was nicknamed "the dismal science."[5] This miserable view of economics was pithily summarized by J. K. Galbraith in 1977: "We all agree that pessimism is a mark of superior intellect."[6]

Yet this cynical conventional wisdom about the fundamental nature of economics, as well as about the capitalist system economics seeks to understand, is wrong. Most great economists—Smith, Ricardo, Mill, Keynes, Schumpeter, and Hayek—had an optimistic outlook about human creativity and the capacities of the market system. They were fundamentally optimistic for both practical and intellectual reasons.

The main intellectual goal of economics set out by Adam Smith, and partly achieved by him in *The Wealth of Nations*, was to explain the miracle that led millions of unrelated individuals, all working freely in pursuit of their own desires and personal interests, to serve the needs of others and promote the prosperity of all. After Smith, other great economists enriched this understanding with unexpected and counterintuitive detail. Ricardo showed how nations could benefit from free trade even if it seemed initially to hurt many of their businesses and workers. Mill showed how spreading prosperity to the working class could serve the interests of business, even though profits might appear to be squeezed by higher wages. Keynes showed how slumps could be avoided, even when companies and consumers lacked the confidence and financial wherewithal to invest and spend. Schumpeter showed how the destruction of some industries would lead to the creation of others that would create better products and more jobs. Hayek showed how the "spontaneous order" of an apparently chaotic market system would always be better at serving humanity than the calculations of central planners armed with the most powerful computers.

More amazing than this intellectual history, and a better reason for economists to smile, was the market system's practical success in satisfying material needs and desires. The advances in living standards, nutrition, education, health, and every other indicator of human well-being during the 250-year ascendancy of market economics could be described as the human achievement in history. Later chapters return to some of the unwelcome by-products and social costs of this wealth creation—environmental damage, wars for resources, social inequality, and so on. But judged by its own materialistic standards, the reign of market economics has been a spectacular triumph. This long-term triumph of global wealth creation has been interrupted by financial crises and wars, but in the early years of the twenty-first century, just before the 2007–09 financial crisis, there appeared to be more reasons for confidence in the unstoppable growth of the global economy than ever before.

This brings us back to why Dr. Rajan was smiling in 2006. Why wasn't he fretting, as usual, about the risks of a global recession and reiterating the IMF's standard denunciations of profligate governments, unsustainable trade deficits, and the crushing burdens of consumer debt? It is tempting to say with hindsight that Dr. Rajan and his IMF colleagues, along with all the other well-paid economists who failed to predict a financial disaster, were stupid or blinded by dogma or hog-tied by institutional interests. There is some justice in such claims, as discussed in Chapter 11. However, a more important reason why so many well-meaning and well-informed experts were so misled about the outlook was that the world economy was in remarkably good shape just months before the crisis erupted.

As Dr. Rajan explained to that IMF meeting in late 2006, economic activity all over the world was expanding briskly but not too strongly; inflation and interest rates were stable; employment and incomes were rising; and these healthy trends seemed set to continue almost wherever one looked around the globe, even in the recently war-torn depths of sub-Saharan Africa. Moreover, the reasons for this remarkable performance seemed clear.

Most economists had long been enthusiastic about free trade, globalization, and technological progress, but the benefits of these forces were usually hedged with warnings about the concomitant risks of financial leverage, economic instability, job insecurity, and so on. In the years leading up to the crisis, however, the evidence appeared to be mounting that the technological and structural advances of the preceding decade were generating even greater benefits than expected, and doing so with rather lower costs. Thus, when the IMF's researchers considered the familiar long-term hazards in the global outlook—the trade deficits in America (and to a lesser extent in Spain and Britain), the danger of boom-bust cycles in housing, the threats to financial stability from speculators and hedge funds—they concluded that these risks were all *less* disturbing than they had appeared a year or two before. Hence, the smiling faces in Singapore in September 2006. How differently economies—and IMF physiognomies—were going to look just twelve months later!

The fact is that the arrow of progress was soaring higher than ever in the months just before the crisis. Why was this so? The rest of this chapter and the next two will try to answer this question. Chapters 7 and 9 will then explain how the ring of financial cyclicality, spinning relentlessly in the background, suddenly brought the arrow down to earth. Part III will show how the combination of these cyclical and secular forces interacted with the political ideology of Capitalism 3.3 to trigger a crisis of a kind never seen before.

Five vast and irreversible changes transformed the world in the two decades before the crisis, starting in the pivotal year of the late twentieth century—the *Annus Mirabilis* of 1989. The reason for choosing this starting point will be obvious from the first of these transformations.

One, the seventy-year experiment with communism came to an end in November 1989, when the Berlin Wall was demolished. Even more important than the physical break-up of the Soviet bloc was the ideological collapse of Marxism as a political doctrine and of central planning as an idea for organizing economic activity without markets. From 1989 onward, all nations, regardless of their political institutions, their stage of development, or their local traditions, were forced to acknowledge private property, the profit motive, and the voluntary exchange of goods and services through competitive markets as the only plausible basis for economic life. As revealed by the epigraphs to this chapter, the aftershocks from this sudden and unexpected implosion spread far beyond the Soviet bloc—to India, China, South Africa, and every country and political movement that had been beguiled by the deceptive logic of socialist delusions.

Two, Asia, and especially China, emerged as a significant part of the global economy. In theory, China's gradual transformation into one of the most fiercely competitive and profit-oriented systems of private enterprise the world had ever seen began with Deng Xiaoping's introduction of "Socialism with Chinese characteristics" in 1978.[7] However, these reforms only began to deliver impressive results about a decade later, in the late 1980s, turning China into a serious commercial power, transforming the global trading system, and shifting the center of gravity of the world economy toward Asia.

Three, a technological revolution accelerated in the late 1980s and did for human memory and intelligence what the steam engine and electricity did in the nineteenth century for muscle power. In March 1989, Tim Berners-Lee, a British physicist working at the CERN laboratory in Geneva, wrote a proposal for a "world wide web" of documents written in a standardized "hypertext language" that would reside on computers dotted around the world and communicating through phone lines with what he called "browsers." Berners-Lee predicted that his world wide web would quickly allow "the creation of new links and new material," making "authorship universal" for computer users everywhere. In addition, in the late 1980s and early 1990s, the time and cost of data processing and global communications was reduced to virtually zero by the ubiquitous adoption of personal computers.[8] As a result, by the early 1990s, communication, data storage, and computer processing had become almost free goods. Parallel though less spectacular improvements in air and sea transport technologies reduced the cost of long-distance physical communication for goods and people to about one-third their level in the 1950s.[9]

Four, the end of the Cold War produced a "peace dividend," substantially reducing defense spending in America, Europe, and the Soviet Union. More importantly, the peace dividend seemed to confirm a new era in which global wars were out of the question. The World Wars of the first half of the twentieth century had consumed or directly destroyed much of the physical wealth created by three successive generations. As a result, each of these generations was forced to save a large share of its income to invest in the reconstruction of houses, factories, and physical infrastructure that their parents had destroyed. The postwar baby boom generation suffered no such depredations—and the dismantling of the Berlin Wall implied that no such disaster was going to occur in the near future. Even localized wars became far less likely after the end of proxy conflicts in Africa and southeast Asia between the United States and Soviet Union. Meanwhile, the declining value of natural resources and farmland, especially in comparison with the products of technology and intellectual property, reduced the economic incentives for territorial expansion. The one aberrational case, when such territorial expansion was attempted—Saddam Hussein's invasion of Kuwait in August 1990—was quickly reversed by an international community showing unprecedented unity. With homes, factories, and roads no longer threatened by military destruction, the habits of saving and frugality imposed on previous generations by the needs of postwar reconstruction, receded into the past.

Five, the demystification of money was a less widely noticed but equally unprecedented event. This process began with the collapse of the Bretton Woods international currency system in 1971. On August 15, 1971, President Nixon closed the "gold window," where the U.S. Treasury had always stood ready, at least in theory, to convert into gold any dollars presented by foreign governments. Because the dollar had become the sole standard of value for all currencies—even in Communist countries such as China, Russia, and Cuba—after World War II, the decision to sever its official link with gold was momentous. For the first time in five thousand years of recorded history, every country in the world was now using pure paper money that was not linked to gold, silver, land, slaves, salt, cowrie shells, or any other "natural" or God-given standard of value. This unprecedented event transformed the global economy in ways that no one understood at the time—and which are still not fully appreciated forty years later. It deserves a longer explanation.

While most nations had abandoned their gold standards during the depression of the 1930s, they all did so reluctantly and as a temporary measure. After the war, as part of the settlement agreed by the allied powers at the Bretton Woods Conference in 1944, all national monies, even those of the communist countries, were linked to the dollar and, hence, at least in theory, to gold. If a peasant in China or a miner in Britain wondered why his yuan or pound note had any value, he could be assured by his government that it was worth an equivalent sum in dollars and thus in gold. After August 1971, this concept of value no longer applied.

From that day onward, anyone who asked why a dollar bill was worth more than the paper it was printed on could not get a satisfactory answer. The dollar was valuable because the U.S. government said it was. As the text on the dollar bill declares, "This note is legal tender for the settlement of all debts public and private." But the debts to be settled were themselves denominated in paper dollars, so the concept of value was circular, dependent solely on the U.S. government's assertion, or fiat. In Britain, the curlicue text on a five-pound note made this circularity even more obvious: "I promise to pay the bearer on demand the sum of five pounds," the governor of the Bank of England states on the note. But what would "the bearer" receive if he went to the Bank of England to redeem this "promise"? Nothing more than a choice between another identical five-pound banknote or five single-pound coins.

After the dollar had become a pure paper currency, representing nothing more than the fiat of the U.S. government, the idea that other currencies could acquire some intrinsic value by linking to the dollar lost its allure. Every form of money in the world was now an abstract symbol of confidence in the government that ordered its issue. No currency anywhere in the world represented an objective kind of value. This situation had never existed before—and its economic consequences were vast. As governments realized that they had broken their age-old servitude to gold, silver, or another externally imposed financial standard (such as the dollar), their initial confusion was quickly replaced by a sense of astonished liberation. In principle, any government could now print any amount of money at will. Not surprisingly, the initial result was an outbreak of inflation that greatly aggravated the fear and confusion that had started to haunt financial markets in the late 1960s and this escalated steadily throughout the next ten years.

By the late 1980s, however, governments in the main advanced economies had become surprisingly responsible with their newfound monetary freedom—inspiring a degree of faith in pure paper money that no one would have imagined possible when the gold link was abandoned in 1971. In the United States, the arrival of Ronald Reagan at the White House and Paul Volcker at the Federal Reserve reduced inflation to moderate levels by 1982, and the skillful handling of the 1987 stock market crash by Volcker's successor, Alan Greenspan, inspired tremendous confidence in the Fed's monetary management. An even clearer symbol of the burgeoning belief in paper money was the upsurge of confidence in the German mark and the Japanese yen, which culminated in two of the most extraordinary events in economic history, both occurring in 1989.

European governments resolved in the Delors Report of April 1989 and at the subsequent Rome Summit to create a synthetic new currency, the euro, which would derive its value neither from gold nor the fiat of any sovereign government, but merely from the reputation of Europe's central bankers. The staged progress toward the European Monetary Union, which began in 1990, was initially greeted with skepticism but quickly gained credibility in the financial markets. Even more remarkable was the worldwide faith in Japan's yen. This produced the greatest financial boom in history, which climaxed in December 1989. Such was the world's demand for the trillions of paper yen flying off the Bank of Japan's printing presses that the garden of the Emperor's Palace in Tokyo was calculated in 1989 to be worth more than all the land in California.[10] The Nikkei share index, which peaked on December 31, 1989, at 39,000, had become so overvalued that twenty years later it was still 75 percent below the levels it had reached in that fateful year. These figures, incidentally, illustrate a point we will come to later: The U.S. housing and mortgage boom, by the standards of history's great financial bubbles, was actually a modest affair.

The incredible bull markets that occurred in 1989 in all sorts of paper assets confirmed something that would have been unthinkable to politicians and economists of previous generations. Less than twenty years after President Nixon severed the link between gold and the dollar, the world had learned to manage successfully a system of pure fiat money of a kind that had never existed before. In the 1920s, Keynes had denounced the global monetary system's dependence on gold as a "barbarous relic," but even he never imagined that governments would be liberated completely from this age-old servitude and freed to print paper money, unconstrained by international agreements or external disciplines of any kind.

Rightly or wrongly—and we will return to the pros and cons of pure fiat money in Chapters 6 and 15—the demystification of money from the late 1980s onward offered governments a new ability to manage (or mismanage) their national economies. The world's learning experience with pure fiat money, which started with the breakdown of Bretton Woods in 1971, took almost twenty years to complete. By the time this learning process was finished in the late 1980s, money had been transferred from the divinely ordained realm of nature and turned into a pure human construct, subject to political control. This revolutionary demystification of money did to economic policy what the French Revolution did to state religion. As in the case of political secularization, the transformation of money from a mysterious natural substance created by God into a mundane human artifact churned out by printing machines was an earthquake that reverberated for decades. Along with the other great historic transformations that converged in the Annus Mirabilis of 1989, the unexpected triumph of paper money was still shaking the world twenty years later. Between them, these irreversible, once-and-for-all events created powerful and long-lasting economic trends that ultimately set off the financial crisis of 2007–09. This is the story the next chapter takes up.