

INTRODUCTION

Wherever orthodoxy exists, radicals will not be far behind. What is true for society is true for a science. Science has always had its radicals: economics is unexceptional in this regard.

Although Adam Smith was a radical in his own day, he fashioned the classical orthodoxy, major elements of which have never disappeared. The laissez-faire aspect of Smith prevailed in all things classical or neoclassical. John Stuart Mill was the last of the classical; he nonetheless was very much left of Smith, and advocated some modern social welfare reforms. What we shall call “the radical assault” begins with Mill’s contemporary, Karl Marx (1818–85), historically the most radical economist of all. Though he built on classical foundations, Marx’s economic system departed sharply from the classical orthodoxy. Marx’s ideas were sufficiently powerful to eventually divide the global economy more or less in half.

Marx’s name is inseparable from that of soulmate Friedrich Engels (1820–95). Ironically, Engels was upper-middle-class while Marx was mired in poverty. One was the serious scholar with trousers worn thin from sitting in the British Library, the other a handsome, athletic and romantic journalist. Although they did not look anything alike, they shared a strong distaste for the status quo. Engels was the practical one, supporting Marx financially, while Marx was allowed to be the dreamer and Germanic scholar.

The philosophy of Georg Wilhelm Friedrich Hegel (1770–1831) had a great influence on Marx’s thinking. To Hegel, matter and mind are intertwined. Economic, social, and political life is in a process of continual growth. After any social institution gains

power, it is challenged by another, a process revealed by Hegel's dialectic. In a paradigmatic example of the dialectic, feudalism (thesis) encounters a new force, the market economy (antithesis), and the result is an entirely new system, capitalism (synthesis). Properly understood, history is a dialectical progression.

Humanity's progress toward self-realization is not smooth, for self-alienation can happen. Marx turns Hegel inside out. Marx saw religion as a reflection of self-alienated man. Since religion is a phenomenon of human self-estrangement, Marx alienated himself from the Christian faith. Marx *did* see humans overcoming alienation by recognizing themselves as the proper objects of love, care, and worship. The state is intertwined with and at times indistinguishable from the economic life of society, which is yet another sphere of human self-alienation. Marx saw capitalism as only a necessary evil to be superseded by a higher state when private property would not exist.

Marx's devotion to a labor theory of value was complete. The labor value of any commodity is equal to the amount of average labor time required for its production. The capitalist pays a price for labor — treating labor as just another commodity — a subsistence wage just sufficient to keep the worker alive, at work, and able to reproduce the commodity.

The capitalist defines himself by using capital (machinery) to produce goods, and therefore current labor will produce some amount of commodity value above its own value, an exchange value in excess of its labor value. The difference between the two is surplus value, which is the source of the owner's profits. In modern definition, the surplus is the sum of rent, interest and profit. Marx goes on to make a distinction between absolute surplus value and relative surplus value. In this way he looks to technological improvements to create relative surplus value.

Surplus value is the motive behind the accumulation of capital; the more capital and the higher the state of technology, the greater the output from the labor force and, presumably, the greater the profits. The original, post-feudal justification for private property

came from the desire to accumulate capital and thereby relentlessly increase profits through market exchange. In Marx, greed for riches and the boundless pursuit of exchange value drives the accumulation of capital.

Accumulation is the beginning of monopoly capital. Improvements in technology will require a larger plant and more capital for production. Competition allows the strong to dominate both the weak and the less strong.

There is also worker alienation. In Marx's doctrine of increasing misery, the conditions of labor worsen compared with the conditions of the capitalist. When labor becomes sufficiently alienated, workers will revolt. Estranged labor will carry the day. Alienation spreads to the entire market system. The worker is no longer the craftsman creating, but the servant of new industrial processes.

From the ashes of monopoly capital Marx built the first sophisticated model of the business cycle, of boom and bust. The successive depressions of capitalism would become increasingly severe, so much so that the workers would finally revolt, overthrow capitalism, and build a socialist economy. Many people made premature predictions about the death of capitalism during the Great Depression of the 1930s, and the American Communist Party gained adherents. But by the end of World War II, the mixed enterprise system bore only a family resemblance to the kind of capitalism attacked by Marx. Still, Marx anticipated, in some detail, the evolution of capitalism, even while he underestimated the resiliency of reformed capitalism and the effectiveness of patriotic appeals to labor.

Like Marx, the Victorian Age and the dominance of English economic thought seemed to have no ending. At the time the United States was becoming the exceptional home to the "American Dream," a dream that gained much of its optimism through 18th century belief in a beneficent, finely tuned universe based on Newtonian Mechanics. The British orthodoxy was too busy to notice the relative decline of the British Empire as the Industrial Revolution spread to the United States by the time of the Civil War.

The robber barons matured during the years preceding the Civil War. While Horatio Alger's stories and the Protestant Church went a long way in defending the antics of the robber barons, they were to reach out to the Social Darwinists for the "scientific" justification for their corruption. Social Darwinism was to become Thorstein Veblen's foil.

The turn of the century marks the origins of the British labour party. Still, the labor movements in both Britain and America had tough sledding until the labor shortage accompanying the Great War. That the public was so strongly antipathetic to labor was due in no small part to the widespread acceptance of the principles of Social Darwinism.

Gradually, a separation appeared between the financial control of industrial enterprises and the means by which production took place. Worse, competition became too intense for its own survival. For giant business enterprise, competition became obsolete because investments in plants and equipment were too high for success to be trusted to the workings of the market mechanism, where competition was a kind of genteel balancing act. For example, it was that great speculator Jay Gould who forced the Pennsylvania Railroad line to abandon its cooperative strategy with other lines and to build the country's first inter-territorial railroad empire. Despite his unscrupulousness, Gould failed to put together a national system. He nonetheless eventually controlled 14,854 miles of roads, or 15 percent of U.S. mileage.

Thorstein Veblen (1857–1929) would inveigh against the robber barons and follow Marx as a radical economist. Well, he was more than that; Veblen founded the only uniquely American school of economics, the institutionalist school. A strange man whose furtive eyes were often for women, for whose attention was nearly fatal for his academic career as he bounced from college to college in the USA. Veblen's understanding of capitalism was in sharp contrast to the marginalist orthodoxy. His first popular book, *The Theory of the Leisure Class*, introduced biting sarcasm such as pecuniary emulation and conspicuous consumption for the

ostentatious display of wealth that remains a part of economics today. In contrast to Alfred Marshall, waste in the expenditure of superfluities became respectable.

Veblen managed to turn the Social Darwinists on their heads. The ideas of Social Darwinism became just another outmoded “institution.” Veblen saw ideas lagging behind reality as *laissez-faire* continued to be used to defend business corruption and the monopolistic practices of the robber barons. In Veblen, the rich accumulate and consume wealth in a conspicuous way, a display that brings them power, honor, and prestige. While giving the robber barons enough rope to hang themselves, Veblen ultimately broadened economics, bringing into play social institutions and psychological attitudes toward wealth. He did all this with great wit. Veblen’s ideas, if not his writing style, even influenced the author of the Jazz Age, F. Scott Fitzgerald.

Those who accumulate wealth, Veblen writes, do so for reasons going beyond the simple satisfaction of physical needs: the rich accumulate and consume wealth in a grossly conspicuous way because the display is indicative of power, honor, and prestige in a materialistic culture. Through intricate phrases Veblen’s subtle logic also gave society a great deal to think about. Veblen ultimately broadened economics, bringing into play such “non-pure” economic forces as social institutions and psychological attitudes toward wealth.

Social institutions and wealth also was to preoccupy our next radical.

Joseph Schumpeter (1883–1950) was born the same year as John Maynard Keynes, the same year that Karl Marx died. Schumpeter had sufficient ego to consider himself to be a greater economist than his contemporary, J. M. Keynes. Though influenced by Ludwig von Mises’s (1881–1973) insight into entrepreneurship, Schumpeter’s entrepreneurs are of more substance.

Schumpeter had considerable respect for Karl Marx and came to the same conclusion, namely, that capitalism was doomed. The reasons, however, were quite different. Like Marx, Schumpeter was

a troubled man. He was a libertine who pursued adultery with uncommon passion and claimed himself, not Keynes, to be the world's greatest economist. He had an inferiority complex and suffered chronic depression. Though overshadowed by Keynes during his lifetime, viable research projects continue to flow from Schumpeter's theory of capitalism.

In Schumpeter's theory, the heroic entrepreneur is the innovator and the agent of economic change. The entrepreneur creates entire industries. Such a romantic figure appears in fiction, especially in the persona of Hank Rearden in Ayn Rand's *Atlas Shrugged*. The entrepreneur is the extraordinary person who daringly raids the circular flow of economic activity and diverts labor and land to investment.

Schumpeter saw the Great Depression as part of the "creative destruction" necessary to free the entrepreneur to be inventive in his attempt to rescue capitalism. It nonetheless is industrial concentration that weakens capitalism. Such industries become self-destructive. New Deal policies can only sustain capitalism in an oxygen tent: ultimately, capitalism is swallowed by the state in order to save it.

Karl Marx depicted the crises of capitalism as cataclysmic. Much more recently, another German economist, Gerhard Mensch, has taken his lead from Schumpeter but favors the pattern of the discontinuous path of capitalism. Mensch's model, which he calls the metamorphosis model, is based upon the product cycle or product S-curve.

In the metamorphosis model, long periods of growth are interrupted by relatively short intervals of turbulence. Despite these breaks and upheavals over time and the variations in tempo of change, there is regularity that conforms to the S-curves of those industrial complexes that lead the particular expansion. Mensch's view can be modified to show that general economic progress can be extended over several centuries despite the sharp disruptions.

Innovations and the timing of long waves are forces making for faster or slower economic growth rates among nations. Relatively

small coalitions or special-interest groups appear to be the most obstructive to economic efficiency and growth where the long upswing is aging. If coalitions as rent-seekers design the rules, the income distribution is decided by their power. As long as the growth rates of wages and labor population do not exceed that of productivity, the rent-seekers divide the surplus without creating much inflation. This could describe the first half of the long-wave expansion. Only when the swarm of innovations has been widely diffused do the rent-seekers contribute to stagflation. At that time, the stable democracy that gives rise to the rent-seekers might itself be threatened.

Modern dissenters have had a major effect on contemporary economic thought but have always fallen short of becoming the new orthodoxy. Adam Smith, Thomas Malthus, Karl Marx, John Stuart Mill, Thorstein Veblen, John Maynard Keynes, Joseph Schumpeter, and even Alfred Marshall had a broader social perspective than the modern superstructure. Contemporary dissenters, including those names associated with the institutionalists, share this broader social perspective. Predominant among the names are Robert Heilbroner (1919–2005) and John Kenneth Galbraith (1908–2006). There is an unbroken line between institutionalism and these two giants in contemporary economic thought. Galbraith stands astride several contemporary schools; Karl Marx is not without some influence.

Robert Heilbroner was born in New York City into a wealthy German Jewish family. After his father died when Robert was a small child, his family's chauffeur, Willy Gerkin, became Robert's surrogate father. As a son of privilege, Robert attended the best schools, including Harvard University, where Schumpeter would be one of his professors. Heilbroner attributed his social conscience not to Schumpeter, but to his feelings of indignation when he realized that his mother could give orders to her chauffeur only because his beloved Willy needed the money.

Robert went to Harvard in 1936, a year in which the Harvard Economics Department was debating the meaning of John Maynard Keynes's General Theory. In his sophomore year, Robert's tutor

was Paul M. Sweezy, the most prominent of the “older” Marxists. Sweezy, an eclectic, also assigned Veblen’s *The Theory of the Leisure Class* as supplemental reading.

Heilbroner’s flowering as an economist was interrupted by service in World War II, a stint in business, and freelance journalism. He went from the war into Adolph Lowe’s course on the history of economic thought. Lowe’s course was the impetus for the first edition of Heilbroner’s classic, *The Worldly Philosophers*, which has sold more than a million copies in seven editions. Like the classicals that animate *The Worldly Philosophers*, Heilbroner’s many faces have a breadth of vision. His final book was *The Crisis of Vision in Modern Economic Thought*, co-authored with William Milberg.

In his many writings Heilbroner is somewhere between capitalism and socialism. For Heilbroner, human inspiration is attained in a “slightly imaginary Sweden.” It is a vision of a cooperative economy which would push liberal capitalism to its limit while allowing democratic politics and egalitarian goals to gain the edge over acquisitiveness. Heilbroner’s analytic pessimism is balanced by his moral optimism. This vision is little removed from his early concern about his mother’s wealth dominating Willy Gerkin.

Like Veblen and Heilbroner, John Kenneth “Ken” Galbraith has delighted general readers, if not always other economists, with books such as *The Affluent Society* (1958), *The New Industrial State* (1967), and *Economics and the Public Purpose* (1973). Strongly influenced by Thorstein Veblen, Galbraith has abided Veblen’s assault on the neoclassicals. While the neoclassicals sense weakness, Galbraith, like Heilbroner, senses power. While neoclassicals advise against intrusion with natural market forces, Galbraith sees economic forces left to themselves often working out to favor the powerful.

Galbraith’s status in American letters is ensured, not only by his bestsellers in economics, but also by three widely acclaimed novels and other literary ventures. Galbraith, author of more than two dozen books, competes with Heilbroner as the most widely read

modern-day economist, and served as president of the combined American Institute and Academy of Arts and Letters. Although he and Veblen share agricultural roots, great sardonic wit, and literary talents, Galbraith, in contrast to Veblen, was a remarkably well-balanced personality and enjoyed a highly successful lifestyle, not to mention access to the highest levels of Democratic Party political power.

Galbraith's nomination to the presidency of the American Economic Association in 1970 was opposed by Milton Friedman on the dubious grounds that Veblen had never been president. "I learned after the election," writes Galbraith, "that this got me by." Later he wrote an introduction to a new edition of *The Theory of the Leisure Class* and led a drive to save from the ravages of time the Veblen homestead in Minnesota.

Galbraith has been a confidant of presidents, a speechwriter for Adlai Stevenson, Lyndon Johnson, George McGovern, and the Kennedys; an ambassador to India, and an escort of first ladies. One measure of Galbraith's renown is that in 1968 he was interviewed by *Playboy* magazine, that opulent reminder of the surrogate pleasure open to those with too much money, Veblenian leisure, and unrestrained expectations (Friedman was later interviewed by *Playboy*).

Galbraith's early life was a prophetic background for his later career as a social critic. His father began as a teacher, turned to farming, and was a leading political liberal in his rather isolated community. When Ken was about six years old, he began to go to political meetings with his father, and perhaps this is when he began to develop his sardonic humor. In *The Scotch*, Galbraith recalls an occasion in which his father made a speech critical of the Tory platform from atop a huge manure pile, apologizing for having to speak from the Tory platform.

Galbraith attended high school in Dutton, a village split by discord between the rural Scotch and the English townspeople. Most of the Tories were English merchants, whereas the Liberal Party was predominantly Scotch. In the post-World War I years the

village merchants prospered while the farmers suffered. The Scotch, who thought they were superior in every way to the English (Galbraith agreed), believed that the merchants were better off because they were buying cheap and selling dear. The superior bargaining power of the merchants apparently made a lasting impression on the young man.

Galbraith worked his way through Ontario Agricultural College and took his doctorate in agricultural economics at the University of California at Berkeley in 1936, where he first read Veblen and Marx. Most of his subsequent academic life was spent at Harvard University as the Paul M. Warburg Professor of Economics and, later as Professor Emeritus.

Galbraith's main contribution to economics is his general theory of advanced development. In contrast to the neoclassical system is the planning system by which he means the 1,000 or so industrial giants. They produce a larger share of the GNP than the remaining 12 million business firms combined. The size of the largest firms such as General Motors is in the service of planning. Galbraith is writing at a time when the automotive industry is healthy and long before the bankruptcy of the still massive GM. The only reason that corporate power does not corrupt absolutely is because the power is not quite absolute. Although this is so, planning system power nonetheless is sufficient to impose an "irrational" mode of life on individuals.

Part of the corporate plan becomes the management of what consumers want. Through advertising, promotion, and salesmanship, the producers create the wants they seek to satisfy, which Galbraith labels the *dependence effect*. Galbraith goes a step beyond Veblen into something akin to *producer sovereignty*. Since GM produces about half of all automobiles, its design is the current mode. The auto majors decree the current shape of the automobile. Once necessities are satisfied, a whole new world of possible wants is just waiting to be created.

Because of the imbalance between the planning system and the market system, economic development is uneven. The market

system is at a disadvantage in competing for skilled workers and natural resources. Moreover, the influential planning system can obtain services from the state, which the market system largely does without. In turn, uneven development influences social attitudes toward state provided services.

During the 1970s a new group of younger economists emanating from Galbraith's Harvard stormed onto the scene. Though now older, their ideas and they, for the most part, are still around. Many of these radical adherents gained a place on the 1971 program of the AEA convention, the year John Kenneth Galbraith was president of the Association. By 1980, New Left radical economics had joined Marxism and institutionalist economics as a branch of academic economics. The New Left has its own journal, *The Review of Radical Political Economics*. By 1985 numerous books had appeared championing their cause. They included Samuel Bowles's and Herb Gintis's *Schooling in Capitalistic America*.

The rebirth of radical economics in the USA can be traced to unmet economic crises such as poverty amidst plenty, environmental pollution, and the inability of capitalism to reconcile full employment with price stability. The concern for poverty extends to issues of economic development in Third World countries.

Despite its debt to Marx, New Left radical economics is influenced more by the broad, humanistic social thought of Marx than by his revolutionary side. The neoclassical paradigm is useful primarily as a justification for existing institutions. The radicals join Marx, Galbraith, and Veblen in bemoaning the distribution of wealth and income, especially in the USA. They also reject the idea of consumer sovereignty.

The New Left does not have a monopoly on radicalism in economics. The neo-Austrians were to have a real-world effect by the early 1980s. A close connection developed between the ideas of 19th-century Austrian economists at the University of Vienna and the first term of Ronald Reagan. The neo-Austrians are about as self-conscious of their adherence to fundamentals as the Marxians and neo-Marxians. Neo-Austrian literature is replete with references

to “Austrianism” and the neo-Austrians’ role as “methodological outcasts.” Unlike their neoclassical brethren, the neo-Austrians wear their values on their sleeves, deliberately proclaiming their “Austrianism.” It seems like a doctrine calling for religious conversion. The doctrine includes analysis of human action, the idea of entrepreneurship, and the theory of capital. It is the logical necessity of the free market system that attracted Ronald Reagan.

Austrian economics began in 1871 with the publication of Carl Menger’s *Principles of Economics*. The refinement and spreading of Menger’s views by Friedrich von Weiser (1851–1914) ignited the “Austrian tradition.” A diligent student of Weiser’s and Böhm-Bawerk’s, Ludwig von Mises (1881–1973) found his way to Great Britain and, later to the United States. Ayn Rand, the novelist and founder of objectivism, was charmed by von Mises and recommended him to admirers of his philosophy. Ayn Rand’s *The Fountainhead* evokes the neo-Austrian theme of radical individualism; architect Howard Roark epitomizes the neo-Austrian idea of human action in the service of private property. This psychology or praxeology undergirds the theory of capital and entrepreneurship.

Praxeology is the point of view of capitalistic individuals, maximizing personal satisfactions in the marketplace through their increased access to alternative means to chosen ends and their capability to exploit those means to planned-out ends. In fact, the entrepreneur is the standard against which all human action is judged rational. This image of the magnificently attractive entrepreneur no doubt has turned the heads of many businesspeople. The entrepreneur is the Superman of the market economy but *only* a market economy produces entrepreneurs.

The entrepreneur is closely tied to the Austrian concept of capital. In this regard, von Böhm-Bawerk’s *Theory of Capital* is the definitive work. The theory of capital is of two parts: (1) production takes time and (2) the longer the time, the greater the productivity. “Roundaboutness” requires laboring over raw materials long enough to make the value of the final product greater. The roundaboutness requires the entrepreneur to withhold the final product until his

subjective value is realizable. The value of goods produced rests in the marketplace, not the factory. This is the ultimate test of the rational choice-revealed notion of markets. Austrian time is part and parcel of the Austrian waiting game. Time becomes inseparable from capital; it is an elemental source of subjective value for the entrepreneur. Capital is a category of thought; it is whatever entrepreneurs put to use in making the final product.

Neo-Austrians make the most of entrepreneurship and capitalism as social practice. Austrian whole cloth is comprised of the reasonableness of the entrepreneur and the unreasonableness of artificial constraints on human action. The values of capitalism, the free market, and entrepreneurship are closely linked.

In *My Fair Lady*, sundry people are brought together during a sudden rainstorm. The “sudden rain showers” that brought together the diverse Post Keynesian characters was the stagflation of the 1970s. The crisis of faith extended across the Post Keynesians to the orthodox Keynesians. The Post Keynesians have flourished not only in the USA but also in Cambridge (England) and in Italy. On both sides of the ocean they have returned to the classical concern with income distribution. The Americans have focused on monetary economics and the Europeans more on a classical real economy.

Generally the Post Keynesians have separated themselves from the other Keynesians in a number of ways. They have extended Keynes by demonstrating how income distribution helps to determine national income and its growth. They have combined imperfect competition with classical pricing theory to explain stagflation. They have used income distribution and price markups to forge a new incomes policy. They have revived Keynes’s ideas on uncertainty, especially in regard to liquidity preference and business investment, and have resurrected Keynes’s idea that money is primarily created by the banking system as “inside money.”

The introduction of imperfect competition into macroeconomics is due to Marxist economist Michal Kalecki (1899–1972) but also to John Kenneth Galbraith, Joan Robinson (1903–83) at Cambridge,

England, and Sidney Weintraub (1914–83) at the University of Pennsylvania. Kalecki's and Weintraub's vision of pricing can be summed in one word, markup. If wages are administered by union-management agreements, the balance of income is provided by the markup over wages, most of which will be retained profits (profits plus depreciation) and dividend payouts. Like Pierro Sraffa, Kalecki seldom put pen to paper, but when he did, the clarity and depth of his thoughts were powerful.

In 1933, before Keynes had written his *General Theory*, Kalecki had developed a Keynes-style theory of the level of employment. The theory, however, was driven by the income distribution and can be summed up in the adage, "The workers spend what they get; the capitalists get what they spend." It could have been a line from a George Bernard Shaw play. If the greater share of output is devoted to investment goods, the level of employment in the investment sector will be greater and a greater share of the national income will go to the capitalists. On the other hand, if a greater share of output is devoted to consumer necessities, the workers gain a larger share of the national income pie.

Income in excess of cultural subsistence leaves a demand wedge and breathing space for producers. The price markup fills this void. Since wages are necessary payments to labor for production, the price markup determines the price level and wage inflation results in price inflation. Since this can happen short of full employment, stagflation can be the result.

An incomes policy is to be relentlessly pursued. Real-world incomes policies have ranged all the way from voluntary wage and price guidelines to mandatory wage and price controls long advocated by John Kenneth Galbraith. Such measures have been deployed in different forms and with varying vigor by the Kennedy, Johnson, Nixon, Ford, and Carter Administrations. An alternative to wage and price guidelines or controls is a tax-based incomes policy (TIP).

Retained earnings or expected profits can be used to obtain bank loans or to issue corporate bonds to generate funds for

investment goods. The part of debt which is bank credit constitutes Post-Keynesian “inside money.” Besides, the corporation can issue new equities in the stock markets for financing investment.

The supply of money comes into existence with private debts as “inside money.” Since production costs have to be paid during the time of production, producers’ debt may be incurred prior to any sales revenue whatsoever. Any increase in loan activity can be offset by the actions of the monetary authorities — in the USA, the Federal Reserve System. Still, loans beget deposits, which beget loans, which beget deposits, and so on. In this way changes in a nation’s money supply is decided by business activity itself. In contrast to the monetarists, there is full interaction between the money supply and GNP.

Hyman Minsky (1919–96), a laconic but persistent American Post Keynesian with Italian connections, connected the dots between Kalecki’s markup, retained earnings, and inside money to financial fragility. Minsky’s theory of investment focuses on how Keynesian uncertainty, speculation, and an increasingly complex financial system lead to business cycles. Minsky has extended Post Keynesian monetary theory to include not only credit, but the special problems of financial speculation. The system’s stability depends on profit flows to borrowers sufficient to service the loans. Charles P. Kindleberger (1910–2003) extended Minsky’s theory to the global economy.

The New Right had its political incarnation in the Reagan Administration. Reaganomics required the convergence of three powerful forces. The first was monetarism. The second force was the rising influence of the neo-Austrians and their desire to free the entrepreneurs from the state. The third force was the dream of supply-siders to free the rich from “excessive” taxation. Ronald Reagan matured as a politician during the rise to power of the New Right during the late 1970s and early 1980s. The neo-Austrian link to political power emanates from the establishment in 1974 of the Charles Koch Foundation which has since been the Cato Institute in Washington, D.C. In part by design, but mostly

by error and accident, monetarism and Reaganomics built a bridge to a casino economy.

As Reagan came to power, the recovery from the Carter Administration's 1980 recession was incomplete. Paul Volcker, the Federal Reserve head, faced an unemployment rate near 8 percent with a high rate of inflation. Volcker and monetarism was invoked by Reagan as a way out of the stagflation malaise, a condition also affecting Great Britain and Western Europe. Of the twin abominations, Volcker and Reagan considered inflation to be the greater evil. Reagan urged a return to an even tighter monetary policy along with supply-side tax cuts for the rich and corporations — all of which comprised the lethal mixture of Reaganomics. Lurking behind the supply-side ideas was a crude version of Say's law, that supply creates its own demand.

George Gilder gave further boost to the supply-siders while embracing neo-Austrian entrepreneurship in his *Wealth and Poverty*, required reading for Reagan's 1981 White House staff. Gilder's message was straightforward: to help the poor and the middle class, the tax rates of the rich must be cut. Entrepreneurs would play their historically heroic role once freed of the shackles of taxation. Despite increased spending for national defense and the penal system, the Federal budget would be balanced in 1984, the year George Orwell "had the clocks striking 13." As a result, the total value of the tax cuts for 1982 through 1990 was nearly \$2 trillion (in 1985 dollars), a value roughly equal to the entire GDP for 1960. By 1992, under President George H. W. Bush, the average tax break for the super-rich had risen to \$78,090 on incomes averaging \$675,000.

The magic trick between massive tax cuts and a balanced budget was provided by the Laffer curve. The Laffer curve traces the relationship between tax rates and government revenue. At extreme tax rates (0 percent and 100 percent), there will be no government revenue. Tax rates in-between yield different government revenues. The Laffer curve was the Rosetta Stone of Reaganomics. Originally, it was drawn for journalist Jude Wanniski

on a napkin in a Washington, D.C. “insiders” hotel bar, and given celebrity status in Wanniski’s *The Way the World Works*.

In the world of Reaganomics, the effectiveness of tax reductions would come from changing relative prices and inducing decision makers to substitute productive activity for leisure and idleness. The shift away from leisure and consumption toward productive activity would enhance economic growth.

The outcome was the Great Recession of 1981–82. Tight money policy combined with rising budget deficits sharply raised interest rates. In midsummer 1981 the unemployment rate was approaching 12 percent, the highest rate since the Great Depression. Between 1980 and 1992 the national debt exploded. In other words, the debt accumulation continued during the term of President George H. W. Bush, reaching \$4 billion in 1992. It was left to New Democrat Bill Clinton to cut budget deficits by some 60 percent during his first term, move to a balanced budget sometime in 1998, and build his proverbial bridge to the 21st century with surpluses.

History is replete with irony. By 1980 Keynesian economics was at a nadir among U.S. economists; the Reagan near depression greatly altered this perception. President Reagan and the supply-siders began to champion budget deficits greatly in excess of amounts acceptable to many modern Keynesians. With the rise in debt and the importance of the bond and equities markets, a lasting legacy of Reaganomics was a greatly enlarged importance of Wall Street in American society. The society began to resemble a giant money market fund in which the central function was speculation. In 1983 equity and debt issuance were \$4.8 billion and \$4.0 billion, respectively. In every year of the eighties thereafter, net equity issues were negative while corporate net bond issues soared (to about \$30 billion in 1989).

The next step on the road to bond and equity market dominance came with Michael Milken, the junk bond king. As a security salesman at Drexel, Milken preached a new gospel: the higher yield on low-grade bonds simply reflected a risk well worth

taking at such high expected returns. The only problem with low-grade debt was lack of liquidity or quick convertibility into money. Milken dispelled customers' initial aversion to high-risk bonds. His sales ability solved the "lack of liquidity" problem. In turn, the junk bond market led to a new era of leveraged buyouts (LBOs) during the 1980s and 1990s. All this was encouraged and abetted by a very lax regulatory environment.

The debt-equity bubble was to burst. Weaknesses in real estate were visible by the mid-1980s, but the great stock market crash of 1987 was the most dramatic omen. The S&L industry already had virtually collapsed. By mid-1990 the U.S. Treasury predicted that more than 1,000 S&Ls — more than 40 percent of all thrifts — would have to be taken over by the government. The final cost to taxpayers would be \$1 trillion, or \$4,000 per person. The total number of properties to be sold by federal regulators would eventually rise to one million (a figure excluding the tens of thousands of homes repossessed by commercial banks). There were close ties between the junk bond dealers and the bonfire of the S&Ls.

Commercial banks got caught in the squeeze. Banks foreclosed on \$26 billion worth of commercial properties in 1991, 32 percent more than in 1990. The FDIC, which has insured bank deposits since 1933, went broke for the first time in 1991. These were not small banks going under, they were giants. Some 882 banks with assets totaling \$151 billion failed between 1987 and 1991. Banks once considered too large to fail became too large to save. Much of the financial industry was being liquidated by the time Michael Milken was being sentenced to ten years in prison on November 21, 1990 (only to be released in 1993 on a greatly reduced sentence).

Any "trickle-down" benefits were illusive. The U.S. official poverty rate had declined to 11.7 percent and 26.1 million persons in 1979, but had rebounded to 13.1 percent and 31.9 million in 1988. In that same year, one in every five children lived in poverty. The poor also were getting poorer, as the gap between actual incomes and the poverty line rose from 8.9 percent in 1973–79 to

15.5 percent in 1979–88. What happened to wealth inequality was even more dramatic.

Incredibly, as Reagan's two-term national debt or the value of Treasury bonds outstanding soared to \$3.2 trillion, his tax cuts had given rich Americans a \$2 trillion windfall for their purchase. Tax breaks for the very wealthy enabled them to buy something like \$700 billion of Reagan's new bond debt. Not only were the bonds — in massive quantities — initially created during the Reagan years, but so were the means to buy them, a trend that continued through the end of the 20th century. The top 1 percent of wealth holders, the super-rich, got half of all interest payments going to households. Compound interest alone was creating new millionaires and billionaires. By the late 1990s still only 4 percent of all families directly held any bonds. The 1980s decade's entire increment of disposable income is more than accounted for by the rise in the share of interest income. The casino economy redistributes and concentrates income and financial wealth.

As President-elect, Bill Clinton virtually turned over White House economic policy to Alan Greenspan and to the Treasury heads, all choices of Wall Street. Greenspan had been one the first students at the Nathaniel Branden Institute, The "think tank" founded to further the ideas of Ayn Rand. Greenspan was a member of a radical right group known to themselves as The Collective and to Rand, as the Class of '43, named for the year of her novel, *The Fountainhead*. Whatever irony attends a free-marketer becoming the world's most powerful bureaucrat is exculpated by the revelation that Greenspan, the Howard Roark of central banking, has been the lonely hero freeing Wall Street from the chains of government. Greenspan never strayed from his radical ideology, though as head of the Federal Reserve he stated it with less clarity.

Clinton was a Southern populist, one of the New Democrats who were more centrist than the old Democrats, but nonetheless wanted to retain the social programs from Franklin Roosevelt's New Deal. Clinton had run on a platform of public investment in

the infrastructure such as roads, airports, bridges, and schools, but he abandoned these issues unless “building a bridge to the 21st century” is considered a new infrastructure.

Instead Clinton embraced Alan Greenspan’s “financial markets strategy.” With budget deficits under control, market expectations would change, and long-term interest rates would drop. Since homeowners had increasingly used refinancing as a source of consumer credit, they could buy more automobiles, appliances, home furnishings, and other consumer goods. This borrowing and spending would wonderfully expand the economy. Moreover, as bondholders got lower yields on bonds, they would shift money into the stock market, and stock prices would take off like a flock of geese. Economic growth from deficit reduction would increase employment. However, public infrastructure was sacrificed to reduce the budget deficit.

The Greenspan-Clinton alliance had the life span of a butterfly. In January 1994 Greenspan told Clinton and his economic advisers that inflation expectations were mounting. As Greenspan broke his promise to the president to keep interest rates down if Clinton narrowed the deficit, Greenspan and his Fed raised the fed funds rate, beginning shortly after Greenspan’s break with Clinton. The fed funds rate was raised seven times in quick succession.

The “financial markets strategy” did create the greatest bull market in stocks in American history. Greenspan began to worry that the financial bubble might burst and in an address in December 1996 he expressed his concern about the possible “irrational exuberance” of the market. Thereafter, unable to talk the stock market down, the Federal Reserve generally conducted itself in a manner least likely to precipitate the greatest stock market crash in American history. Cowed, President Clinton re-appointed Greenspan to head the Federal Reserve for a fourth term a full half-year before his third term was to end.

In his second term President Clinton abandoned domestic economic policy concerns and was looking to foreign policy achievements as a way to elevate his historical place among American presidents. He had fought Greenspan and Wall Street and had lost: progressives were deeply disappointed with his capitulation to Wall Street. The Clinton Administration presided over the final phase of a historical shift to monetary policy at the exclusion of fiscal policy. The Reagan Revolution had created so much federal debt that it left no room to use intentional budget deficits to stimulate the economy.

The completion of the “Reagan Revolution” continued to be promoted by the GOP majority and the editorial page of *The Wall Street Journal*. In 1997 Clinton signed onto a “trickle-down” policy of capital gains and inheritance tax cuts. The richest 1 percent of households once again benefited by far the most, with each paying \$16,000 less in taxes. The bottom 20 percent of U.S. households saw their taxes rise by an average of \$40 per year. The second 20 percent saw no change, and the middle 20 percent gained only \$150 a year. In winter 1998 while Greenspan’s words were still moving financial markets, Bill Clinton, the most compromised Democrat president in American history was impeached by the GOP he had emulated.

By the turn of the century, asset deflation and inflation began to supersede goods deflation and inflation, though these twin evils have never gone completely away. The assets were mainly held by wealth holders on Wall Street. There evolved what I have called Wall Street capitalism and a casino economy. With the rise in the use of derivatives and ATM-housing finance, there also came two episodes of boom and bust in real estate. All this culminated in what would be called the second Great Recession of post-World War II or the Great Recession of 2007–10, with 2010 being the projected end date.