In the depths of the Great Depression, John Maynard Keynes wrote that “[p]ractical men, who believe themselves to be quite exempt from any intellectual influence, are usually the slaves of some defunct economist.”¹ This acute observation is applicable to our current Great Recession as well. In fact, the newly discredited ideas are not all that different from the old, suggesting that Keynes may have overestimated people’s ability to learn from their mistakes.

I pursue the parallels between these two watersheds in recent economic history along three paths: the causes of the crises and their relation to economic theory; the spread of the crises on a global scale; and, finally, recovery – at least as far as we can see it at this point. As Karl Marx famously said, history repeats itself “the first time as tragedy, the second as farce,”² a criticism that also fits our current condition.

Both of these dramatic and costly economic crises emerged from the interaction of economic imbalances in the world economy and the ruling ideology of financial decision-makers who confronted these imbalances. World War I, a paroxysm of violence that brought the long economic expansion of the nineteenth century to a sudden end, produced the imbalance that led to the Depression. Britain, the workshop of the prewar world, was exhausted by the struggle. America, the rising economic behemoth, was unprepared to take responsibility for its new role in the international economy. Germany, having unsuccessfully challenged the Allied Powers, refused to acknowledge its defeat.

Patterns in the international movement of capital reveal this imbalance. During the postwar decade, one of the most important reasons for approving resumed capital flows was the ruling economic theory of the gold standard. In the eighteenth century, philosopher, historian, and economist David Hume explained how currencies valued in gold remain stable relative to each other. If, for instance, a shock to one country decreased its exports, the result would be an outflow of gold, which would lower prices in the exporting country. Lower prices would encourage exports and decrease imports, leading to an inflow of gold. Prices would rise again, re-creating the previous equilibrium. This argument is known among economists as the price-specie-flow mechanism.
Hume’s contribution is still useful today, although we are now aware of the many assumptions that underlie the mechanism’s proper functioning. In particular, the theory presupposes that prices are fully flexible and determined in competitive markets. These assumptions express a view of the economy – often attributed to Adam Smith – that has become characteristic of economic models in the years since Hume’s writing. This view is taught in introductory economics classes; it is the starting point for many journal articles; and it is referred to as a perfectly competitive economy. When conditions cross the line between descriptive and normative, however, they are transformed from description – which may or may not be accurate – to prescription – which in turn affects public policy.

These conditions may have been fulfilled in the eighteenth century, but they were not accurate in the 1920s postwar world. In contrast to Hume’s assumption of a fixed link between gold flows and prices, central bankers thought themselves responsible for inflation and deflation. Business firms had become larger, and many product markets were no longer fully competitive. As the size of production units, whether mines or factories, became larger, the ability of labor markets to be fully competitive also diminished. Large employers yielded little bargaining power to workers to negotiate wages and working conditions. If a factory, for example, was the only large employer in town, the options for workers were even more limited and the market power of the employer more obvious. Workers formed unions to countervail the market power of employers, and wage bargaining and strikes supplanted the individual wage negotiations implicit in Hume’s and Smith’s analyses.

Nevertheless, after World War I, policymakers could think of no better way to reorganize the international economy than to restore the gold standard – that is, to fix one price (the exchange rate) while assuming all others were flexible. Freezing exchange rates in this fashion reduced countries’ ability to adapt to new conditions; this defect, however, was deemed preferable to the anticipated chaos of alternative arrangements. When England attempted to reduce prices to sustain the value of sterling, a general strike resulted, revealing both the inaccuracy of the gold standard’s underlying assumptions and the strength of the economic policies based on those assumptions.

In this context, the United States took over the position of leading international lender and exported massive amounts of capital to Germany in the 1920s. The loans were meant to help Germany maintain the gold value of its currency, and they enabled Weimar Germany to pay reparations owed to the victors in World War I and enjoy a consumption boom. Higher prices after the war also put strain on gold currencies, and while England and Germany struggled as a result, economists in the more prosperous United States proclaimed the advent of a new economy in which stability and prosperity would continue indefinitely. Hindsight suggests that these conditions were not sustainable; rather than celebrating the promised strength and vitality of a new economy, countries should have been concentrating on how to avoid a rough landing from the high-flying results of the previous shocks.

Economic troubles appeared in Germany and the United States in the late 1920s. The former’s consumption growth produced a boom in municipal expenditures that began to fizzle; in the latter, both housing and stock market booms
eventually crashed. As recession spread to other countries, international trade decreased, but prices did not fall rapidly enough to equilibrate markets in the fashion Hume described. Prices were sticky, and rather than deflation, a lack of foreign reserves led to unemployment. When all countries found their exports falling, the processes of deflation and depression chased a moving target.

A similar international imbalance developed after the end of the Cold War. The new world lender, the United States, traded roles and became the world’s largest borrower. China, a “loser” in the Cold War, became the United States’ primary lender. Just as the inflow of capital to Weimar Germany had fueled expansion, the inflow of capital from China financed a consumption boom in the United States that developed into a housing boom.

This global imbalance was apparent, and economists feared that a crisis would ensue. Because the United States no longer adhered to the gold standard, the value of the dollar could change freely from day to day. The question was whether there would be a smooth decline in the value of the dollar, in the fashion of the price-specie-flow mechanism, or an abrupt fall. These concerns were misplaced; even though the international imbalance created crisis conditions, short-run booms and busts precipitated economic calamity in the interwar and recent years. One such boom was surging housing expenditures in the 1920s. The housing market was only a minor player in the drama of the Great Depression, but it had a starring role in our current crisis.

The housing boom flourished in recent years, nourished by the availability of Chinese capital and the ruling economic theory of the Washington Consensus. This term, coined in 1989, referred to a set of economic policies that ranged from stable exchange rates and responsible fiscal policies to deregulation and privatization. It was an adaptation of the gold standard to current conditions, stipulating stable—instead of fixed—exchange rates to avoid the rigidities of the gold standard that proved to be harmful in the 1930s. Other requirements marked a departure from the era of large government that followed the Great Depression and World War II. The terms of the Consensus favored diminished government influence, so as not to impede the progress of private finance and industry; competition would ensure continued growth and prosperity. Like the gold standard, the Washington Consensus was based on the Enlightenment ideas of David Hume and Adam Smith and promulgated as a way to organize the postwar world. It was the economic component of the new world order that the first President Bush was looking for.

More explicitly than the gold standard mentality, the Washington Consensus spelled out the conditions needed to maintain stable exchange rates. It acknowledged that most economies in the later twentieth century did not resemble the eighteenth-century conditions analyzed by Hume and Smith and argued that policies designed to re-create these earlier conditions would lead to economic growth and prosperity. Using familiar theories of competition and flexible prices, the underlying theory showed how the competitive process of allocating resources in individual markets would generate stable conditions for society as a whole.

Banks and associated businesses in the United States extended the underlying reasoning to the creation of new assets known collectively as structured finance. The Washington Consensus was designed to reduce risks, and innovative securities provided a means of allocating risk to
those investors who wanted to take it on. Just as banks can hold fractional reserves on the assumption that people draw on their deposits randomly and independently, the creators of new securities reasoned that homeowners default on mortgages randomly and independently. Collateralized debt obligations (CDOs) allowed financial institutions to benefit from the fact that only a few homeowners default in any given time, so that most mortgages are safe. Combining mortgages into "tranches," banks could separate the safe part of mortgages from the risky parts without knowing which mortgages would be defaulted—just as banks do not know which deposits will be withdrawn but can safely assume that only a fraction will be withdrawn at any given time.

Based on the ability to sell mortgages to be securitized, mortgage brokers expanded, encouraged homeownership, and promoted the ownership society championed by the second President Bush. Banks and other financial intermediaries holding securitized assets took on more and more leverage, which was justified by their calculations that the risks of many of these assets were vanishingly small. But when the resulting housing boom burst and many mortgages failed, the assumption that defaults occurred randomly and independently turned out to be false. CDOs were much more risky than they had appeared to be, and the separation of risky and safe assets proved to be invalid. Investors refused to buy the CDOs, and credit markets seized up. Countries that had adopted the policies of the Washington Consensus found themselves mired in a worldwide financial crisis.

The Great Depression and the Great Recession were both caused by policies derived from nostalgia for the world of the Enlightenment. Drawing on theories from the eighteenth century, hard-headed policy-makers either assumed or tried to re-create the idealized conditions described by Hume and Smith. These policy-makers ignored both the growth of economies of scale in modern economies and the work of behavioral economists that has shown that people do not behave as *homo economicus*. Their efforts produced the new economy of the 1920s and the Goldilocks economy of recent decades that turned into booms and busts. Was it inevitable that these economic expansions would end badly? According to the late economist Hyman Minsky, people become more complacent with prosperity and more willing to take on risks they often know are highly suspect. More recently, economists Carmen Reinhart and Kenneth Rogoff analyzed historical evidence and reached a similar conclusion: booms typically precede financial crises, just as pride goes before a fall.

More formally, people in both expansions miscalculated the risks they faced. Their models were based on shocks to individual countries or homeowners and did not allow for collective actions. The gold standard model explained how to deal with a shock to an individual country, implicitly assuming that other countries would be immune to whatever disturbance affected the distressed country. The interaction between the country in crisis and other countries would lead back to stability; a collective shock to many economies was not considered. Similarly, the model behind the Washington Consensus considered individual risks. Structured financial obligations were valued as if the underlying risk of mortgage foreclosure was the result of random and independent shocks to individual homeowners. As with the gold standard, no consideration was given to collective shocks; housing prices were expected to rise continually. It was
assumed that homeowners experienced financial difficulty and defaulted on their mortgages randomly. The randomness of defaults enabled financial designers to reduce the risk to any security by diversification, that is, combining many mortgages the same way a bank combines many bank deposits. When the housing boom ended and housing prices fell, however, many homeowners began to default, and the risk that was supposed to be protected for through diversification was now present in securities previously thought to be risk free. Investors could not discern safer assets from those more at risk, and the prices of all structured finance fell. Prices of some securities fell rapidly because there were no buyers for them. Financial markets froze in September 2008.

The second step of this comparative analysis is to evaluate the spread of each crisis. In the early 1930s, countries pursued a moving target as their economies contracted to deal with what appeared to be budget and current-account deficits. Consequently, a series of currency crises in Summer and Fall 1931 turned a bad recession into the Great Depression. The German mark collapsed when the chancellor put domestic politics ahead of sensible finance. The Bank of England abandoned the gold standard after a subsequent speculative attack. And the U.S. Federal Reserve raised its discount rate dramatically in October 1931 to preserve the value of the dollar; the Fed kicked the American economy when it was down and drove it further into depression.

Many countries continued to maintain deflationary policies in the early 1930s as they tried to hold on to the gold standard or, in the case of Germany, follow its prescriptions even after abandoning the gold standard. Some countries followed England off gold and created room for expansive policies, which were neither large nor expansive enough to stimulate recovery in countries that remained in thrall to gold. It has become common to attribute the continued economic decline to banking crises, but banks failed only in countries that adhered to the gold standard. As long as countries set policies to maintain the value of their currency, their banks were at risk; bank failures were a damaging outcome of the depression, not its cause. Governments and central bankers—not commercial banks—led the way into depression in country after country.

This process is illustrated clearly in the United States' experience. Banks continued to fail as the government clung to the gold standard. For instance, in early 1933, the Reconstruction Finance Corporation refused to help a prominent Michigan bank holding company for reasons that are not clear (anticipating the failure of Lehman Brothers in 2008). States declared bank holidays, and the New York Federal Reserve Bank lost gold as investors speculated against the dollar. Franklin Delano Roosevelt took office in early March 1933; he immediately instituted what he called a federal bank holiday to protect the banking system from complete collapse.

At the center of the financial panic that initiated the Great Recession were the banks and other private financial institutions that had accumulated large portfolios of mortgage-backed assets, in which mortgages were combined and then separated—at least in theory—into securities of differing risks. When the housing boom ended in 2006 and 2007, homeowners began to default on mortgages at an increasing rate. These defaults were not the random defaults assumed in the construction of mortgage-based securities, and investors could no longer distinguish between the various assets.
Efficiency-promoting securities were transformed into toxic assets as it became progressively harder to sell them. High leverage, initially a way to multiply earnings, became a company hazard as the price of assets fell.

Apparent in American and European financial markets by Summer 2007 were the deleterious effects of the inability to sell these toxic assets. Pressure continued during the fall, and the Fed lowered its discount rate by more than a percentage point between September 2007 and January 2008. (The National Bureau of Economic Research later concluded that a recession had started in December 2007.) Fed Chairman Ben Bernanke, Treasury Secretary Henry Paulson, and President of the New York Fed Timothy Geithner rescued the New York investment house Bear Stearns at the point of collapse with Fed funds and purchase by another investment house in March 2008. They took over the two quasi-governmental mortgage brokers, Fannie Mae and Freddie Mac, in August. Even at this late date, the Fed and other public figures argued that the pressure was largely limited to the housing sector and that the measures taken up to that point were sufficient to maintain financial health.

Bernanke and Paulson asserted after the fact that they tried in Summer 2008 to get Congress to take action to forestall a crisis. This effort proved futile for several reasons. For one, the financial leaders were making reassuring statements to the public at the same time they were appealing to Congress, a mixed message that did not lend persuasiveness to the arguments they presented. In addition, Congress was not convinced that the financial system was on the verge of a meltdown and was reluctant to act outside of an emergency. This reluctance may illustrate a general problem: it is hard to prepare for a hypothetical crisis absent evidence that a crisis is indeed about to emerge. Certainly, if palliative action forestalls the putative crisis, people will ask what all the pressure was about. Congress is a large and unwieldy body; all these complexities precluded preventive action in Summer 2008.

In September, another investment house, Lehman Brothers, found itself unable to borrow. It tried selling assets to pay its obligations but could not sell its toxic assets and fell short of its needs. Creditors wanted to be paid and investors wanted to sell Lehman Brothers stock. Though an investment rather than a commercial bank, Lehman was in a process that resembled nothing so much as an old-fashioned banking panic. Bernanke, Paulson, and Geithner did not wish to repeat their rescue of Bear Stearns and therefore allowed the firm to fail on September 15, 2008. After the fact, none of these articulate policy-makers was able to tell a coherent story about why they had not avoided bankruptcy for the firm. The event reprised the government confusion that led Michigan banks to fail in early 1933, precipitating the bank holiday. The financial triumvirate had tried to find a buyer for Lehman Brothers, as they had done for Bear Stearns, but was unable to do so. They apparently reverted to the gold standard mentality as expressed in the free-market ideology of the Washington Consensus: Lehman Brothers had taken large risks and now had to pay the penalty for losing too many bets. But hard on the heels of Lehman Brothers’ failure came American International Group (AIG). Although it was not an investment bank, this multinational insurance company also had taken too many bets on what were now toxic assets and was about to collapse. The epidemic had escaped the mortgage market and infected the whole financial system. Nearly a year earlier, the global financial system had
entered into what Frederic Mishkin, a member of the Fed’s Board of Governors, had called an “adverse feedback loop.” One failure induced another; a worldwide financial panic ensued.

Paulson, Bernanke, and Geithner threw in the towel and nationalized AIG. Their commitment to the free market had lasted one day; Congressman Barney Frank (D-Mass.) suggested we call it Free Market Day! But while the sale of Bear Stearns had calmed the financial markets, the nationalization of AIG — arriving on the heels of Lehman Brothers’ bankruptcy — only confused the market. The government had restated its ideals and then abandoned them in the twinkling of an eye. Investors could not predict what would come next.

Barely functioning credit markets seized up completely. No one knew what the government policy was or if anyone was insured; no one wanted to purchase toxic assets. Economic activity and international trade came to a sudden halt. The brief reassertion of faith in the free market in 2008 was as counterproductive as fidelity to the gold standard had been in 1931. In both cases, the United States dragged the world down with it — doing so faster the second time than it had fifty years earlier.

Fortunately, we are now in a Great Recession, not a repeat of the Great Depression. Ten percent unemployment and unemployment insurance compares favorably to 20 percent unemployment without a safety net. The primary reason for this divergence is the vagary of the American political cycle. Voters had to wait three years after the Great Depression began and a full year after the Fed turned a recession into a depression to vote on public policy; voters in 2008 had this opportunity just months after the financial crisis began. The similarity between now and then is that it took a new group of leaders to change policy. The Obama administration has many holdovers — for example, Obama reappointed Bernanke as Fed Chairman — but there is no doubt that the theories underlying policy have changed since the last administration. An important difference between the past and current economic calamities is that because the present crisis is only a recession — not a depression — Obama does not have the opportunity for reform that Roosevelt did.

Roosevelt opened most banks quickly after their holiday; he took the United States off gold a month later. He introduced the National Industrial Recovery Act (NIRA) and the Agricultural Adjustment Act (AAA), pillars of the New Deal, shortly thereafter. These actions signaled a clear new direction in government policy, or what economists call a new policy regime. Investment rose and consumption began to recover; the long economic decline had ended.

The continuation of high unemployment in the 1930s is commonly blamed on the high wages created by the NIRA and the subsequent growth of unions. This argument is inaccurate for several reasons. Economic growth progressed rapidly during Roosevelt’s first term and may not have been able to occur any faster because of bottlenecks in the supply of raw materials and production. Faster growth, even if possible, likely would have led to inflation despite high unemployment. In fact, the recovery was so fast that both the Fed and the government decided to reverse policy and rein in demand through both monetary and fiscal policies. The result was the recession of 1937, which increased unemployment and delayed the return to full employment for several more years. It was policy, not gains by labor, that extended the Depression’s length.
The growth of unions was only one result of the New Deal reforms. Not all of these reforms were consistent with each other, and not all of them lasted more than a few years. However, the enduring parts of the New Deal changed the economy in many ways. Labor and tax reforms preserved a stable income distribution in the economic expansion that followed World War II. Creation of the Food and Drug Administration helped expand the pharmaceutical industry that extended life for many people. Social Security improved the quality of life for many older people.

Reforms to the financial system produced a half-century free from financial crises. The Federal Deposit Insurance Corporation (FDIC) gave most people faith in the safety of their bank accounts. Deposit insurance was complemented by bank regulation to substitute for critical investors and depositors. The Glass-Steagall Act separated commercial and investment banks. The Federal Reserve System was restructured to empower its central office; the Securities and Exchange Commission (SEC) was created to regulate financial investments. Banking became a boring industry, and more people invested safely in the stock market. There was little excitement in the financial markets, and the economy grew rapidly and consistently after the war.

Nothing lasts forever, and prosperity generated a desire for more independent financial dealings. Economic turmoil in the 1970s hastened the transition, and the Washington Consensus arose in the 1980s. The Glass-Steagall Act was repealed, and the SEC’s regulation relaxed. Americans urged the rest of the world to follow suit and deregulate both domestic and foreign capital movements. The distribution of income widened, the size of the financial sector rose, and a string of small-scale (at least to the United States) financial crises ensued.

This foreshadowing of our current problems was not seen as such at the time; even the failures of Long-Term Capital Management (LTCM) in 1998 and Enron in 2001 did not raise concerns. Most of the crises, like the Asian crises of 1997 (which spread to Russia, bringing down LTCM), were seen as problems of less developed countries, not mature economies like the United States. Economists and politicians alike pushed for less regulation at home and deregulation abroad. In particular, they sought to deregulate the international flow of capital and hailed the Washington Consensus as the way forward for all countries, developing and developed. Like Irving Fisher, a great economist of the early twentieth century who predicted continued prosperity just before the Great Depression, they too readily believed in the reigning economic model.

Even Bernanke, chairman of the Federal Reserve and student of the Great Depression, did not see chaos ahead during most of 2008. Bernanke, to his credit, realized what was happening by the start of 2009. He resolved not to let the Fed duplicate its mistakes of the early 1930s, standing by as banks failed and supporting the gold standard instead of the domestic economy. He pulled all the strings – some of them on the outer edge of his authority – to loosen monetary policy and encourage economic activity. It was a bravura performance, but monetary policy lost its effectiveness as banks ran for cover even after the financial panic subsided. The banks used the Fed’s services to rebuild their depleted reserves as the value of toxic assets went to zero, and they loaned only to the safest of customers.

Obama, even before he took office, urged Congress to pass a stimulus bill – to create a fiscal expansion in addition to the hobbled monetary expansion.
Republican congressmen insisted he divert part of the stimulus to tax cuts, which went into savings as individuals-like banks-tried to build up their depleted reserves, limiting the size of the stimulus. This fidelity to the Washington Consensus reduced Obama's ability to moderate the recession's effects on ordinary people.

Expansive monetary and fiscal policies were effective enough to preclude a repetition of the Great Depression, and support for reforms on the order of the New Deal ebbed. Obama had campaigned on a program of bipartisan cooperation, and although he tried to bring Republicans along with his policies, they had not abandoned their belief in the Washington Consensus. Banks, moreover—newly prosperous from government bailouts—resisted increased regulation. When Obama put extending health care to all Americans before reforming the financial system, resurgent banks blunted the impact of financial reforms.

There are two lessons to be drawn from this comparison. The first is that the open American economy is prone to collapse every once in a while. Favorable conditions—the New Deal and a vigorous post-war expansion—can eliminate "great" economic contractions for a generation or so, but American exuberance appears to chafe under these conditions. As the memory of past economic difficulties fades, economic and political pressure for change rises to the fore. International economic imbalances are condoned until they have to be corrected, often painfully.

The second lesson is that there are strong pressures for unregulated capitalism that only abate in the face of sharp economic downturns like the Great Depression. We avoided another Great Depression by luck—the election cycle—and skill. Marx was correct when he argued that tragic history repeats itself as farce: we now have the oxymoronic Great Recession after all the fears of Great Depression II. Keynes was right, too; discredited economic theories—and the gold standard mentality—continue to dominate the actions of even "practical" men and women. Recent policy initiatives have done little to reduce the underlying risk of another financial crisis. As of this writing, Jean-Claude Trichet, president of the European Central Bank, gave a striking illustration of the continuing gold standard mentality, calling for worldwide fiscal austerity in the early stages of a tentative recovery from our recent crisis.

ENDNOTES


17 Reinhart and Rogoff, This Time Is Different.


Revised edition, 2007) and Polarized America: The Dance of Ideology and Unequal Riches (with Nolan McCarty and Keith T. Poole, 2006).

Robert M. Solow, a Fellow of the American Academy since 1956, is Institute Professor Emeritus at the Massachusetts Institute of Technology. In 1987, he was awarded the Nobel Prize in Economics in recognition of his contributions to the theory of economic growth; in 1999 he received the National Medal of Science for his creation of the modern framework for analyzing the effects of investment and technological progress on economic growth. His publications include Capital Theory and the Rate of Return (1963); The Nature and Sources of Unemployment in the United States (1964); Growth Theory (1970); and Inflation, Unemployment and Monetary Policy (with John B. Taylor, 1998).


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