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Minsky's Money Manager Capitalism and the Global Financial Crisis

by

L. Randall Wray
Levy Economics Institute of Bard College

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Levy Economics Institute
P.O. Box 5000
Annandale-on-Hudson, NY 12504-5000
http://www.levyinstitute.org

ABSTRACT

The world's worst economic crisis since the 1930s is now well into its third year. All sorts of explanations have been proffered for the causes of the crisis, from lax regulation and oversight to excessive global liquidity. Unfortunately, these narratives do not take into account the systemic nature of the global crisis. This is why so many observers are misled into pronouncing that recovery is on the way—or even under way already. I believe they are incorrect. We are, perhaps, in round three of a nine-round bout. It is still conceivable that Minsky's "it"—a full-fledged debt deflation with failure of most of the largest financial institutions—could happen again.

Indeed, Minsky's work has enjoyed unprecedented interest, with many calling this a "Minsky moment" or "Minsky crisis." However, most of those who channel Minsky locate the beginnings of the crisis in the 2000s. I argue that we should not view this as a "moment" that can be traced to recent developments. Rather, as Minsky argued for nearly 50 years, we have seen a slow realignment of the global financial system toward "money manager capitalism." Minsky's analysis correctly links postwar developments with the prewar "finance capitalism" analyzed by Rudolf Hilferding, Thorstein Veblen, and John Maynard Keynes—and later by John Kenneth Galbraith. In an important sense, over the past quarter century we created conditions similar to those that existed in the run-up to the Great Depression, with a similar outcome. Getting out of this mess will require radical policy changes no less significant than those adopted in the New Deal.

Keywords: Hyman Minsky; Hilferding; Veblen; Keynes; John Kenneth Galbraith; Financial Crisis; Minsky Crisis; Minsky Moment; Finance Capitalism; Money Manager Capitalism; Debt Deflation; Can It Happen Again?

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The world's worst economic crisis since the 1930s is now well into its third year. All sorts of explanations have been proffered for the causes of the crisis: lax regulation and oversight, rising inequality that encouraged households to borrow to support spending, greed and irrational exuberance, and excessive global liquidity—spurred by easy money policy in the United States and by US current account deficits that flooded the world with too many dollars. Unfortunately, these do not recognize the systemic nature of the global crisis. This is why so many observers are misled into pronouncing that recovery is on the way—or even underway already.

I believe they are incorrect. We are perhaps in round three of a nine round bout. The first round was a liquidity crisis—when major "shadow bank" institutions such as Lehman and Bear Stearns were unable to refinance positions in assets. The second round was a wave of insolvencies—with AIG and Merrill Lynch and a large number of home mortgage specialists failing or requiring resolution. In round three we have the financial institutions cooking the books, using government bail-out funds and creative accounting to show profits so that they can manipulate stock prices and pay huge bonuses to top management and traders. Round four should begin this fall, when another wave of defaults by borrowers forces institutions to recognize losses. It is conceivable that this could deliver a knock-out punch, bringing on a full-fledged debt deflation and failure of most of the behemoth financial institutions.

Indeed, they may already be massively insolvent, but forbearance by the regulatory authorities allows them to ignore losses on trash assets and remain open. If the knock-out comes, governments might be able resuscitate the institutions through trillions more dollars of bail-outs—but I do not think voters will allow that to happen. Hence, a knock-out punch might provide the necessary impetus for a thorough reformation of the international financial system. Otherwise, I do not see any way out of this crisis—which could drag on for many more years in the absence of radical policy intervention. Perhaps of more immediate importance, fiscal policy—the only way out of this deep recession—is constrained by deficit hysteria, which seems to have even infected President Obama. If a debt deflation begins, it will take a major revolution of thinking in Washington to allow for fiscal expansion on the necessary scale. As we know, it was only World War II that generated sufficient spending to get the economy out of depression; one can only hope that something less destructive can create support for more government spending this time around.

Hyman Minsky's work has enjoyed unprecedented interest, with many calling this the "Minsky Moment" or "Minsky Crisis" (Cassidy 2008; Chancellor 2007; McCulley 2007; Whalen 2007). However, most of those who channel Minsky locate the beginnings of the crisis in this decade. What I have long argued is that we should not view this as a "moment" that can be traced to recent developments. Rather, as Minsky argued for nearly fifty years, we have seen a slow transformation of the global financial system toward "money manager capitalism." Others have used terms like "financialization," "casino capitalism," or even "neoliberalism" (outside the United States) and "neoconservatism" (or "ownership society" within the United States—I particularly like James Galbraith's "predator state" term) to describe this phenomenon. I think Minsky's analysis is more comprehensive and it correctly links postwar developments with prewar "finance capitalism" analyzed by Rudolf Hilferding, Thorstein Veblen, and John Maynard Keynes—and later by John Kenneth Galbraith. In an important sense, over the past quarter century we restored conditions similar to those that existed in the run-up to the Great Depression, with a similar outcome. To get out of this mess will require radical policy changes no less significant than those adopted with the New Deal. Most importantly, the New Deal downsized and then constrained the financial sector. I think that is a pre-condition to putting in place the structure that would promote stable growth—although other policies will be required, as discussed below.

Before proceeding further, let me acknowledge that my focus is on the United States. However, conditions in the other advanced economies are and were similar. That is to say, they also operated along the lines of finance capital in the pre-Depression era, and other nations such as the UK had their own version of a New Deal in the postwar period, and they returned to a money manager version of finance capitalism in recent years. Hence, while the details presented refer to the US case, the general arguments are more widely applicable.

A BRIEF FINANCIAL HISTORY OF THE POSTWAR PERIOD

The best accessible account of the Great Depression is J.K. Galbraith’s *The Great Crash*. Very briefly, the late 19th century saw the rise of the huge corporations—and robber barons. Modern industrial production required increasingly expensive, complex, and long-lived capital assets. It was no longer possible for an individual or family to raise the necessary funding, hence, external finance was needed. This was supplied directly by financial institutions, or by selling equity shares. As J.M. Keynes famously described in his *General Theory,* separation of nominal ownership (holders of shares) from management of enterprise meant that prices of equities would be influenced by “whirlwinds of optimism and pessimism.”

Worse, as Galbraith makes clear, stocks could be manipulated by insiders—Wall Street’s financial institutions—through a variety of “pump and dump” schemes. Indeed, the 1929 crash resulted from excesses promoted by investment trust subsidiaries of Wall Street’s banks. Since the famous firms like Goldman Sachs were partnerships, they did not issue stock; hence they put together investment trusts that would purport to hold valuable equities in other firms (often in other affiliates, which sometimes held no stocks other than those in Wall Street trusts) and then sell shares in these trusts to a gullible public. Effectively, trusts were an early form of mutual fund, with the “mother” investment house investing a small amount of capital in their offspring, highly leveraged using other people’s money. Wall Street would then whip up a speculative fever in shares, reaping capital gains. However, trust investments amounted to little more than pyramid schemes—there was very little in the way of real production or income associated with all this trading in paper. Indeed, as Galbraith shows, the “real” economy was already long past its peak—there were no “fundamentals” to drive the Wall Street boom. Inevitably, it collapsed and a “debt deflation” began as everyone tried to sell out of their positions in stocks—causing prices to collapse. Spending on the “real economy” suffered and we were off to the Great Depression.

To deal with the effects, the Roosevelt administration adopted a variety of New Deal reforms, including direct job creation in an “alphabet soup” of programs such as the WPA and CCC; it created commodity buffer stock programs to stop the fall of agricultural prices; it enacted relief programs and Social Security to provide income and reduce inequality (which had peaked in 1929, which was part of the reason that the real economy had slowed—most people were too poor to consume much); it supported labor unions to prevent wages from falling; it created Social Security to provide income to the aged, thereby propping up aggregate demand; and—important for our story here—it reformed the financial system. These reforms included a segregation of financial institutions by function—commercial banking, investment banking, savings and loans, and insurance each had their own lines of business.

In truth, none of this was enough to end the Great Depression—it took the spending of World War II to get us out—but it set the stage for the stable economy we had after the war. This was a high-consumption economy (high and growing wages created demand), with countercyclical government deficits, a central bank standing ready to intervene as necessary, low interest rates, and a heavily regulated financial sector. The "golden age" of capitalism began—what Minsky called "paternalistic capitalism," or the "managerial-welfare state" form of capitalism. J.K. Galbraith called it the "new industrial state." Recessions were mild, there were no financial crisis until 1966, and when they began, crises were easily resolved through prompt government response.

This changed around the mid-1970s, with a long series of crises that became increasingly severe and ever more frequent: real estate investment trusts in the early 1970s; developing-country debt in the early 1980s; commercial real estate, junk bonds, and the thrift crisis in the United States (with banking crises in many other nations) in the 1980s; stock market crashes in 1987 and again in 2000 with the dot-com bust; the Japanese meltdown from the late 1980s; Long Term Capital Management, the Russian default, and Asian debt crises in the late 1990s; and so on. Until the current crisis, each of these was resolved (some more painfully than others—impacts were particularly severe and long-lasting in the developing world) with some combination of central bank or international institution (IMF, World Bank) intervention plus a fiscal rescue (often taking the form of US Treasury spending of last resort to prop up the US economy, and to maintain imports that helped to generate rest of world growth).

RECENT DEVELOPMENTS THAT LED TO THIS CRISIS

There are four important developments that need to be recognized.[1] First, there was the rise of "managed money"—pension funds (private and public), sovereign wealth funds, insurance funds, university endowments, and other savings that are placed with professional money managers seeking maximum returns. Also important was the shift to "total return" as the goal—yield plus price appreciation. Each money manager competes on the basis of total return, earning fee income and getting more clients if successful. Of course, the goal of each is to be the best—anyone returning less than the average return loses clients. But it is impossible for all to be above average—generating several kinds of behavior that are sure to increase risk.[2] Money managers will take on riskier assets to gamble for higher returns. They will innovate new products, using marketing to attract clients. Often these are purposely complex and opaque—the better to dupe clients and to prevent imitation by competing firms. And, probably most important of all, there is a strong incentive to overstate actual earnings—by failing to recognize losses, by overvaluing assets, and through just plain fraudulent accounting.

This development is related to the rising importance of "shadow banks"—financial institutions that are not regulated as banks. Recall from the discussion above that the New Deal imposed functional separation, with heavier supervision of commercial banks and thrifts. Over time, these lost market share to institutions subject to fewer constraints on leverage ratios, on interest rates that could be paid, and over types of eligible assets. The huge pools of managed money offered an alternative source of funding for commercial activities. Firms would sell commercial paper or junk bonds to shadow banks and managed money rather than borrowing from banks. And, importantly, securitization took many types of loans off the books of banks and into affiliates (special investment or purpose vehicles—SIVs and SPVs) and managed money funds. Banks continually innovated in an attempt to get around regulations, while government

[1] I thank Frank Veneroso for lengthy discussions that led to some of the ideas expressed in this section.
[2] See Nersisyan and Wray (2010).

deregulated in a futile effort to keep banks competitive.[3] In the end, government gave up and eliminated functional separation in 1999.

Note that over the past two or three decades there was increased "outsourcing" with pension, insurance, and sovereign wealth fund managers hiring Wall Street firms to manage firms. Inevitably this led to abuse, with venerable investment houses shoveling trashy assets like asset backed securities (ABS) and collateralized debt obligations (CDOs) onto portfolios of clients. Firms like Goldman then carried it to the next logical step, betting that the toxic waste they sold to clients would crater. And, as we now know, investment banks would help their clients hide debt through opaque financial instruments, building debt loads far beyond what could be serviced—and then bet on default of their clients through the use of credit default swaps (CDS). This is exactly what Goldman did to Greece. When markets discovered that Greece was hiding debt, this caused CDS prices to climb, raising Greece's finance costs and causing its budget deficit to climb out of control, fueling credit downgrades that raised its interest rates in a vicious death spiral. Goldman thus benefited from the fee income it got by hiding the debt, and by gambling on the inside information that Greece was hiding debt!

Such practices appear to have been normal at global financial institutions, including a number of European banks that also used CDSs to bet against Greece. For example, Goldman encouraged clients to bet against the debt issued by at least 11 US states—while collecting fees from those states for helping them to place debt. Magnetar, a hedge fund, sought the very worst subprime mortgage backed securities (MBS) to package as CDOs (Eisinger and Bernstein 2010). The firm nearly single-handedly kept the subprime market afloat after investors started to worry about Liar and NINJA loans, since Magnetar was offering to take the very worst tranches. Between 2006 and summer 2007 (after housing prices had already started to decline), Magnetar invested in 30 CDOs, which accounted for perhaps a third to a half of the total volume of the riskiest part of the subprime market—making it possible to sell the higher-rated tranches to other more skittish buyers. And Magnetar was quite good at identifying trash; according to an analysis commissioned by ProPublica, 96% of the CDO deals arranged by Magnetar were in default by the end of 2008 (versus "only" 68% of comparable CDOs). The CDOs were

[3] See Wray (2008a), Wray (2008b), and Kregel (2010).

then sold on to investors, who ultimately lost big time. Meanwhile, Magnetar used CDS to bet that the CDOs they were selling would go bad. Actually, that is not a bet. If you can manage to put together deals that go bad 96% of the time, betting on bad is as close to a sure thing as a financial institution will ever find. So, in reality, it was just pick-pocketing customers—in other words, it was a looting.

In mid-April the Securities and Exchange Commission (SEC) announced a civil fraud lawsuit against Goldman Sachs. (Goldman agreed to pay a fine of $550 million, without admitting guilt, although it did admit to a "mistake.") The SEC charges that Goldman sold CDOs to investors without informing them that it allowed a hedge fund that was shorting the CDOs to select the underlying MBSs.[4] Goldman created synthetic CDOs that placed bets on toxic-waste MBSs. A synthetic CDO does not actually hold any mortgage securities—it is simply a pure bet on a bunch of MBSs. The purchaser is betting that those MBSs will not go bad, but there is an embedded CDS that allows the other side to bet that the MBSs will fall in value, in which case the CDS "insurance" pays off. Note that the underlying mortgages do not need to go into default or even fall into delinquency. To make sure that those who "short" the CDO (those holding the CDS) get paid sooner rather than later, all that is required is a downgrade by credit rating agencies. The trick, then, is to find a bunch of MBSs that appear to be over-rated and place a bet they will be downgraded. Synergies abound! The propensity of credit raters to give high ratings to junk assets is well-known, indeed assured by paying them to do so (Wray 2008a). Since the underlying junk is actually, well, junk, downgrades are nearly certain. Betting against the worst junk you can find is a good deal—if you can find someone willing to take the bet.

The theory behind shorting is that it lets you hedge risky assets in your portfolio, and it aids in price discovery. The first requires that you've actually got the asset you are shorting, the second relies on the now thoroughly discredited belief in the efficacy of markets. With CDSs that are settled by cash (not by delivery of the assets on which bets are placed), one does not need to hold the assets. In truth, these markets can be manipulated by insiders, are subject to speculative fever, and are mostly over-the-counter.

[4] The following discussion is based on reports by Louise Story (2010), Gretchen Morgenson and Louise Story (2009, 2010a, 2010b), Joe Nocera (2010), Christine Harper (2010), and Peter Henning and Seven Davidoff (2010).

That means that initial prices are set by sellers, not by the haggling and haggling of markets. Even in the case of MBSs—that actually have mortgages as collateral—buyers usually do not have access to essential data on the loans that will provide income flows. Once we get to tranches of MBSs to CDOs (squared and cubed) and on to synthetic CDOs we have leveraged and layered those underlying mortgages to a degree that it is pure fantasy to believe that markets can efficiently price them. Indeed, that was the reason for credit ratings, monoline insurance, and credit default swaps. CDSs that allow bets on synthetics that are themselves bets on MBSs held by others serve no social purpose whatsoever—they are neither hedges nor price discovery mechanisms.

The most famous shorter of MBSs is John Paulson, whose hedge fund asked Goldman to create some toxic synthetic CDOs that it could bet against. According to the SEC, Goldman allowed Paulson’s firm to increase the probability of success by allowing it to suggest particularly risky securities to include in the CDOs. Goldman arranged a total of 25 such deals, named Abacus, totaling about $11 billion. Out of 500 CDOs analyzed by UBS, only two did worse than Goldman’s Abacus. Just how toxic were these CDOs? Only five months after creating one of these Abacus CDOs, the ratings of 84% of the underlying mortgages had been downgraded. By betting against them, Goldman and Paulson won—Paulson pocketed $1 billion on the Abacus deals; he made a total of $5.7 billion shorting mortgage-based instruments in a span of two years. This is not genius work—experience suggests that 84% to 96% of CDOs that are designed to fail will fail.

Paulson has not been accused of fraud—while his firm is accused of helping to select the toxic waste, he has not been accused of misleading investors in the CDOs he bet against. Goldman, on the other hand, never told investors that the firm was creating these CDOs specifically to meet the demands of Paulson for an instrument to allow him to bet against them. The truly surprising thing is that according to the SEC Goldman’s customers actually met with Paulson as the deals were assembled—but Goldman never informed them that Paulson was the shorter of the CDOs they were buying! By the way, remember the AIG bail-out, of which $12.9 billion was passed-through to Goldman to cover CDS bets on a dollar-for-dollar basis? AIG provided the CDSs that allowed Goldman and Paulson to short Abacus CDOs. Hence, the Abacus deal played a role in bringing down AIG, and resulted in government expenditure to make Goldman’s bets whole. This could be the opening salvo against what appear to be misleading practices that were probably quite common on Wall Street.

In the latest revelations, JPMorgan Chase suckered the Denver public school system into an exotic $750 million transaction that has gone horribly bad. In the spring of 2008, struggling with an underfunded pension system and the need to refinance some loans, it issued floating rate debt with a complicated derivative. Effectively, when rates rose, that derivative locked the school system into a high fixed rate. Morgan had put a huge "greenmail" clause into the deal—they are locked into a 30-year contract with a termination fee of $81 million. That, of course, is on top of the high fees Morgan had charged up-front because of the complexity of the deal. To add insult to injury, the whole fiasco began because the pension fund was short $400 million, and subsequent losses due to bad performance of its portfolio since 2008 wiped out almost $800 million—so even with the financing arranged by Morgan the pension fund is back in the hole where it began but the school district is levered with costly debt that it cannot afford but probably cannot afford to refinance on better terms because of the termination penalties. This experience is repeated all across America—the Service Employees International Union estimates that over the past two years state and local governments have paid $28 billion in termination fees to get out of bad deals sold to them by Wall Street (see Morgenson and Story 2010c).

This brings us to the second transition: the investment banks went public. Recall that during the 1929 boom, Wall Street partners could not benefit directly from rising stock values (they could only earn fee income by placing equities and bonds, or by purchasing shares in traded firms)—hence they created traded subsidiaries. In the "irrational exuberance" of the late 1990s, Wall Street firms again lamented that they could not directly benefit from the boom. Hence Wall Street firms went public, issuing traded shares. In this way, top management's bonuses would include stocks and options to be sold at huge profit if share prices rose. Just as they did in 1929, management could manipulate share prices by overreporting earnings, selectively leaking well-timed rumors, and trading on inside information. They became richly rewarded. Related to this was the substitution of profit maximization of underlying firms by "total return to shareholders" (dividends plus share price appreciation) as the goal of a corporation. This increased the focus on stock prices—which can be easily manipulated for short-term gain, both serving as the justification for big rewards and also as the means to enrichment for management holding options.

So in 1999 Goldman and the other partnerships went public to enjoy the advantages of stock issue in a boom. Top management was rewarded with stocks—leading to the same pump-and-dump short-term incentives that drove the 1929 boom. To be sure, traders like Robert Rubin (later, Treasury Secretary under President Clinton) had already come to dominate firms like Goldman. Traders necessarily take a short view—you are only as good as your last trade. More importantly, traders take a zero-sum view of deals: there will be a winner and a loser, with the financial firm pocketing fees for bringing the two sides together. Better yet, the firm would take one of the two sides—the winning side, of course—and pocket the fees and collect the winnings. You might wonder why anyone would voluntarily become the client of an investment bank, knowing that the deal was ultimately zero-sum and that the bank would have the winning hand? No doubt there were some clients with an outsized view of their own competence or luck, but most customers were wrongly swayed by the bank's reputation that was being exploited by hired management.

Note that before it went public, only 28% of Goldman's revenues came from trading and investing activities. That is now about 80% of revenue. While many think of Goldman as a bank, it is really a huge hedge fund, albeit a very special one that now holds a bank charter—giving it access to the Fed's discount window and to FDIC insurance. That, in turn, lets it borrow at near-zero interest rates. Indeed, in 2009 it spent only a little over $5 billion to borrow, versus $26 billion in interest expenses in 2008—a $21 billion subsidy thanks to its bank charter. It was also widely believed to be "backstopped" by the government—under no circumstances would it be allowed to fail, nor would it be restrained or prosecuted—keeping its stock price up. After the SEC's charges, that is now somewhat in doubt, causing share prices to plummet.

Essentially both the research arms of the big financial firms as well as the supposedly unbiased reporting of the financial media (especially television) became little more than marketers for the products and shares of Wall Street banks. All of this irreversibly changed the incentive structure of investment banking—away from placing equities and bonds of industrial corporations and toward a frenzy of trading in complex financial instruments whose values were determined mostly by “marking to model” or even “marking to myth”—that is, value was set by the seller in “over the counter,” unregulated and opaque markets. In the new environment, traders rose to the top of firms like Goldman (and then on to head the Treasury in the case of Robert Rubin and Henry Paulson). It is no wonder that “originate to distribute” securitization and trading replaced careful underwriting (assessment of borrower risk) and lending as the primary focus of financial institutions.

This fueled the third transition, deregulation and desupervision, which actually began in the United States in the late 1960s and built up steam through the 1980s and 1990s. We gradually allowed financial institutions to take riskier positions—holding riskier assets, taking illiquid positions (mismatched maturities of assets and liabilities, for example), increasing leverage (and moving assets off balance sheet where they would not count toward capital requirements), and using internal models to assess risk and asset values. This should be more properly called “self-supervision” rather than deregulation and desupervision. The theory was that financial institutions could better evaluate risks than could government supervisors, and that relying on private credit raters and accounting firms would provide more flexibility. We also let managed money such as pension funds “diversify” portfolios—into new and complex financial instruments that promised higher and uncorrelated returns that would supposedly reduce systemic risk (Nersisyan and Wray 2010). At the end of the 1990s we ended the functional separation of financial institutions, allowing a single holding company to engage in the full range of financial services—one-stop financial supermarkets that were mostly free of government intervention.

The completion of this transformation occurred with the collapse of Lehman, Bear, and Merrill, when the last two remaining investment banks (Goldman and Morgan Stanley) were handed commercial banking charters so that they would have access to cheap and government-insured deposits—as mentioned above—made necessary because they could not raise funds any longer in financial markets that were shaken by the collapse of three investment banks. Now the riskiest of the financial institutions were playing with “house money”—government-insured deposits that could be gambled, with government absorbing almost all losses (at a capital ratio of 12-to-1, government incurs losses of 92 cents of each dollar blown in bad bets) (Tymoigne and Wray 2009).

The fourth and, for our purposes, final transformation was the inevitable result of these three changes just examined: the rise of fraud as normal business procedure. In early spring 2010 a court-appointed investigator issued his report on the failure of Lehman. Lehman engaged in a variety of "actionable" practices (potentially prosecutable as crimes). Interestingly, it hid debt using practices similar to those employed by Goldman to hide Greek debt. The investigator also showed how the prices by Lehman on its assets were set—and subject to rather arbitrary procedures that could result in widely varying values. But most importantly, the top management as well as Lehman's accounting firm (Ernst&Young) signed off on what the investigator said was "materially misleading" accounting. That is a go-to-jail crime if proven. The question is why would a top accounting firm as well as Lehman's CEO, Richard Fuld, risk prison in the post-Enron era (similar accounting fraud brought down Enron's accounting firm, and resulted in Sarbanes-Oxley legislation that requires a company's CEO to sign off on company accounts)? There are two answers. First, it is possible that fraud is so widespread that no accounting firm could retain top clients without agreeing to overlook it. Second, fraud may be so pervasive and enforcement and prosecution thought to be so lax that CEOs and accounting firms have no fear. I think that both answers are correct.

In the aftermath of the 1980s savings and loan crisis in the United States, 1,000 top managers of failed institutions went to jail. Investigations found fraud in virtually every failed institution examined (Wray 1994). Interestingly, the FBI warned of an "epidemic" of fraud in mortgage lending as early as 2004. Subsequent detailed investigation of randomly selected mortgage backed securities have found evidence of fraud in virtually every one. William Black (who worked in thrift supervision during the 1980s crisis, and blew the whistle on the worst criminal, Charles Keating—remembered for his association with five US senators, including John McCain) has convincingly argued that what we really have is a criminogenic environment that fueled the worst kind of fraud, control fraud. This is where the top management—in this case, of a financial institution—turns a firm into a weapon of fraud, in the interest of enriching top management.

The easiest example to understand is a pyramid or Ponzi scheme (named after a famous pyramid run by Charles Ponzi), with Bernie Madoff of recent note. Many of the failed savings and loans of the 1980s—and all of the most expensive failures—were control frauds. However, these are small potatoes compared with the failures of AIG or Lehman. If (and of course at this point it is a big if) all the large financial institutions are hiding “actionable” practices approved by top management and external auditors then we are in the midst of the biggest control fraud in history. In any case, there is no question that fraud worthy of incarceration is rampant. To date, however, there has been almost no investigation and no prosecution of top officials at any of the big banks. This is why the SEC complaint against Goldman is so important, as it might represent a newly found determination to finally go after fraud.

To be clear, I am not saying that the crisis was caused by fraud. There has been a long-term transformation to create an environment in which fraud was encouraged. Incentives matter: deregulation and reliance on self-supervision were important; a long period without a great depression as well as prompt intervention by government to attenuate crises helped to reduce perceptions of risk; and globalization linked balance sheets so that a crisis in the United States would affect the entire world.

Further, there is the long-term growth of debt, especially household debt, that made the entire economy more vulnerable. That is a complex issue that I have examined elsewhere (Wray 2005), but in short it was encouraged not only by “democratization” of access to credit, but also by greater social acceptance of indebtedness (again in large part by absence of an experience like the Great Depression), and by stagnant growth of median real income in the United States (inequality of income and wealth reached and perhaps exceeded the 1929 record). Unions lost power, workers lost high paying jobs, unemployment (including those not counted in official statistics) and underemployment trended higher, and support for the poor declined—all of this increased reliance on debt to maintain livelihood even as it increased uncertainty that made people behave in what might appear to be irrational and self-destructive ways—but it really amounted to desperation.

It will surprise most readers that I argue that all this was compounded by fiscal policy that was chronically too tight—budget deficits were too small (President Clinton actually ran a budget surplus). I will not go into that here, but given the US trade deficit and a tight federal budget, the private sector had to run unprecedented deficits (spending more than its income) for more than a decade (Wray 2003, 2009). That is what helped to promote all the household debt—fiscal restraint kept economic growth low, causing stagnating incomes that forced households to borrow to achieve American lifestyles.

So in short, the crisis resulted from a number of related factors and trends, and was a long-time coming. The Queen famously asked why economists did not see it coming. But many of us did. Minsky saw it coming by the late 1950s! He began writing about money manager capitalism in the 1980s. There are also many publications at the Levy Institute from the late 1990s and early 2000s that projected this collapse and in general outline captured many of the forces that brought it on. And there is plenty of evidence that traders on Wall Street also (accurately) foresaw the bust. However, each trader thought he would be able to sell out positions just in time to avoid losses. Of course, when all traders tried to sell, they all found that liquidity disappeared. Only the Fed and Uncle Sam would buy, or lend against, assets. It is only in the aftermath of the bail-out that Wall Street has suddenly found collective amnesia useful.

THE END OF MONEY MANAGER CAPITALISM?

Minsky always insisted that there are two essential propositions of his "financial instability hypothesis."[5] The first is that there are two financing "regimes"—one that is consistent with stability and the other that subjects the economy to instability. The second proposition is that "stability is destabilizing," so that endogenous processes will tend to move a stable system toward fragility. The current crisis is a natural outcome of these processes—an unsustainable explosion of real estate prices, mortgage debt, and leveraged positions in collateralized securities and derivatives in conjunction with a similarly unsustainable explosion of commodities prices and equities. The crash was inevitable.

Hence, the problem is money manager capitalism—the economic system characterized by highly leveraged funds seeking maximum total returns in an environment that systematically underprices risk. With little regulation or supervision of

[5] See Papadimitriou and Wray (1998) for a summary of Minsky's approach.

financial institutions, money managers concocted increasingly esoteric and opaque financial instruments that quickly spread around the world. Contrary to orthodox economic theory, markets generate perverse incentives for excess risk, punishing the timid. Those playing along are rewarded with high returns because highly leveraged funding drives up prices for the underlying assets—whether they are dot-com stocks, Las Vegas homes, or corn futures. Those who refuse to participate get below-average returns. As Keynes said, those who bet against speculative excesses can find that markets can remain "irrational" longer those who short the market can remain solvent (which is the reason that mechanisms were created to quicken the pay-outs by linking CDS bets to credit ratings rather than to actual defaults).

We are now living with the aftermath as positions are delevered, driving prices of the underlying collateral (homes, commodities, factories) down. Previous financial crises were sufficiently limited that only a portion of managed money was wiped out, with a new boom inevitably rising from the ashes. We remain in the midst of a commodities and equities boom, so many are already proclaiming that the crisis is over. I think that is premature and expect another round of financial crisis. Perhaps the next one will be so severe that it will destroy a sufficient part of the managed money that real reform will take place. In any case, the crisis and the scandals already revealed have discredited the money managers. Wall Street bankers are detested and Americans are furious about the bail-out. And, in spite of the unprecedented efforts of Fed Chairman Bernanke and Treasury Secretary Geithner to save the money managers, I believe they will ultimately fail to restore "business as usual."

The main problem is that "finance" simply became too big. At the peak it captured 40% of all corporate profits (it recovered that share by the beginning of 2010 thanks to the bail-out and "creative" or even fraudulent accounting), and about a fifth of value-added to GDP. Interestingly, we find the same phenomenon in 1929, when finance received 40% of the nation's profits. Apparently that represents a practical maximum and thus a turning point at which the economy collapses.

Perhaps of equal importance, finance virtually captured government, with Wall Street alumni grabbing an unprecedented proportion of federal government positions that have anything to do with the financial sector—including Treasury—under three consecutive presidents (from Clinton through Obama). It is not surprising that Wall Street gets deregulation when it wants, and that in spite of the scale of the current financial crisis—which has wiped out an estimated $50 trillion in global wealth—there has been no significant reform to date. Real reform might have to wait for another collapse—what I called "round four." When it comes, it will wipe out even more wealth, and will bring on even more intolerable suffering. That might finally prove to be the end of this stage of capitalism. Of course, it is too early to even speculate on the form capitalism will take in the future.

When the next crash comes, the losses must be accepted—in order to wipe out Wall Street and the managed money. All "too big to fail" institutions should be resolved— if a bank is so big that its failure would threaten the financial system, then it is "systemically dangerous" and too big to save. If we had taken that approach in 2008, it would have been much easier to actually get the economy on the road to recovery. Collateral damage must be managed by directly targeting the "real" part of the economy (households and productive firms) rather than the financial sector. We need to protect jobs, wages, insured deposits, and retirements—but not financial institutions, including banks or managed money. Time and economic growth can go a long way in restoring financial health—if incomes can grow sufficiently, it becomes easier to service debt. But we will still need debt relief for households. That should be direct, not through bail-outs of financial institutions, taking the form of forced debt-writedowns, cash subsidies to homeowners, or foreclosure and "rent-to-own" programs.

During the recovery, the private sector cannot be the main source of demand stimulus as it has been running up debt, spending more than its income for more than a dozen years. While the government budget deficit is growing as the economy slows, this results from deterioration of employment and income (which lowers taxes and increases transfers)—thus it will not proactively create growth although it will help to constrain the depths of recession. What is needed is a massive fiscal stimulus—probably two or three times the $800 billion that President Obama obtained—and then a permanently larger fiscal presence to allow growth without relying on private sector debt.

More generally, we need to "definancialize" the economy—reducing the role for Wall Street. For example, we need to replace "financialized" healthcare (run by insurance companies that have been given a huge boost by recent legislation labeled misleadingly as “reform”) and private pensions controlled by money managers with universal and adequate publicly funded healthcare and retirement (Auerback and Wray 2010; Nersisyan and Wray 2010). We need to finance higher education so that it is less reliant on managed endowments. And we should eliminate government subsidies of managed money—such as tax advantages and guarantees—to stop encouraging shenanigans.

Minsky (1986) argued that the Great Depression represented a failure of the small-government/laissez-faire economic model, while the New Deal promoted a big government/big bank (Fed) highly successful model for financial capitalism. However, that was replaced by money manager capitalism that essentially reversed most of the gains and that generated inequality and financial instability (Wray 2005). Minsky insisted “the creation of new economic institutions which constrain the impact of uncertainty is necessary,” arguing that the “aim of policy is to assure that the economic prerequisites for sustaining the civil and civilized standards of an open liberal society exist. If amplified uncertainty and extremes in income maldistribution and social inequalities attenuate the economic underpinnings of democracy, then the market behavior that creates these conditions has to be constrained” (Minsky 1996: 14, 15). We will need a new New Deal to create those new institutions and to constrain market behavior.

The global crisis offers both grave risks as well as opportunities. Global employment and output are collapsing faster than at any time since the Great Depression. Hunger and violence are growing—even in developed nations. The 1930s offer examples of possible responses—on the one hand, nationalism and repression, on the other a New Deal and progressive policy. There is no question that finance has played an outsized role over the past two decades, both in the developed nations where policy promoted managed money and in the developing nations which were encouraged to open to international capital.

Households and firms in developed nations were buried under mountains of debt even as incomes for wage earners stagnated. Developing nations were similarly swamped with external debt service commitments, while the promised benefits of neoliberal policies usually never arrived. It is time to finally put global finance back in its proper place as a tool to achieving sustainable development. This means substantial downsizing and careful re-regulation. Government must play a bigger role, which in turn requires a new economic paradigm that recognizes the possibility of simultaneously achieving social justice, full employment, and price and currency stability through appropriate policy.

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