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FINANCIAL MARKETS MELTDOWN

What Can We Learn from Minsky?

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Financial Markets Meltdown

In previous work, I examined the problems in the securitized subprime mortgage market that led to a crisis last summer (Wray 2007, 2008). Many commentaries on the mortgage securities meltdown have referred to the work of the late Hyman P. Minsky, probably the most astute observer of the financial system of the past century, with some even calling it a “Minsky moment” (Whalen 2007, Magnus 2007, Cassidy 2008). With 20/20 hindsight, pundits finally recognized the real estate bubble and the dangerous financial practices that had developed in that sector over the previous four or five years. A few now recognize that problems have spread far beyond mortgages and real estate. Still, the conventional view is that the damage will be contained through a combination of interest rate cuts and the fiscal stimulus package that will send checks to most taxpayers in late spring 2008. The majority of commentators, including officials at the Federal Reserve (Fed), still project a moderate reduction in growth, with recovery later this year. While it is believed that it could take residential real estate several years to recover, and while there are calls for reregulation of the home mortgage industry, few analyses recognize the true depth of the problems facing the financial system today.

This brief will provide a Minskyan analysis of the forces that have brought us to the present situation, and will make some general policy recommendations to ameliorate the damage done to the financial structure over the past couple of decades by lax oversight, risky innovations, and

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deregulation. What we actually confront is a systemic failure resulting from a fundamentally flawed model—in Minsky’s phrase, “money manager capitalism.” Indeed, Minsky’s writings can shed a lot of light on the current problems, as well as on the direction that financial system reform ought to take. If the problem is with the design of the financial system itself, yet another crisis will arrive shortly to expose other flaws. For that reason, reform is needed.

Minsky would not blame “irrational exuberance” or “manias” or “bubbles” for the real estate boom. Rather, it was mass delusion propagated in part by policymakers and those with vested interests. However, a large part of the blame must be laid on the relative stability experienced since the 1980s—the tranquility that made the boom possible also created fragility because, according to Minsky, *stability is destabilizing*.

Money Manager Capitalism and the Systemic Nature of the Crisis

Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation.

—John Maynard Keynes (1964)

Irrational exuberance? No, the seeds of the current financial crisis were sown long ago. The story begins with the Fed’s increasingly aggressive use of interest rate changes in an effort to fine-tune the economy. Each rate hike intended to fight inflation caused problems for commercial banks and thrifts (retail deposit withdrawals) when market rates rose above legislated deposit rates. Rules and regulations that dated to the New Deal financial reforms constrained practice to preserve safety and soundness.

However, as in Minsky’s scenario, financial institutions responded to each tight-money episode by innovating and creating new practices and instruments—making the supply of credit ever more elastic (Wray 1994). As time passed, the upside tendency toward speculative booms became correspondingly more difficult to contain. In addition, the Fed and Congress gradually removed constraints, allowing commercial banks to engage in a wider range of practices in order to better compete with their relatively unregulated Wall Street rivals.

According to Minsky, the remarkable thing about the post-war period is the absence of depressions, while recessions are constrained and the fallout from financial crises is contained. This is due in part to the various reforms that date to the New Deal, but also to countercyclical movement of the “Big Government” budget, to lender-of-last-resort activity of the “Big Bank” Fed, and to periodic bailouts arranged by the Fed, the Treasury, or Congress. As Minsky argued, by preventing “it” (a debt deflation on the order of the 1930s collapse) from happening again, new practices and instruments were validated.

By the early 1970s, firms were turning to the commercial paper market for short-term borrowing, taking business away from banks. Other market innovations allowed for diversification of risk in the form of issued securities collateralized by pooled loans—apparently eliminating the advantage banks had previously held. New instruments continually eroded the bank share of assets and liabilities—which fell by half between the 1950s and the 1990s.

Irrational exuberance that developed in equity markets in the 1990s was based on the belief that a “new economy” had created conditions in which dot-com companies could only rise in value—validating exploding stock prices—while the 2000s saw unprecedented real estate appreciation that validated increasingly risky Ponzi finance. Both bubbles were fueled by a combination of optimistic expectations and the search for high returns by money managers. This growth of managed money eroded banks’ traditional lines of business, as pension, insurance, and hedge funds provided an alternative source of funds.

The securities market share of private nonfinancial debt rose from 27 percent in 1980 to 55 percent in February of this year (Greenlaw et al. 2008). Banks were forced to become more market-oriented, settling for a smaller share of the financial system, while servicing Wall Street firms would replace some of the relationship banking they had lost. Minsky (1987) observed that banks appear to require a spread of about 450 basis points between interest earned on assets and that paid on liabilities. By contrast, financial markets can operate with much lower spreads precisely because they are exempt from required reserve ratios, regulated capital requirements, and much of the costs of relationship banking.

To restore profitability, banks would earn fee income for loan origination, but by moving loans such as mortgages off their books, they could escape reserve and capital requirements. There was no need to develop relationships with individual

borrowers in order to assess creditworthiness, since loan pools diversified risks, risk raters evaluated the risks of the overall pools, and insurers protected against losses. To replace lost income, banks began to take direct positions in the poolers, the securities, and the insurers; they also provided backup liquidity and money-back guarantees. Ironically, this meant that they were now exposed to the risk of default by borrowers neither they nor anyone else had ever assessed.

This is why the problem is not confined to subprimes or to an irrational real estate market. It is a systemic problem resulting from the incorrect notions that markets can properly assess risk, that they can hedge and shift risk to those best able to bear it, and that market forces will discipline decision making. The models were constructed during an unusually stable period in which losses were small, and required that the structure of the financial system remain constant. However, as Minsky (1986) observed, relative stability will necessarily encourage behavior that changes the financial structure (he used the terms hedge, speculative, and Ponzi to describe the transformation). This evolution, in turn, rendered the models increasingly useless. Further, as we now know, risk was not properly hedged, and much of it came back directly to banks through buyback guarantees, backup credit facilities, and bank purchases of securities.

And, finally, markets encouraged ever-riskier activities. Competition forced fund managers to take on excessive risk given returns, to rely on ratings agencies, and to follow the leader down the path to inevitable destruction.

Securitization and Leverage

That which can be securitized will be securitized.

—Hyman P. Minsky (1987)

Many of today's problems can be traced back to securitization—the pooling of assets to serve as collateral against issued securities. Securitization has led to a dizzying array of extremely complex instruments that—quite literally—only a handful understand. Warren Buffet has called these new instruments “financial weapons of mass destruction.” Economist M. Cary Leahey (2007) said the problem is in “opaque hard-to-value credit derivatives,” which is why a bank might value derivatives at \$90 billion one day and at \$22 billion the next (Norris 2008). Throughout the financial world, “mark to model” or even “mark

to myth” substituted for “mark to market” because markets could not value the instruments. By fall 2007, markets had lost faith in both the models and the myths.

The current financial crisis began in the market for mortgage-backed securities (MBSs), especially in the subprime section of that market. It quickly spread to securities backed by “Alt A” mortgages (less risky than subprime, but too risky to qualify for conventional loans), and then to more exotic markets. Further, problems spread beyond specific asset classes to institutions such as special purpose vehicles and monoline insurers (which provide insurance for MBSs), and to major financial institutions and other financial instruments such as municipal bonds and credit default swaps (CDSs). Finally, the credibility of real estate agents, property appraisers, accountants, credit-rating agencies, mortgage brokers, and financial institution officers has been called into question because of practices that have developed over the past decade. It wasn't supposed to happen this way—securitization was supposed to reduce risk and shunt it to those best able to handle it.

Securitization is a “market-oriented” financial practice that has been called the “originate and distribute” model: the institution that arranges the finance of activities does not hold the loan. Minsky (1987) argued that securitization was part and parcel of the globalization of finance, as it creates financial paper that is freed from national boundaries. In the aftermath of the 2000 equity market crash, investors in dollar assets looked for alternative sources of profits. The low interest rate policy of the Fed under former Chairman Alan Greenspan meant that traditional money markets could not offer adequate returns. Investors lusted for higher risks, and mortgage originators offered subprimes and other “affordability products” with ever-lower underwriting standards. Greenspan gave the maestro seal of approval to the practice, urging home buyers to take on adjustable rate debt.

Since banks, thrifts, and mortgage brokers relied on fee income rather than interest, their incentive was to increase throughput, originating as many mortgages as possible. Ironically, the shift to “markets” reduced the portion of the financial structure that the Fed is committed to regulate, supervise, and protect—something that was celebrated rather than feared. The fate of homeowners was sealed by bankruptcy “reform” that makes it virtually impossible to get out of mortgage debt—another very nice “credit enhancement,” provided in this case by Congress.

Finally, some of the subprime loans are covered by mortgage insurance, but more importantly, insurance was sold on the securities themselves. The insurers' foray into the more profitable MBS sector seemed sensible and without greater risk, since the securities were rated by the agencies (Moody's, Standard and Poor's, Fitch)—the same agencies that rated the health of the insurers themselves. Insurance allowed the debts to gain the highest ratings, ensuring a deep market and low interest rate spreads (Richard and Gutscher 2007).¹

The incentives to increase throughput, combined with credit enhancements, led banks to abandon their reluctance to purchase securities with the riskiest underlying debts. Ironically, while relationship banking had based loans on the relevant characteristics of the borrower (such as income, credit history, and assets), the new arrangements appeared to offer a nearly infinite supply of impersonal credit with no need to evaluate borrowers' ability to repay. Instead, "quant models" based on historical data regarding default rates of purportedly similar borrowers would replace costly relationship banking, enhancing efficiencies and narrowing interest rate spreads (Kregel 2007).

Asset-backed securities (ABSs) with high ratings would be purchased by hedge funds (and others) that would use the securities as collateral to raise funds for their purchase—much as in a leveraged buyout, where the firm to be purchased is used as collateral for the funds borrowed for its takeover. In many cases, banks provided the loans that were used to buy the ABS collateral that contained the mortgages the banks were trying to move off their balance sheets! The hedge funds, in turn, could leverage by factors of 20, 30, or more to hold the ABSs. By contrast, banks could leverage capital by a factor of perhaps eight, no more. Low interest rate spreads, in turn, required extremely low default rates as well as layers of insurance and backup lines of credit. Ironically, much of the risk returned to banks in the form of loans made to buyers of the securities, promises to buy back bad securities, and relations with monoline insurers. Ultimately, the move to "market-based" funding left banks holding much of the risk: the risk simply moved from the balance sheet, where it was regulated and more or less observable, to a place where it isn't regulated or observable—but where it still threatens bank solvency (Das 2007). How much is uncertain, but the combined risk could total \$1 trillion to \$2 trillion. And rather than shifting risk to those best able to bear it, the new financial system shifted risk "on to the shoulders of those least able to understand it" (Wolf 2007).

Greed Trumps Fear: The Evolution to Fragility and Crisis

Over a protracted period of good times, capitalist economies tend to move from a financial structure dominated by hedge finance units to a structure in which there is a large weight to units engaged in speculative and Ponzi finance.

—Hyman P. Minsky (1992)

Superimposed on these developments was a change in the "model of the model" adopted by market players. The "Great Moderation" (Bernanke 2004, Chancellor 2007) is the belief that the world is now more stable, a condition characterized by a new economy that is far less vulnerable to "shocks." Further, central banks have demonstrated both willingness and a capacity to quickly deal with threats to the financial system (e.g., Greenspan's engineered bailout of Long-Term Capital Management [LTCM] in 1998, and Bernanke's responding to the subprime crisis by supposedly "pumping liquidity" into markets). Moreover, the Fed has made it clear that it remains on guard against any residual fallout from mortgage losses.

The Great Moderation allowed greed to trump fear, and the revelations are piling up. Real estate appraisers have complained that they were strong-armed by lenders to inflate values, and there is little doubt that inflated appraisals played a major role in fueling the speculative boom—just as they had helped to create the savings-and-loan fiasco in the 1980s (Wray 1994).

The ratings agencies were also complicit because their appraisals of the securities were essential to generating markets for risky assets and to ensuring ratings that would guarantee marketability, and they were richly rewarded for helping to market mortgages. Furthermore, mortgage securitizers relaxed their due diligence tests even as lenders relaxed loan standards (Rucker 2007).

Of course, much has already been written about borrower greed. The subprime market bloomed as "low doc" loans evolved to "no docs" and to "liar loans," and finally, to "Ninja loans" (no income, no job, no assets). Certainly, some of this was fraudulent (on the part of both lender and borrower), but much was also based on the belief that real estate values could only go up—thus, Ponzi finance was encouraged by the relative tranquility of the market. Minsky would label the faith in the era of the Great Moderation a "radical suspension of disbelief." In sum,

the nature of the financial system changed in a fundamental manner that ensured its evolution toward fragility.

The models used to value the securities could not take into account structural changes to the economy or systemic risk. These models were based on data derived from only a few years' experience that coincided with an unusually good period for house prices. Further, since similar models are widely used, the models themselves drive the market—generating “herding behavior” that can have devastating results when all are simultaneously “selling out position,” as Minsky would put it. The new system required accurate appraisals of values of the underlying assets and accurate evaluation of the risks of the securities. However, the apparent success of the originate-and-distribute approach encouraged erosion of margins of safety, ever-riskier practice, collusion, and misrepresentation—all in the belief that nothing could go wrong. But the behavior induced by these beliefs changed the structure of the financial markets so that *everything* would go wrong.

Retribution

To be exact, our economic leadership does not seem to be aware that the normal functioning of our economy leads to financial trauma and crises, inflation, currency depreciations, unemployment, and poverty in the midst of what could be virtually universal affluence—in short, that financially complex capitalism is inherently flawed.

—Hyman P. Minsky (1986)

The combination of low interest rates and rising real estate prices encouraged a speculative frenzy that would end only if rates rose or prices stopped rising. Of course, both events were inevitable—indeed, were dynamically linked—because Fed rate hikes would slow speculation, attenuating rising property values and increasing risk spreads. When losses on subprimes began to exceed expectations that had been based on historical experience, prices of securities began to fall. Problems spread to other markets, and banks became reluctant to lend even for short periods. With big leverage ratios, owners faced huge losses and began to deleverage by selling, thus putting more downward pressure on prices.² By early 2008, some of the credit

markets for municipalities had dried up, as monoline insurers faced liquidity problems.³

Projections of losses on residential MBSs range from about \$200 billion to \$500 billion, with some outside projections reaching \$1 trillion.⁴ Considering that total home values are more than \$20 trillion, and given that projections of eventual average house price declines will be as much as 30 percent, this amounts to a total notional loss of \$6 trillion. Actual losses will depend on the ultimate depreciation of home values, on the depths to be reached in the coming recession, and on the ease with which households are allowed to work out debt positions. It is also worth noting that problems are now showing up in home equity loans. Delinquency rates doubled during 2007 and are continuing to climb.

The loss on a typical subprime foreclosure can be substantial for two reasons. First, down payments were small or nonexistent, and with falling real estate prices, equity can be hugely negative. Second, foreclosure can be a long process and losses can reach above 90 percent of the value of the loan (UBS Investment Research 2007). Moreover, vacant houses negatively impact real estate values and add to the inventory of unsold homes, while local government suffers loss of tax revenue and reduces public services as the economy stagnates.

Of particular concern are loans in the construction sector, exposing banks to large direct losses. If default rates by firms rise to what has been normal recession experience, total losses on nonfinancial corporate debt could approach \$400 billion (Veneroso 2007). Moreover, banks have already taken significant hits due to conduits and special investment vehicles (SIVs) they set up to hold MBSs or collateralized debt obligations (CDOs). Further SIV losses could amount to \$150 billion. The synergistic effects of massively negative home equity, rising unemployment (should the recession deepen), and rising inflation (especially of energy prices) could lead to higher defaults and losses related to credit cards and credit card ABSs (\$70 to \$100 billion).

Credit default swaps (CDSs) were created (in the mid-1990s) to allow Wall Street to take (commercial) loans away from commercial banks. CDSs are much like giant insurance funds, but with almost no loss reserve. If losses were to reach 5 percent, we are talking about real money, on the order of \$2.25 trillion.

Leveraged buyout operations have been booming. Total “junk debt” now stands at \$2.5 trillion, and it is not inconceivable

that losses on “junk” could reach \$400 billion. Hence, the aggregate losses on residential mortgages, SIVs, CDOs and other consumer debt, commercial MBSs, and other business debt could reach well over \$1 trillion. The direct losses on residential real estate could mount to several trillion dollars, while CDS and other unknown losses could amount to another few trillion (in a \$13 trillion economy).

In the postwar period, the United States has not seen a nationwide real estate crisis. However, there have been regional crises, such as that in California in the 1990s. If the California case is relevant, the United States will be feeling the effects of the current crisis for a long period—perhaps a decade or more (also similar to the Japanese experience). Indeed, there are reasons to believe that if the United States moves into recession, the damage would be even more severe (i.e., after a decade of deficit spending, the U.S. private sector is much more indebted today than it was in the early 1990s).

Finally, as documented above, securitization spread far beyond mortgages, with practices similar to those used in sub-prime securitization adopted in other sectors. For these reasons, asset price depreciation will not be restricted to residential real estate, and losses in one sector will generate recursive losses in others. In short, recovery could be a long time coming.

Policy and Reform

Implicit in the legislation which I am suggesting to you is a declaration of national policy. This policy is that the broad interests of the Nation require that special safeguards should be thrown around home ownership as a guarantee of social and economic stability, and that to protect home owners from inequitable enforced liquidation in a time of general distress is a proper concern of the Government.

—President Franklin D. Roosevelt,
Message to Congress on Small Home
Mortgage Foreclosures (1933)

Over the course of the real estate boom, home ownership rates rose from 64 to 70 percent. This rise in ownership rates was nothing but a mirage. The financial engineers turned housing from mere abodes into assets that could be traded like dot-com equities—with long-run consequences (Goodman 2007).

The problem is systemic and derives from a fundamentally flawed model that viewed the move to markets as something that would increase efficiency, lowering interest rate spreads while spreading and reducing risk. The shift to the originate-and-distribute model meant that individual creditworthiness was never assessed. Indeed, it is becoming apparent that banks are currently exposed to *far more* risk than they had been under the old banking model, but without any of the long-term relations with debtors that characterized it. Further, the interest rate spreads had been so reduced by a system that valued quantity over quality that there was no hope that gross earnings could cover losses if defaults rose even slightly. Add to the mix corruption, control fraud, rogue traders, deception, insider trading, “pump and dump” campaigns, and predatory lending practices and you’ve got a recipe for a painful outcome.

There are two immediate policy issues facing us: first, what, if anything, can be done to ameliorate the fallout from the current crisis; second, what can be done to prevent recurrence of such a situation in the future? Unfortunately, most of the initiatives being put forward by the George W. Bush Administration appear to be designed to help creditors rather than debtors. Meanwhile, the Fed has lowered interest rates and developed a new auction facility, and is lending safe Treasury debt against asset-backed securities, but credit spreads were still widening in early March.

After a run on Bear Stearns, the Fed arranged a “nonrecourse” loan to JPMorgan Chase so that it could lend against MBSs provided as collateral.⁵ Ironically, the Fed’s intervention came on the 75th anniversary of President Roosevelt’s reopening of financial institutions after the “banking holiday” of 1933, and required invocation of one of the New Deal era’s provisions that allows the Fed to lend to “individuals, partnerships, or corporations.” The Fed appears to be willing to ignore inflation pressures as well as moral hazard problems, putting its role as lender of last resort first and foremost in an all-out effort to prevent a panic. This is, of course, the prescribed solution to liquidity problems; however, it cannot do much if real estate prices continue to fall and delinquencies continue to rise.

Recent economic growth has been mostly fueled by exports, partly thanks to a depreciating dollar. However, any serious U.S. slowdown will be contagious, reducing demand for U.S. exports. If that happens, the heavily indebted private sector cannot be the main source of demand stimulus, and while a slowing economy will increase the budget deficit, this

will not proactively create growth (although it will help to constrain the depths of recession). The government's modest economic stimulus plan is far too small to turn around the economy. Moreover, creeping inflation—mostly fueled by energy and food prices—will temper government's willingness to use policy to fuel growth. Indeed, the return of stagflation looks increasingly likely. Thus, it is difficult to see how the United States can grow its way out of this problem.

Washington has called on Freddie Mac and Fannie Mae to take a bigger role in home lending in order to relieve pressures. The problem is that these institutions have their own troubles, so it is difficult for them to maintain strong balance sheets and support home ownership in a crisis.

What is needed is mortgage relief. Legislation proposed by Congress would allow modification of mortgage terms so owners could keep their homes. If passed, this could help to stabilize the real estate sector. Moreover, bankruptcy laws should be amended to allow those who had been subjected to predatory lending to escape subprime loans. The borrower should then be able to refinance the home at its current market value, and with the borrower's original equity (if any) intact. As President Roosevelt argued in announcing his plan to save the "small homes," the goal would be to preserve home ownership, not to protect real estate speculators.⁶ Following Roosevelt's lead, which included the creation of the Home Owners' Loan Corporation, we may need a new institution to get us through the worst real estate crisis since the 1930s. Refinance is preferable to foreclosure, as it preserves home ownership and communities, while also putting money where it is most needed.

Meanwhile, bailouts *will* be required (Magnus 2008). A financial crisis is not the time to teach markets a lesson by allowing a generalized debt deflation to "simplify" the system, as Minsky put it, by wiping out financial wealth so that only equity ownership remains. Regulations as well as oversight must be strengthened to slow the next stampede toward a speculative bubble. State and local governments will probably require assistance as tax revenue falls, community needs increase, and the ability to borrow and to service debt suffers.

Thus far, most of the schemes floated by public and private officials have failed because no one has been able to persuade participants to go against their own narrow private interests (e.g., in the rescue of Bear Stearns, JPMorgan agreed to provide lending only if it did not have to bear risk). Today, it is difficult to identify anyone willing and able to take the bull by the horns

and force participants to act in the public interest because most of the prominent candidates (Greenspan, Robert Rubin, Henry M. Paulson Jr.) are too closely identified with the interests of particular Wall Street firms. The crisis has gone far beyond a liquidity problem, and addressing insolvency will require participation of private players as well as the Treasury.

Congress is considering regulations and new standards to be met by mortgage originators regarding the ability of borrowers to make payments. The evidence is overwhelming that variable rate mortgages (VARs) lead to more foreclosures; hybrid VARs are even more dangerous. Therefore, Congress should investigate limits to the marketing of VARs and hybrids to low-income borrowers and first-time buyers.

Policy should avoid promoting the consolidation of financial institutions. The Roosevelt alternative should be adopted: temporary "nationalization" of failing institutions, with a view to eventually returning them to the private sector at a small profit to the U.S. Treasury. And, again following Minsky, policy should return to a bias toward market segmentation, with greater regulation of the (protected) banking sector.

The originate-and-distribute model has shown its weakness and is unlikely to survive in its present form. Risk raters, property appraisers, quant models, and broker's markets cannot substitute for relationship banking. There is a clear public interest in the management of pension and insurance funds, which are supposed to be biased toward safety and soundness. Even hedge funds and private equity funds need some supervision and regulation because of their potential impact on the economy should they collapse.

Conclusion: What We Learned from Minsky

Minsky argued that the Great Depression represented a failure of the small-government, laissez-faire economic model, while the New Deal promoted a highly successful Big Government/Big Bank model for financial capitalism. The current crisis just as convincingly represents a failure of the Big Government/Neoconservative (or, outside the United States, what is called "neoliberal") model that promotes deregulation, reduced supervision and oversight, privatization, and consolidation of market power in the hands of money manager capitalists.

The New Deal reforms transformed housing finance, promoted home ownership, benefited communities, and built household wealth. This required oversight by regulators, deposit

insurance courtesy of the FDIC and the Federal Savings and Loan Insurance Corporation, and a commitment to relatively stable interest rates. Other policies identified by Minsky as “paternalistic capitalism” also helped to build a robust economy, reduce insecurity, enhance trust, and promote economic stability.

Over time, however, the economy gradually evolved toward fragility. Social programs were cut, trickle-down economics favored the growth of inequality, and policy increasingly turned to promotion of investment and business to fuel growth. This policy mix increased the importance of finance, and the absence of a depression in the postwar period allowed financial wealth to accumulate in the hands of an elite. A formally “anti-government” bias led to the erosion of many of the New Deal reforms. The Big Government/Neocon model replaced the New Deal reforms with self-supervision of markets, with greater reliance on “personal responsibility” as safety nets were shredded, and with monetary and fiscal policy that is biased against maintenance of full employment and adequate growth to generate rising living standards for most Americans. The government’s constituency had shifted away from America’s middle class and toward Wall Street’s money managers.⁷

The model is in trouble—and not just with respect to the mortgage mess, as the United States faces record inequality and destruction of the middle class, a health care crisis, an incarceration disaster, and other problems beyond the scope of this analysis (see Wray 2000, 2005). We must return to a more sensible model, with enhanced oversight of financial institutions and with a housing-finance structure that promotes stability rather than speculation. We need policy that promotes rising wages for the bottom half (or even three-quarters) of workers so that borrowing is less necessary to maintain middle-class living standards, and policy that promotes employment, rather than transfer payments—or worse, incarceration—for those left behind. Minsky always advocated job creation programs so that government would act as an employer of last resort—the only way to eliminate involuntary unemployment and reduce inequality and poverty, while also ensuring that the government’s budget would swing countercyclically to offset recessionary as well as inflationary forces.

Monetary policy must be turned away from using rate hikes to preempt inflation and toward stabilizing interest rates, direct credit controls to prevent runaway speculation, and supervision and regulation—its proper role. Minsky favored

support for small banks, and creation of a system of community development banks—the latter only partially achieved under President Clinton—as a viable alternative to the predatory lending practices that did increase the supply of credit to low-income borrowers and neighborhoods, but which is now resulting in foreclosures and vacancies.⁸

Unfortunately, we turned American home finance over to Wall Street, which operated the industry as if it were a casino. The swing toward markets and away from regulated banking greatly increased risk, while at the same time it necessarily extended government assurance to the unregulated institutions for the simple reason that the government cannot allow a financial crisis to threaten the economy. What Bernanke called “the Great Moderation” is also known as the “Greenspan put”—the belief that no activity is too risky because the Fed will intervene if things go bad. Unfortunately, it is Chairman Bernanke who is left to clean up the mess left by years of lax oversight and deregulation that operated to the advantage of Wall Street.

Minsky insisted that “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” (Minsky 1996). It is likely that the current crisis will make it politically feasible to devise and to put into place such institutions.

Notes

1. It is important to stress, however, that the AAA rating of the MBSs relied on an AAA rating for the insurer; and if losses on the MBSs led to larger-than-expected losses by the insurers, the monolines would be downgraded, leading to downgrading of the MBSs they insured—generating a recursive cycle of downgrading. This is why problems with the monolines have shaken markets in recent weeks.
2. Note that in a world of high leverage ratios, reducing exposure means that many multiples of collateralized debt obligations relative to one’s own funds must be sold (if equity is \$1 billion, to reduce exposure by half requires sales of \$7.5 billion when leverage is 15-to-1).
3. The “auction-rate” market for securitized government debt has collapsed—putting both holders of securities and debtors in a bind. Essentially, these are long-term securities but with interest rates that reset periodically in auctions.

Sellers had expected the securities to have unquestioned liquidity but now cannot sell them. Debtors are penalized with very high interest rate resets due to collapse of the auctions—threatening to turn yet another liquidity problem into a solvency problem.

4. Greenlaw et al. (2008) project mortgage debt losses at \$400 billion, but admit the number will grow if house prices continue to fall, with defaults snowballing through conventional mortgages.
5. Two days later, on March 16, it was announced that JPMorgan would buy Bear Stearns for \$2 per share (down from a high of \$171 the previous year), agreeing to take over all counterparty risks and using the likelihood of losses and lawsuits to justify the low purchase price. At the same time, the Fed made an unusual move in cutting the discount rate by 25 basis points on a Sunday evening in advance of a Federal Open Market Committee meeting the following Tuesday. It also created yet another lending facility for big investment banks to secure short-term loans of reserves against a range of collateral. Later, JPMorgan raised its offer price to \$10 per share in response to widespread criticism that it had perhaps received one of the best deals—arranged and guaranteed by the Fed—in recent history.
6. According to the Center for Responsible Lending, there is no difference in the delinquency rates for speculators and owner-occupants. Further, the proportion of all completed foreclosures on securitized subprime adjustable rate loans made in 2006 that were attributable to speculators was just 7 percent, while owner-occupants accounted for 93 percent. In other words, speculators are a very small part of the problem in the universe of subprime adjustable rate mortgages.
7. Readers will remember President Bush's famously candid remarks at a fundraising dinner for the Archdiocese of New York in December 2000: "This is an impressive crowd—the haves and the have-mores. Some people call you the elite. I call you my base."
8. See Papadimitriou and Wray (1998) for a summary of Minsky's policy proposals.

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