

A Minsky Perspective on the Global Recession

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On August 18, 2007, a front-page story in *The Wall Street Journal* highlighted the ideas of economist Hyman Minsky. With the U.S. economy in the midst of a worsening credit crunch, reporter Justin Lahart observed that although Minsky died in 1996, his views were ‘reverberating from New York to Hong Kong as economists and traders are trying to understand what’s happening in the markets’ (Lahart 2007).

Since 2007, attention to Minsky’s ideas has increased as global economic conditions have deteriorated (see, for example, Cassidy 2008; Pollin 2008; and ‘Minsky’s Moment’ 2009). As an economist who has long appreciated Minsky’s insights, I am happy to see this flurry of interest. Yet I fear that many observers have missed the full significance of his contributions.

Many of those now on the Minsky bandwagon treat his ideas as relevant to understanding a single economic event. Market analysts and traders even refer to that event as a ‘Minsky moment,’ which arrives ‘when over-indebted investors are forced to sell even their solid investments to make good on their loans’ (Lahart 2007). If the trouble were to become so widespread that it threatened the banking system at the national or international level, then some would replace the word ‘moment’ with ‘meltdown’ (Magnus 2008). However, the focus is still on a single incident, not on the evolutionary path of economic activity.

Others exposed to Minsky’s ideas acknowledge that his work was grounded in a dynamic conception of the economy. For most in this group, though, Minsky’s place in economics rests on what he called the “financial-instability hypothesis.’ According to Minsky, capitalist financial systems tend to cycle endogenously from a conservative state of affairs called hedge financing,

to a more risky form called speculative financing, to an unsustainable form called Ponzi financing, and then back to hedge financing for another round. This pattern of economic activity tends to generate a series of booms and recessions, and the severity of the latter depends largely on the effectiveness of government regulation and stabilization policies (Minsky 1982; 1992a).

A full appreciation of Minsky's insights, however, must recognize that about the last dozen years of his life were devoted largely to synthesizing the financial-instability hypothesis and an understanding of long-term capitalist development. Indeed, in an essay written for the hundredth anniversary of the birth of John Maynard Keynes and Joseph Schumpeter, Minsky wrote: 'The task confronting economics today may be characterized as a need to integrate Schumpeter's vision of a resilient intertemporal capitalist process with Keynes's hard insights into the fragility introduced into the capitalist accumulation process by some inescapable properties of capitalist financial structures' (Minsky 1986a, 121). A key conclusion of Minsky's pursuit of such a synthesis is that although the 'basic path' of real-world capitalism is cyclical (Minsky 1975, 9), the 'money-manager capitalism' characteristic of recent decades differs substantially from the 'managerial capitalism' found in the United States immediately after World War II (Minsky 1990a; 1993a). A successful economic policy for the present era must be built upon recognition of the institutional features of this stage of capitalist development (Minsky and Whalen 1996-1997).

This paper offers a Minsky perspective on the global recession of 2009 by drawing on the insights Minsky gained from both Keynes and Schumpeter. While the Keynesian and Schumpeterian dimensions of Minsky's viewpoint are intertwined in the real world, the cyclical and structural aspects of the current crisis are highlighted separately in the analysis that follows.

After examining the nature and causes of the global downturn from those two lenses, Minsky's policy proposals are compared with recent policy steps taken by the U.S. government.

CYCLICAL DYNAMICS

Minsky's financial-instability hypothesis can be seen as an alternative to the 'efficient-market hypothesis' of conventional economics. According to that conventional view, investors, lenders and other financial-market participants are not, as a group, predisposed to overconfidence or other biases (Shefrin 2000, 4). In contrast, the financial-instability hypothesis treats overconfidence and panics as regular features of the economic landscape.

Minsky traces this aspect of his perspective to Keynes, especially to the latter's 1937 article in *The Quarterly Journal of Economics*, 'The General Theory of Employment' (Minsky 1975, 64-67; Keynes 1937). In that essay, Keynes describes his departure from the mainstream economics of his time, which he called 'classical economic theory,' as the departure from a focus on long-period equilibrium (Keynes 1937, 213-214). Behind both the classical theory of Keynes's time and the efficient-market hypothesis of our own is an assumption that the future can be treated as a matter involving risk (reducible to the calculation of probabilities), not uncertainty. Keynes, however, dismisses this substitution of risk for uncertainty in the case of most economic analyses:

The whole object of the accumulation of wealth is to produce results, or potential results, at a comparatively distant, and sometimes at an *indefinitely* distant, date. Thus the fact that our knowledge of the future is fluctuating, vague and uncertain renders wealth a peculiarly unsuitable subject for the methods of classical economic theory.

This theory might work very well in a world in which economic goods were necessarily consumed within a short interval of their being produced. But it requires, I suggest,

considerable amendment if it is to be applied to a world in which the accumulation of wealth for an indefinitely postponed future is an important factor; and the greater the proportionate part played by such wealth-accumulation the more essential does such amendment become (Keynes 1937, 213).

According to Minsky, the financial structure of our economy becomes more and more fragile over a period of prosperity. In the early stages of prosperity, enterprises in highly profitable segments of the economy are rewarded for taking on increasing amounts of debt. And their success encourages other firms to engage in similar behavior.

This pattern was certainly evident in the high-tech sector during the late 1990s and in the housing sector during the early- and mid-2000s. In fact, construction companies and contractors were not the only ones taking on more debt in the 2000s. Homebuyers were also taking on more debt as the housing market began heating up, in part because interest rates were low and the stock market had become less attractive in the wake of the dot-com boom and bust. While it had long been customary for U.S. homebuyers to make a 20-percent down payment on a home, 42 percent of first-time home purchasers and 13 percent of buyers who were not first-time purchasers put no money down to acquire homes in the mid-2000s (Baker 2009a; Max 2005; Irwin 2005).¹

In retrospect, it seems that enterprises and homebuyers should have resisted the impulse toward increasing indebtedness, but the incentives at the time were just too great. As Gary Dymski and Robert Pollin explain in a 1992 essay, nobody in a robust sector of the economy wants to be left behind due to underinvestment:

Even if market participants did have full knowledge of the Minsky model, and were aware that financial crises will occur at some point, that would still not enable them to

predict when the financial crisis will occur. In the meantime, aggressive firm managers and bank loan officers will be rewarded for pursuing profitable opportunities and gaining competitive advantages. Cautious managers, operating from the understanding that boom conditions will end at some uncertain point, will be penalized when their more aggressive competitors surpass their short-run performance (Dymski and Pollin 1992, 45).²

As the preceding quote indicates, lenders as well as borrowers fuel the tendency toward greater indebtedness in an expansion. The same climate of expectations that encourages borrowers to acquire more risky financial liability structures also eases lenders' worries that new loans might go unpaid (Minsky 1975). Moreover, it is not just that borrowing and lending expand in the boom. There is also financial innovation. In fact, in a 1992 essay, Minsky wrote that bankers and other financial intermediaries are 'merchants of debt, who strive to innovate with regard to both the assets they acquire and the liabilities they market' (Minsky 1992a, 6).

The boom cannot continue forever, however; we eventually arrive at what some have called the 'Minsky moment' (Lahart 2007, 1). In other words, it eventually becomes clear that some borrowers have become overextended and need to sell assets (or secure a government bailout) to make their payments. In the current crisis, early high-profile cases involved the mortgage broker Countrywide, the British bank Northern Rock, and two hedge funds run by Bear Stearns (Stempel 2007; Reckard, Douglass and Petruno 2007; Larsen and Giles 2007; Mildenberg 2008; Foley 2007).³

Then the problem spreads. Since bankers and investors hold subjective views about acceptable debt levels, once a shortfall of cash and a forced selling of assets materializes somewhere in the economy, it can lead to a widespread reassessment of how much debt or

lending is appropriate. Moreover, the buildup can go on for years, but when anything goes wrong the revaluation can be sudden (Minsky 1982, 67).

When banks decide to rein in their lending, we find ourselves in a credit crunch. It is easy to think of the present economic crisis as something that began with the worldwide stock-market downturn in the autumn of 2008. In fact, though, the difficulties of 2008 were preceded by a credit crunch that began in the summer of 2007, and signs of trouble—traceable in large part to the ‘subprime’ mortgage market—were evident as early as March 2007 (Magnus 2007; Foley 2007; ‘Timeline’ 2009).

Once a credit crunch emerges, financial difficulties are no longer confined to one sector. In fact, a crunch threatens not only business investment, but also household spending. This means that when a sectoral bubble bursts—in the high-tech sector nearly a decade ago or in the housing sector more recently—the collapse threatens to trigger an economy-wide recession.

And that sort of recession is what the United States and much of the world now experiences. Moreover, it is pretty clear the situation has gone beyond a Minsky ‘moment’ and is more akin to an economic ‘meltdown,’ at least with respect to U.S. housing, banking, and stocks. The Dow Jones industrial average, for example, fell 37 percent between April 1, 2007 and April 1, 2009 (Yahoo Finance 2009). Meanwhile, the U.S. unemployment rate rose from 4.4 percent in March 2007 to 8.5 percent in March 2009 (the latest monthly data available as of this writing), and is widely expected to continue rising through 2009 (U.S. Department of Labor 2009; ‘Obama’s economic aide sees rising U.S. unemployment’ 2009).

STRUCTURAL EVOLUTION

In a pair of articles designed to integrate key contributions of Keynes and Schumpeter, Minsky mentions that Keynes and institutionalist Wesley C. Mitchell had a common perspective on

business cycles (Minsky 1993a; 1990a). Bringing Mitchell into the picture helps underscore the sort of synthesis toward which Minsky was aiming: Mitchell had long ago written that ‘each new cycle presents idiosyncrasies. Business history repeats itself, but always with a difference’ (Mitchell 1941, ix). In the 1990s, Minsky still believed that the U.S. economy moves along a cyclical path, but he also believed that the system had recently entered a new stage of capitalist development. The managerial era that matured in the immediate aftermath of World War II had, during the 1980s, given way to a stage characterized by emergence of money managers as the nation’s dominant economic decision-makers (Minsky 1990a; 1993a; 1996; see also Whalen 2001 and 2002).

While Keynes offered insights into cyclical fluctuations, Schumpeter (Minsky’s dissertation advisor at Harvard until the relationship was cut short by Schumpeter’s untimely death) provided Minsky with insights into structural economic evolution over a series of cycles. In fact, Minsky underscored an aspect of Schumpeterian ‘creative destruction’ that few others recognized: ‘Nowhere are evolution, change and Schumpeterian entrepreneurship more evident than in banking and finance and nowhere is the drive for profits more clearly the factor making for change’ (Minsky 1993a, 106). Thus, four institutional features of money-manager capitalism emerge to play a role in explaining the economic difficulties of the past few years. The origin of the current global crisis can be traced in large part to the following financial-sector innovations: unconventional mortgages, securitization, the rise of hedge funds, and the globalization of finance.

At the heart of the current financial crisis are home mortgages that deviate from the traditional U.S. home-loan arrangement, which involved a long-term loan on fixed-rate terms. Many of these unconventional—some have even called them ‘exotic’—mortgages have

adjustable interest rates and/or payments that balloon over time. Federal law allowed banks to issue adjustable-rate mortgages since 1982, but their use and complexity have exploded in the past decade. For example, industry experts estimate that a variant called the ‘option adjustable rate mortgage’ (option ARM), which offers a low ‘teaser’ rate and later resets so that minimum payments skyrocket, accounted for about 0.5 percent of all U.S. mortgages written in 2003, but close to 15 percent (and up to 33 percent in many U.S. communities) in 2006. More precise figures are unavailable because banks have not been required to report how many option ARMs they originate (Der Hovanesian 2006).

Many of these mortgages were created to target less-creditworthy customers, including those in what the banking industry calls the subprime market (Baker 2009a). Others were marketed to people who wanted to speculate in the booming housing market, people who intended to buy and then quickly resell property. However, many unconventional loans were marketed to ordinary working families who could have handled conventional mortgages (Marks 2008).

Unfortunately, it was clear from the outset that many of these exotic mortgages could never be paid back. (For an eye-opening look at the aggressive marketing of unconventional mortgages, see Morgenson (2007).) But why did this happen? Why did the mortgage market evolve in this dangerous direction?

This is where securitization comes into the picture. Securitization is simply the bundling of loans—which can include auto loans, student loans, accounts receivable, and, of course, mortgages—and the subsequent selling of bundle shares to investors. In the mid-1980s, Minsky returned home from a conference sponsored by the Federal Reserve Bank of Chicago and wrote that securitization was emerging as a key, new financial innovation. ‘That which can be

securitized, will be securitized,' he wrote (Minsky 1990a, 64). He was right, but way ahead of his time. Securitization of mortgages exploded onto the scene in the past decade.

After the dot-com bubble burst in 2001, housing in the United States looked like a safer and more attractive investment than ever to many Americans, especially with low interest rates in place due to Federal Reserve policy. Still, returns on conventional mortgages were too mundane to satisfy the aims of most money managers. As a result, what Minsky and Schumpeter might have called the 'financial-innovation machine' turned its attention to housing and shifted in to high gear.

Securitization of mortgages meant that home loan originators could be less concerned about the creditworthiness of borrowers than in the past. Thus, they had an incentive to steer customers toward the most profitable types of mortgages, even if they were the riskiest (which, of course, they were) (Der Hovanesian 2006). The result was the explosive growth in option ARMs and in 'no money down' and 'no documentation (of income)' loans. Minsky warned of all this in 1992, when he observed that securitization means mortgage originators are rewarded as long as they avoid 'obvious fraud' (Minsky 1992b, 22-23).⁴

Securitization worked like magic upon risky mortgages. Instead of 'garbage in, garbage out,' risky loans went into the process, but out came bundles that received high credit ratings from agencies like Standard and Poors. According to Christopher Huhne, a member of the British Parliament and former rating-agency economist, part of the challenge of rating the bundles was 'that financial markets fall in love with new things, with innovations, and the [important] thing about new things is that it is very difficult to assess the real riskiness of them because you don't have a history by definition' (Huhne 2007).

Another problem is that the rating agencies do not verify the information provided by mortgage issuers. Instead, they base their decisions on information received from intermediaries that, as Minsky put it, ‘do not hazard any of their wealth on the long term viability of the underlying [loans]’ (Minsky 1992b, 23).

Moreover, there are so many middlemen in the mortgage securitization game, including a number permitted to operate in a largely unregulated manner, that no one person or organization can be easily assigned blame in the event of default. The chain between the borrower and the investor includes realtors, home appraisers, mortgage brokers, mortgage originators, investment banks that bundled the mortgages, agencies that rated the bundles, and even companies (like American International Group) that insured many of the bundles (Whalen 2008a, 235).⁵

Trillions of dollars worth of mortgage-backed securities were bundled and sold as shares to investors. In late 2008, Fannie Mae and Freddie Mac alone held \$4.1 trillion (Lanman and Kopecki 2008). Moreover, the private market in credit default swaps—used as a hedge against (mortgage-backed) securities losses, as a way to speculate that other companies will experience a loss, or as an arbitrage instrument—reached \$45 trillion by late 2007 (O’Hara 2009, 14).

Many of the mortgages underlying mortgage-backed securities are now in foreclosure or are headed there. In 2008, 2.3 million U.S. homes went into foreclosure, up 81 percent from 2007 and 225 percent from 2006 (RealtyTrac 2009a). There were another 803,489 filings in the first quarter of 2009 (the most recent period for which data are available as this chapter is being written), up 9 percent from the previous quarter (RealtyTrac 2009b).

Mortgage delinquencies are also up sharply. In February 2009, 7 percent of U.S. homeowners with mortgages were at least 30 days late on their loans, an increase of more than

50 percent from a year earlier. Among subprime borrowers, that month's delinquency rate was 39.8 percent (Chernikoff 2009).⁶ (Again, these are the latest available figures.)

There has been much public discussion over the past year or so in the United States about reckless homebuyers, but mortgage seekers alone could not and did not bring the economy to its knees on their own. Exotic home loans and mortgage securitization are products of money-manager capitalism. As Minsky stressed at a pair of professional conferences in the late 1980s and early 1990s, there is a symbiotic relationship 'between the growth of securitization and managed money.' Fund managers, he argued, 'have outgrown the orthodox high quality stock and bond portfolios of fiduciaries' (Minsky 1990a, 71; 1992c, 32).

From a Minsky perspective, the economic participants most responsible for bringing down the economy are hedge funds and other investment funds, investment banks, and other financial institutions. Looking at hedge funds offers a glimpse at what happened. Although the following discussion focuses on hedge funds because they are a relative newcomer to the scene and have become infamous for operating beyond the reach of much government regulation, the investment banks and other institutions played a similar role (and since 1999, U.S. banking has operated without the Glass-Steagall firewall that separated commercial and investment banking for over a half century).

Some of the biggest purchasers of securitized mortgages have been hedge funds. The earliest of these funds were established in the first few decades after World War II for the purpose of seeking absolute returns (rather than beating a benchmark stock-market index). They were indeed 'hedged' funds, which sought to protect principal from financial loss by hedging investments through short selling or other means. The number of hedge funds and the assets under their management expanded in the 1990s and grew even more rapidly in the 2000s. At the

same time, these assets became increasingly concentrated at the top 10 firms and funds became more diverse in terms of the strategies their managers employed. In mid-2008, the Alternative Investment Management Association estimated that the world's hedge funds (based primarily in the United States) were managing \$2.5 trillion, though it acknowledged that other estimates were as high as \$4 trillion (Ineichen and Silberstein 2008, 16).

The total value of assets under hedge-fund management is uncertain because such funds are typically restricted to wealthy individuals and institutional investors, which exempts them from most financial-sector reporting requirements and regulation. Taking advantage of their largely unregulated status, managers of hedge funds used their mortgage-backed securities as collateral to take out highly leveraged loans. They then purchased an assortment of financial instruments, including still more mortgage bundles. As a result, the world's hedge funds used securitized mortgages to lay an inherently flimsy foundation for a financial 'house of cards' (Freeman 2009; Holt 2009).

The current crisis is unmistakably global. It is having economic and political ramifications on all continents ('Timeline' 2009; Whalen 2009). The trouble is even affecting unexpected places like rural China: factories in cities along that nation's coast are laying-off workers and sending them back to their villages (Lee 2009).

The global nature of the current situation would not have surprised Minsky, who stressed early on that money-manager capitalism 'is international in both the funds and the assets in funds' (Minsky 1990a, 71). Looking ahead to the current crisis, Minsky wrote: 'The problem of finance that will emerge is whether the ... institutions of national governments can contain both the consequences of global financial fragility and an international debt deflation' (Minsky 1995, 93). He worried that the United States would be unable to serve as 'the guardian angel for

stability in the world economy' and stressed the need for 'an international division of responsibility for maintaining global aggregate gross profits' (Minsky 1986b, 15; 1990a, 71).

In short, the global economy is now reeling from the consequences of a classic Minsky crisis. Its origins are in a housing boom fueled by rising expectations, expanding debt, and financial innovation. Then the bubble burst, creating first a credit crunch, then a broader banking and stock-market crisis, and now a recession.

The consequences have been staggering. In the housing sector, an unprecedented one in nine U.S. homes (14 million) sits vacant, while another 9.4 million are for sale (El Nasser 2009). The U.S. stock market lost an unprecedented \$1.2 trillion of value in just a single day in late September 2008 (measured by the Wilshire 5000), and for 2008 overall the Dow Jones industrial average had its worst year since 1931 (Twin 2008; Blaine 2008). Unemployment may soon hit double digits in the United States and has already reached double digits in some parts of Europe (Eurostat 2009).

Since 2007, the global banking industry has seen an unprecedented shakeout ('Timeline' 2009), but there is still uncertainty about how much more difficulty lies ahead. As the Bank for International Settlements indicated in a report released in June 2007:

Assuming that the big banks have managed to distribute more widely the risks inherent in the loans they have made, who now holds these risks, and can they manage them adequately? The honest answer is that we do not know. Much of the risk is embodied in various forms of asset-backed securities of growing complexity and opacity. They have been purchased by a wide range of smaller banks, pension funds, insurance companies, hedge funds, other funds and even individuals, who have been encouraged to invest by the generally high ratings given to these instruments (Bank for International Settlements

2007, 145).

Warren Buffett made the point more vividly: ‘You only learn who has been swimming naked when the tide goes out’ (Buffett 2008, 3). Although the risks are now being laid bare, it will still be some time before the world learns the full extent of the financial exposure.

PUBLIC POLICY

The current global economic situation requires a two-pronged economic-policy strategy: recovery and reform. Beyond stabilizing the troubled financial sector and preventing the current downturn from becoming more severe, the overarching policy objective should be greater macroeconomic stability and broadly shared prosperity in the United States and abroad (Minsky 1986c; Minsky and Whalen 1996-1997). This section highlights some of the most important policy issues by comparing Minsky’s recommendations with recent U.S. government action.⁷

Recovery

A government strategy for recovery must have at least three components: fiscal policy, monetary policy, and financial-market policy. Each is considered in turn.

The foundation of Minsky’s strategy for avoiding another Great Depression is what he calls ‘Big Government’ (Minsky 1986c, 292-308). At the heart of Big Government is a federal budget that tends toward surpluses in inflationary periods and that produces deficits large enough to stabilize aggregate profits in recessionary periods. Minsky stressed that such countercyclical spending should be a ‘built-in’ feature of the budget structure, but he also recognized that discretionary action would be needed on occasion (Minsky 1986c, 132, 292).

Since the mid-1970s, however, policymakers have allowed the automatic stabilizing features of the U.S. federal budget to erode. As a colleague and I demonstrated in late 2002, income taxes, unemployment insurance, welfare expenditures, and the minimum wage have all lost much

of their ability to serve as countercyclical mechanisms. We concluded: ‘It makes sense to shore up the economy’s fiscal stabilizers. Better to fix the roof before the rain begins’ (Whalen and Wenger 2002, 91). By the time the storm finally hit, however, little had changed.

The erosion of automatic stabilizers has forced discretionary measures to do all the heavy lifting. In the current downturn, fiscal policy in the United States has moved in the right direction, but the initiatives have been too timid. The first stimulus attempt, passed in early 2008, included \$100 billion in tax rebates and provided a modest boost to consumer spending (Broda and Parker 2008), but the bill also included tens of billions in less stimulative business tax cuts. More recently, President Barack Obama signed into law a stimulus package totaling \$787 billion over two years. However, Paul Krugman was probably correct when he suggested the package should have been twice as big and even more tilted toward spending (as opposed to tax cuts), especially since recent data revisions show that fourth-quarter U.S. gross domestic product fell by 6.3 percent, not 4.0 percent as reported originally (Earnshaw 2009; Krugman 2009a).⁸

Beyond giving a major role to the fiscal policy of Big Government, Minsky stressed that the central bank must intervene as lender-of-last-resort in response to the threat of a serious credit crisis and economic contraction. ‘Central banks are the institutions responsible for containing and offsetting financial instability,’ he wrote in *Stabilizing an Unstable Economy*, published in 1986 (Minsky 1986c, 322). In that same year, Minsky also contributed an article emphasizing the globalization of finance and the need for international central-bank coordination to prepare for the next big financial crisis (Minsky 1986b).

From a Minsky perspective, monetary policy has largely been on the right track since the credit crunch hit in mid-2007. In an effort to stabilize the financial sector and overall economy, the Federal Reserve has aggressively cut interest rates, allowed banks to borrow from it at

nominal rates, and given banks cash in exchange for risky assets (promising to take on the risk if those assets prove worthless).⁹ The Fed has also engineered bank mergers and worked with other central banks to increase the supply of dollars worldwide. In a very short time, Fed chairman Ben Bernanke has moved a long way from the days when he was known as a proponent of inflation targeting.¹⁰

In contrast, financial-market policy at the U.S. Treasury Department has been woefully inadequate from a Minsky vantage point. The Troubled Asset Relief Program, more commonly known as the \$700 billion Wall St. Bailout, seemed designed to clean up bank balance sheets by purchasing their bad assets. Instead, the Treasury was soon writing banks checks and buying large quantities of bank stocks. The underlying problem of the ‘toxic’ assets remained unresolved, banks remained reluctant to lend, and much of the added liquidity was transformed into bank stock dividends.

The Treasury’s latest plan, a ‘public-private partnership’ that creates a market for troubled assets with government loans and guarantees, is not much better. The plan offers what Joseph E. Stiglitz calls a ‘win-win-lose proposal: the banks win, investors win—and taxpayers lose.’ He argues the plan encourages investors to bid high in that newly created market and socializes the losses that are likely to follow. In attempting to account for this proposal, Stiglitz writes: ‘Perhaps it’s the kind of Rube Goldberg device that Wall Street loves—clever, complex and nontransparent, allowing huge transfers of wealth to the financial markets’ (Stiglitz 2009).

A different approach would likely have been endorsed by Minsky, who admired how the administration of President Franklin D. Roosevelt closed insolvent banks and assisted solvent ones during the Great Depression. Minsky would have almost certainly called for a more hands-on sorting-out of the current financial mess by means of bank restructuring.

Today, Krugman (2009b; 2009c), Dean Baker (2009b), and James K. Galbraith (2009) call for similar action. For example, Galbraith writes: 'If the subprime securities are truly trash, most of the big banks are troubled and some are insolvent. The FDIC should put them through receivership, get clean audits, install new management, and begin the necessary shrinkage of the banking system with the big guys, not the small ones' (Galbraith 2009). The Obama administration recently ordered federal regulators to conduct 'stress tests' to gauge the condition of the nation's banks. As a next step, the receivership approach makes more sense than creation of a government-subsidized market for toxic assets.

Another aspect of financial-market policy that currently needs attention involves home mortgages. Throughout 2008, the United States largely avoided addressing the unaffordable mortgages that are at the heart of the current problem (Marks 2008). The Obama administration has been encouraging the financial industry to voluntarily restructure those loans, but industry pressure has made many in the nation's capital reluctant to require it. For example, federal legislators have so far refused to let bankruptcy judges insist on home loan restructuring, despite the fact that judges can demand a restructuring of all loans except the mortgage on a homeowner's residence (legislation is stalled in the U.S. Senate as of this writing). Although Minsky did not address this problem directly, his interest in social justice and a humane economy suggest he would have insisted that this problem be resolved by mortgage restructuring and would have been incensed that the problem has been unresolved for so long (Minsky 1986c; Minsky 1993b).

Reform

Looking beyond the current downturn, a reform agenda must include stricter regulation and supervision of the financial system, a national commitment to the challenges facing America's

working families, and U.S. participation in efforts that promote international economic stability and job creation.

Minsky believed that those responsible for government regulation and supervision of the financial system were in a ‘never-ending struggle’ with financial markets (Minsky, quoted in Phillips 1997, 512). As he wrote in *Stabilizing an Unstable Economy*, ‘After an initial interval, the basic disequilibrating tendencies of capitalist finance will once again push the financial structure to the brink of fragility.’ Still, he believed it was necessary for the Federal Reserve and regulators to continue the struggle: ‘The evolution of financial practices must be guided to reduce the likelihood that fragile situations conducive to financial instability will develop’ (Minsky 1986c, 322, 333).

Today, those adopting a Minsky perspective would hold the same view. Greater industry transparency, more rigorous bank examinations, and broader regulatory oversight would be a good place to start. If policymakers had better information about the extent to which financial institutions were making use of option ARMs and other exotic instruments, perhaps at least a few would have more aggressively sought to address the mounting problem. It also seems appropriate to revive Minsky’s notion of a cash-flow approach to bank examinations, which ‘would use the examination process to generate information on not only the liquidity and solvency of particular institutions, but also on threats, if any, to the stability of financial markets’ (Minsky, quoted in Phillips 1997, 513). Similarly, mortgage brokers, hedge funds, and other institutions that have gained increasing importance in the past decade deserve greater scrutiny from financial-system regulators.¹¹ In light of the current economic crisis, stricter oversight of securitization and other recent financial innovations are clearly overdue, but the additional need is for regulators to be on the lookout for future innovations in an effort to head-off potential crises before they occur.

At the very least, the U.S. government should not block state efforts designed to protect their citizens from gaps in federal law. Today, most Americans know about the 2008 Valentine's Day in Washington that cost former New York Governor Eliot Spitzer his job, but of greater national importance was his guest column that appeared in *The Washington Post* that day. It described how the federal government stopped states from cracking down on predatory lending practices. As Spitzer's essay documents, 'Not only did the Bush administration do nothing to protect consumers, it embarked on an aggressive and unprecedented campaign to prevent states from protecting their residents from the very problems to which the federal government was turning a blind eye. ...The tale is still unfolding, but when the dust settles, [the Bush administration] will be judged as a willing accomplice to the lenders who went to any lengths in their quest for profits' (Spitzer 2008).

In the age of managerial capitalism (approximately 1935-1982), it may have been sufficient to focus on full employment, low inflation and steady economic growth. In the age of money-manager capitalism (since 1982), these goals are still important, but the challenges facing America's working families require more direct attention as well. Americans, like citizens elsewhere around the world, want the opportunity to develop and utilize their talents and to increase their standard of living in the process. They also want the prospect of an even better life for their children.

Unfortunately, rising worker insecurity is the flipside of money-manager capitalism. Under pressure from money managers, corporate executives have largely put aside the employer-employee social contract of the New Deal and the early decades following World War II. Employers have moved increasingly toward treating labor as just another 'spot market'

commodity (Minsky 1996; Minsky and Whalen 1996-1997; Whalen 1997; Whalen 2008b Zalewski 2002).

Thus, the economic challenges facing the United States extend far beyond stabilizing the financial system and preventing a long and deep recession, as Minsky and I discussed in an article written shortly before his death (Minsky and Whalen 1996-1997). The nation needs to spur the growth of domestic jobs that pay family-supporting wages and to ensure that Americans have access to the education and training such jobs require (Marshall 2010; Glover and King 2010). It needs to find a way to promote partnerships between workers and managers, so companies can compete on the basis of innovation, quality, and customer service, rather than by outsourcing jobs or slashing wages and benefits. It needs to provide adjustment assistance to workers displaced by international trade (including service workers excluded from some existing benefits programs) and public-service employment to those unable to find private-sector work. And it needs health-care reform, retirement-system reform, and labor-law reform to address medical insecurity, retirement insecurity, and the insecurity of workers who seek to exercise their legal right to engage in union organizing and collective bargaining (Whalen 2008b; 2008c).

To address the challenges facing America's working families, the Obama administration has created a Middle Class Task Force, headed by Vice President Joe Biden. Its goals suggest an awareness of the issues just mentioned ('About the Task Force' 2009). Yet only time will tell whether the administration devotes much attention and resources to these issues.

Finally, pursuit of greater economic stability and broadly shared prosperity cannot end at the borders of the United States. Indeed, as suggested above, Minsky recognized that money-manager capitalism is worldwide in scope and that stabilization and development challenges must be addressed at a global level. From a Minsky perspective, Americans must help fashion

international institutions that not only contain global financial instability, but also enhance labor rights and promote job growth (Minsky 1995; 1993a; 1990b; 1986b; Palley 1999, 55).

The world's key policymakers, however, have been reluctant to move in this direction.¹² Indeed, international economic policy has been dominated by a different outlook, as Stiglitz indicated after serving at the World Bank:

During my three years as chief economist of the World Bank, labor market issues were looked at through the lens of neoclassical economics. 'Wage rigidities'—often the fruits of hard-fought bargaining—were thought part of the problem facing many countries. A standard message was to increase labor market flexibility. The not-so-subtle subtext was to lower wages and lay off unneeded workers (Stiglitz, quoted in Komisar 2000).

Stiglitz concluded, 'They had a strategy for job destruction. They had no strategy for job creation' (Stiglitz, quoted in Komisar 2000). Economists who see the world from a Minsky perspective need to collaborate to develop that missing strategy.

CONCLUSION: STANDING ON THE SHOULDERS OF MINSKY

Minsky used to say we should stand on the shoulders of giants to better understand the economy. Just as he stood on the shoulders of Keynes and Schumpeter, we can now stand on his shoulders to understand and address the current global recession. From a Minsky perspective, an explanation of this recession must include cyclical and structural dimensions, while a policy strategy requires attention to both recovery and reform.

The recent attention to Minsky's ideas, both outside and within the academy, is encouraging. Yet we do ourselves and his memory a disservice when Minsky's insights are reduced to an analysis of a single event or even of financial instability. Standing squarely on the shoulders of Minsky means understanding the latest business cycle within the context of money-manager

capitalism, and it means seeking to guide the further development of the system in a more humane direction.

NOTES

1. Homeowners were also able to fuel a consumption boom by taking on even more debt. That is because rising home prices encouraged banks to increase customers' credit-card limits and to heavily promote home-equity loans (Chu and Acohidio 2008; Story 2008).

2. Dymski and Pollin add: 'When boom conditions do end, aggressive managers will already have been promoted, while cautious managers will have been demoted, if not dismissed. Moreover, during the slump, all aggressive managers will fail together, so no single individual will be singled out for blame. This is in contrast to the boom, where the miscalculating cautious will have been isolated' (Dymski and Pollin 1992, 45).

3. Of course, Bear Stearns itself was to be a casualty of the crisis in early 2008.

4. Here are some figures that indicate the magnitude of U.S. mortgage securitization: in early 2007, about 65 percent of mortgages were being turned into bonds via securitization, up from 40 percent in 1990; and, in the years 2004-2006, nearly \$100 billion per year in option ARMs were sold to investors (Pittman 2007; Der Hovanesian 2006).

5. Mortgage brokers, who operate without much government regulation, accounted for 80 percent of all U.S. mortgage originations in 2006, double their share a decade earlier (Der Hovanesian 2006).

6. According to the Federal Housing Finance Agency, mortgage delinquencies among the most creditworthy homeowners (prime borrowers) holding loans owned or guaranteed by Fannie Mae and Freddie Mac rose 50 percent from December 2008 to January 2009 (from 497,131 to

743,686) “as borrowers said drops in income or too much debt caused them to fall behind” (Kopecki 2009).

7. The primary focus of this discussion is on the United States, not merely because this is where most of the recent economic trouble originated, but also because it is the main focus of Minsky’s analyses.

8. Another reason for suggesting the 2009 stimulus was too timid is that the first-year tax-cut multipliers estimated by Christine Romer and Jared Bernstein were considerably below 1.0 (Romer and Bernstein 2009, 12). Thus, modifying the package in the direction of tax cuts (to ensure passage) seemed ill advised from a macroeconomic perspective.

9. It is interesting to observe the Federal Reserve’s use of the discount window as a means of influencing the banking system during the current crisis. Minsky recommended that the Fed increase reliance on this mechanism throughout the business cycle, but he thought it was especially important to use this channel in a fragile financial environment (Minsky 1986c, 322-328).

10. For an unconventional look at Bernanke, including the suggestion of a surprising link between Minsky and Princeton University financial-market research convened by Bernanke, see Lahart (2008).

11. The use of leverage by hedge funds and the writing of no documentation home loans are among the practices in greatest need of regulatory attention.

12. The reluctance of global leaders to cooperate for the purpose of establishing a foundation for greater stability and more widespread global economic wellbeing can be seen even the current economic climate; see Zalewski and Whalen (2009, 17-18).

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