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### **Minsky Crisis**

by

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## **ABSTRACT**

*Stability is destabilizing.* These three words concisely capture the insight that underlies Hyman Minsky's analysis of the economy's transformation over the entire postwar period. The basic thesis is that the dynamic forces of a capitalist economy are explosive and must be contained by institutional ceilings and floors. However, to the extent that these constraints achieve some semblance of stability, they will change behavior in such a way that the ceiling will be breached in an unsustainable speculative boom. If the inevitable crash is "cushioned" by the institutional floors, the risky behavior that caused the boom will be rewarded. Another boom will build, and the crash that follows will again test the safety net. Over time, the crises become increasingly frequent and severe, until finally "it" (a great depression with a debt deflation) becomes possible.

Policy must adapt as the economy is transformed. The problem with the stabilizing institutions that were put in place in the early postwar period is that they no longer served the economy well by the 1980s. Further, they had been purposely degraded and even in some cases dismantled, often in the erroneous belief that "free" markets are self-regulating. Hence, the economy evolved over the postwar period in a manner that made it much more fragile. Minsky continually formulated and advocated policy to deal with these new developments. Unfortunately, his warnings were largely ignored by the profession and by policymakers—until it was too late.

**Keywords:** Stability Is Destabilizing; Hyman Minsky; Money Manager Capitalism; Financial Instability Hypothesis; Global Financial Crisis; Self-Regulating Markets

**JEL Classifications:** B22, B25, B26, B52, E02, E11, E12, E44, G01, O11

## INTRODUCTION

Stability is destabilizing. Those three words capture in a concise manner the insight that underlies Minsky's analysis of the transformation of the economy over the entire postwar period. The basic thesis is that the dynamic forces of the capitalist economy are explosive so that they must be contained by institutional ceilings and floors. However, to the extent that the constraints successfully achieve some semblance of stability, that will change behavior in such a manner that the ceiling will be breached in an unsustainable speculative euphoria. If the inevitable crash is cushioned by the institutional floors, the risky behavior that caused the boom will be rewarded. Another boom will build, and its crash will again test the safety net. Over time, the crises become increasingly frequent and severe until finally "it" (a great depression with a debt deflation) becomes possible.

While Minsky's "financial instability hypothesis" is fundamentally pessimistic, it is not meant to be fatalistic (see Minsky 1975, 1982, 1986). Policy must adapt as the economy is transformed. The problem with the stabilizing institutions that had been put in place in the early postwar period is that they no longer served the economy well by the 1980s. Further, they had been purposely degraded and even in some cases dismantled, often on the erroneous belief that "free" markets are self-regulating. Indeed, that became the clarion call of most of the economics profession after the early 1970s, based on the rise of "new" classical economics with its rational agents and instantaneously clearing markets and the "efficient markets hypothesis" that proclaimed prices fully reflect all information about "fundamentals." Hence, not only had firms learned how to circumvent regulations and other constraints, but policymakers had removed regulations and substituted "self-regulation" in place of government oversight.

From his earliest writings in the late 1950s to his final papers written before his death in 1996, Minsky always analyzed the financial innovations of profit-seeking firms that were designed to subvert New Deal constraints. For example, he was one of the first economists to recognize how the development of the fed funds market had already reduced the Fed's ability to use reserves to constrain bank lending, while at the same time "stretching" liquidity because banks would have fewer safe and liquid assets should they need to unwind balance sheets (Minsky 1975). And much later, in a remarkably prescient

piece in 1987, Minsky had foreseen the development of securitization (to move interest rate risk off bank balance sheets while reducing capital requirements) that would later be behind the global financial crash of 2007 (Minsky 2008). At the same time, Minsky continually formulated and advocated policy to deal with these new developments. Unfortunately, his warnings were largely ignored by the profession and by policymakers—until it was too late.

## **MINSKY’S THEORY OF THE BUSINESS CYCLE**

In the introduction I focused on long-term transformations because too often Minsky’s analysis is interpreted as a theory of the business cycle. There have even been some analyses that attempted to “prove” Minsky wrong by applying his theory to data from one business cycle. Further, the global crisis that began in 2007 has been called the “Minsky moment” or a “Minsky crisis.” As I will discuss, I agree that this crisis does fit with Minsky’s theory, but I object to analyses that begin with, say, 2004—attributing the causes of the crisis to changes that occurred over a handful of years that preceded the collapse. Rather, I argue that we should find the causes of the crisis in the transformation that began in 1951. We will not understand the crisis if we begin with a US real estate boom fueled by lending to subprime borrowers. That will be the topic of the next section.

Now, Minsky *did* have a theory of the business cycle.<sup>1</sup> He called it “an investment theory of the cycle and a financial theory of investment.” He borrowed the first part of that from Keynes: investment is unstable and tends to be the driver of the cycle (through its multiplier impact). Minsky’s contribution was the financial theory of investment, with his *John Maynard Keynes* (1975) providing the detailed exposition. In brief, investment is financed with a combination of internal and external (borrowed) funds. Over an expansion, success generates a greater willingness to borrow, which commits a rising portion of expected gross profits (Minsky called it gross capital income) to servicing debt. This exposes the firm to greater risk because if income flows turn out to be less than expected, or if finance costs rise, firms might not be able to meet those debt payment commitments. There is nothing inevitable about that, however, because Minsky

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<sup>1</sup> See Papadimitriou and Wray (1998) for a summary of Minsky’s approach.

incorporated the profits equation of Michal Kalecki in his analysis: at the aggregate level total profits equal investment plus the government's deficit plus net exports plus consumption out of profits and less saving out of wages (Minsky 1986). The important point is that all else equal, higher investment generates higher profits at the aggregate level. This can actually make the system even more unstable because if profits continually exceed expectations, making it easy to service debt, then firms will borrow even more.

This then leads to Minsky's famous categorization of financial positions: a **hedge** unit can meet payment commitments out of income flow; a **speculative** unit can only pay interest but must roll-over principal; and a **Ponzi** unit cannot even make the interest payments so must "capitalize" them (borrowing to pay interest). (Minsky borrowed the name of a famous fraudster, Charles Ponzi, who ran a "pyramid" scheme—in more recent times, Bernie Madoff ran another pyramid that failed spectacularly.) Over a "run of good times," firms (and households) are encouraged to move from hedge to speculative finance, and the economy as a whole transitions from one in which hedge finance dominates to one with a greater weight of speculative finance. Eventually some important units find they cannot pay interest, driving them to Ponzi finance. Honest bankers do not like to lend to Ponzi units because their outstanding debt grows continually unless income flows eventually rise. When the bank stops lending, the Ponzi unit collapses. Following Irving Fisher, Minsky then described a "debt deflation" process: collapse by one borrower can bring down his creditors, who default on their own debts and generating a snowball of defaults. Uncertainty and pessimism rise, investment collapses, and, through the multiplier, income and consumption also fall, and we are on our way to a recession.

But Minsky did not mean to imply that all financial crises lead to recessions nor that all recessions result from the transition to speculative and Ponzi finance. The Federal government in the postwar period was big—20% to 25% of the economy versus only 3% on the verge of the Great Depression. This meant that government itself could be both stabilizing and destabilizing. Countercyclical movement of its budget from surplus in a boom to deficit in a slump would stabilize income and profits (recall from above that deficits add to profits). A rising deficit could potentially offset the effects of falling

investment, and, indeed, over the postwar period that helped to cushion every recession. However, it is also possible for the government to cause a downturn—as it did in the demobilization from WWII. And if the budget is excessively biased toward surplus when the economy grows, it will generate “fiscal drag”—that removes household income and profits of firms—causing a recession. For that reason, a recession could occur well before the private sector is dominated by speculative and Ponzi positions. (Note that an economy that moves toward current account deficits when it grows robustly—such as the United States—will suffer an additional “headwind” that sucks income and profits from domestic households and firms.)

In addition to the “big government,” the postwar period also had what Minsky called the “big bank”—the Fed. The Fed plays a number of roles: it sets interest rates, it regulates and supervises banks, and it acts as lender of last resort. Generally, it moves interest rates in a procyclical manner (raising them in expansion and lowering them in recession), which is believed to be stabilizing. For Minsky, interest rate policy would not be a strong stabilizing force: raising rates in a boom would increase finance costs and hasten the transition to speculative and Ponzi financial positions; lowering rates in a collapse would do little to encourage borrowing and spending if expectations were devastated. And, unfortunately, most Fed policy over the postwar period involved reducing regulation and supervision, promoting the natural transition to financial fragility. But lender of last resort policy was viewed by Minsky as essential—it would stop a bank run and would help to put a floor to asset prices, attenuating the debt deflation process discussed above. If the Fed lends to a troubled financial institution, it does not have to sell assets to try to cover demands by creditors for redemption. For example, if depositors are demanding cash withdrawal, in the absence of a lender of last resort the bank would have to sell assets to raise the cash required; this is normally difficult for assets such as loans, and nearly impossible to do in a crisis. So the Fed lends the reserves to cover withdrawals.

In sum, the combination of the big bank and the big government helps to prevent a financial crisis from turning into a deep downturn. The big government’s deficit puts a floor to falling income and profits, and the big bank’s lending relieves pressure in financial markets (Minsky 1986). A financial crisis can even occur without setting off a

recession—a good example was the 1987 stock market crash, in which the Fed quickly intervened with the promise that it would lend reserves to market participants to stop necessitous selling of stocks to cover positions. No recession followed the crash—unlike the October 1929 crash, in which margin calls forced sales of stocks. And the big government deficits kept profits flowing in 1987, again unlike 1929 when the government’s budget was far too small to make up for collapsing investment.

## **MONEY MANAGER CAPITALISM AND THE CRISIS**

Beginning in 2007, the world faced the worst economic crisis since the 1930s. References to Keynesian theory and policy became commonplace, with only truly committed free marketeers arguing against massive government spending to cushion the collapse and re-regulation to prevent future crises. All sorts of explanations were 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 fully recognize the systemic nature of the global crisis.

Minsky’s work also enjoyed unprecedented interest, with many calling this the “Minsky Moment” or “Minsky Crisis” (Cassidy 2008; Chancellor 2007; McCulley 2007; Whalen 2007). I argued above that we should not view this as a “moment” that can be traced to recent developments. Rather, as Minsky had been arguing for nearly fifty years, what we have seen is a slow transformation of the global financial system toward what Minsky called “money manager capitalism” that finally collapsed in 2007. Hence, I call it the “Minsky half-century” (Wray 2009).

It is essential to recognize that we have had a long series of crises, and the trend has been toward more severe and more frequent crises: muni bonds in the mid-1960s; 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 early 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 to maintain imports that helped to generate rest of world growth).

The problem is money manager capitalism—the economic system characterized by highly leveraged funds seeking maximum returns in an environment that systematically underprices risk (Wray 2009). With little regulation or supervision of financial institutions, money managers concocted increasingly esoteric and opaque financial instruments that quickly spread around the world. Contrary to economic theory, markets generate perverse incentives for excess risk, punishing the timid with low returns. 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.

Many have accurately described the phenomenon as “financialization”—growing debt that leverages income flows and wealth. At the 2007 peak, total debt in the United States reached a record five times GDP (versus three times GDP in 1929), with most of that private debt of households and firms. From 1996 until 2007 the US private sector spent more than its income (running deficits that increased debt) every year except during the recession that followed the dot-com bust in 2000. Financial institution debt also grew spectacularly over the past two decades, totaling more than GDP. Exotic financial instruments like credit default swaps (bets on failure of assets, firms, and even governments) exploded—total financial derivatives (including credit default swaps, interest rate swaps, and exchange rate swaps) reached perhaps \$600 *trillion*—many times world GDP.

Many accounts blame subprime mortgages (home loans made to riskier borrowers, typically low-income households) for the global financial collapse—but that is obviously much too simple. The total value of riskier mortgage loans made in the United States during the real estate boom could not have totaled more than a trillion or



two dollars (big numbers, but exceedingly small relative to the hundreds of trillions of dollars of financial instruments). The United States was not the only country that experienced a speculative boom in real estate—Ireland, Spain, and some countries in eastern Europe also had them. Then there was also speculation in commodities markets—that led to the biggest boom in history, followed by the inevitable crash—that involved about a half trillion dollars of managed money (mostly US pension funds) placing bets in commodities futures markets (Wray 2008). Global stock markets also enjoyed a renewed speculative hysteria. Big banks like Goldman Sachs speculated against US state governments as well as countries like Greece. And on top of all this speculative fervor there was also fraud—which appears to have become normal business practice in all of the big financial institutions. It will be years, perhaps decades, before we will unravel all of the contributing factors, including the financial instruments and practices as well as the criminal activities by market players and government officials, that led to the collapse.

This much we do know: the entire financial system had evolved in a manner that made “it”—an economic collapse and debt deflation—possible. Riskier practices had been permitted by regulators, and encouraged by rewards and incentives. Lack of oversight and prosecution let fraud take over most big institutions. The combination of big government and big bank interventions plus bail-outs of “too big to fail” institutions let risk grow on trend. The absence of depressions allowed financial wealth to grow over the entire postwar period—including personal savings and pension funds. All of these funds needed to earn returns. As a result, the financial sector grew relative to GDP—as a percent of value-added, it grew from 10% to 20%, and its share of corporate profits quadrupled from about 10% to 40% from 1960 to 2007 (Nersisyan and Wray 2010). It simply became too large relative to the size of the economy’s production and income. The crash was the market’s attempt to downsize finance—just as the crash in 1929 permanently reduced the role played by finance, and allowed for the robust growth of the postwar period.

It is important to include as contributing factors the destruction of New Deal institutions that had enhanced economic stability, including most importantly the creation of a high-consumption, high-employment, and high-wage society. As Minsky (1986, 1996) argued, we emerged from WWII with powerful labor unions that were able to

obtain good and growing wages, which fueled growth of domestic consumption out of income. Debt loads were extremely low in the private sector—with debts having been wiped out in the Great Depression—and with lots of safe government bonds held as assets. In combination with a strengthened government safety net (Social Security for the aged, welfare and unemployment compensation for those without jobs, the GI bill for soldiers returning home, low interest rate loans for students) this meant that consumption comprised a large part of GDP. For Minsky, consumption out of income is a very stable component—unlike investment that is unstable. Minsky argued that investment-led growth is more unstable than growth led by a combination of consumption out of income plus government spending because the second model does not lead to worsening private sector balance sheets.

However, over the course of the past four decades, union power declined; Minsky frequently claimed that the most significant action taken during the Reagan administration was the busting of the air traffic controller’s union (which sent a message to all of labor), median real wages stopped growing, consumer debt grew on trend (and then exploded after 1995), and the generosity of the safety net was reduced. Further, over the whole period, policy consistently favored investment and saving over consumption—with favorable tax treatment of savings and investment, and with public subsidies of business investment. Federal government also stopped growing (relative to the size of the economy) and its spending shifted away from public infrastructure investment. Inequality grew on trend, so that it actually surpassed the 1929 record inequality. President Bush even celebrated the creation of the “ownership society”—ironically, with concentration of ownership of financial assets at the very top (Wray 2005). The only asset that was widely owned was the home, which then became the basis for a speculative bubble that would generate widespread foreclosures—with families kicked out of their homes, owing lots of debt, and with real estate prices collapsing so that vulture hedge funds could buy up blocks of houses at pennies on the dollar. Effectively, that is the culmination of the ownership society.

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 the managed money was wiped out so that

a new boom inevitably rose from the ashes. However, this current crisis is probably so severe that it will not only destroy a considerable part of the managed money, but it has already thoroughly discredited the money managers. And, in spite of the unprecedented efforts of Fed Chairman Bernanke and Treasury Secretary Geithner to save the money managers, I believe they ultimately will fail to restore “business as usual.”

Perhaps this will prove to be the end of this stage of capitalism—the money manager phase. Of course, it is too early to even speculate on the form capitalism will take in the future. In the final section I will look at the policy response that will help to reformulate global capitalism along Minskyan lines.

### **MINSKYAN POLICY IN THE AFTERMATH OF THE COLLAPSE OF MONEY MANAGER CAPITALISM**

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 highly successful 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. It 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. Even before the crisis, the United States faced record inequality and destruction of the middle class, a healthcare crisis, an incarceration disaster, and other problems beyond the scope of this article (see Wray 2000, 2005).

We must return to a more sensible model, with enhanced oversight of financial institutions and with a financial structure that promotes stability rather than speculation. We need policy that promotes rising wages for the bottom half so that borrowing is less necessary to achieve middle-class living standards. We need policy that promotes employment, rather than transfer payments—or worse, incarceration—for those left

behind. Monetary policy must be turned away from using rate hikes to preempt inflation and toward a proper role: stabilizing interest rates, direct credit controls to prevent runaway speculation, and supervision.

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). It is time to take finance back from the clutches of Wall Street’s casino.

Minsky had long called for an “employer of last resort” program to provide jobs to those unable to find them in the private sector. In a sense this would be a counterpart to the central bank’s “lender of last resort” program. In the jobs program, government would offer a perfectly elastic supply of jobs at a basic program wage. Anyone willing to work at that wage would be guaranteed a job. Workers would be “taken as they are”—whatever their level of education or training—and jobs would be designed for their skill level. Training would be a part of every job—to improve skills and to make workers more employable outside the program. The work would provide useful services and public infrastructure, improving living standards. While Minsky is best known for his work on financial instability, his proposal for the employer of last resort program received almost as much of his attention, especially in the 1960s and 1970s. Interested readers are referred to the growing body of work on use of job guarantee programs as part of long-term development strategy (Bhaduri 2005; Felipe, Mitchell, and Wray 2009; Hirway 2006; Minsky 1965; Mitchell and Wray 2005; Tcherneva and Wray 2007; Wray 2007). Note that this would help to achieve Minsky’s goal of a high-employment economy with decent wages to finance consumption. Minsky always saw the job guarantee as a stabilizing force—and not something that is desirable for purely humanitarian reasons.

The global crisis offers both grave risks as well as opportunities. Global employment and output collapsed 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 (Nazi Germany), 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, much as we did in the aftermath of the Great Depression. 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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