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THE U.S. CREDIT CRUNCH OF 2007

A Minsky Moment

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Introduction

On September 7, 2007, the monthly jobs report released by the U.S. Department of Labor showed no job growth for the first time in four years. Before the report became available, the widespread view among economic forecasters was that it would show the U.S. economy gained about 100,000 jobs in August. Instead, there was a net *loss* of 4,000 jobs (U.S. Department of Labor 2007). Investor panic over the employment report caused the stock market, which had been volatile during most of the summer, to quickly lose about 2 percent on all major indices. The Federal Reserve (Fed) did eventually cut interest rates as expected, but it took a number of reassuring comments by U.S. central bank governors on September 10 to calm Wall Street's fears.

What is now clear is that most economists underestimated the widening economic impact of the credit crunch that has shaken U.S. financial markets since at least mid-July. A credit crunch is an economic condition in which loans and investment capital are difficult to obtain. In such a period, banks and other lenders become wary of issuing loans, so the price of borrowing rises, often to the point where deals simply do not get done.

Financial economist Hyman P. Minsky (1919–1996) was the foremost expert on such crunches, and his ideas remain relevant to understanding the current situation. This brief demonstrates that the U.S. credit crunch of 2007 can aptly be described as a “Minsky moment,”¹ and identifies some of the key elements relevant to fleshing out a Minsky-oriented account of that event.²

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The Credit Crunch of 2007

As early as March 2007, a smattering of analysts and journalists were warning that financial markets in the United States were on the verge of a credit crunch. By July, the market for new and existing (corporate) buyout loans had shrunk rapidly. According to the September 3 issue of *BusinessWeek*, “Banks now have a \$300 billion backlog of deals,” and the \$1.2 trillion asset-backed commercial paper market, which often uses mortgages as collateral, was “freezing up” (Goldstein 2007, p. 34). By late summer, households were feeling the crunch too: a third of home loans originated by mortgage brokers failed to close in August because brokers could not find investors to buy the loans (Zibel 2007).

Yet another dimension to the crunch involves the role of hedge funds. When it became increasingly clear that large numbers of homeowners could not repay their mortgage obligations, the cash flowing to hedge funds dried up, and fund managers who invested heavily in mortgage securities found themselves sitting on enormous losses. In June 2007, for example, two hedge funds run by Bear Stearns were wiped out, for a total loss of \$20 billion (Foley 2007).³

The Economics of Minsky

Paul McCulley, a bond fund director at Pacific Investment Management Company, coined the term “a Minsky moment” during the 1998 Russian debt crisis (Lahart 2007). George Magnus, senior economic advisor at financial services giant UBS, offers perhaps the most succinct explanation of the term. The stage is first set by “a prolonged period of rapid acceleration of debt” in which more traditional and benign borrowing is steadily replaced by borrowing that depends on new debt to repay existing loans. Then the “moment” occurs, “when lenders become increasingly cautious or restrictive, and when it isn’t only over-leveraged structures that encounter financing difficulties. At this juncture, the risks of systemic economic contraction and asset depreciation become all too vivid” (Magnus 2007, p. 7). If left unchecked, the Minsky moment can become a “Minsky meltdown,” a spreading decline in asset values capable of producing a recession (McCulley, quoted in Lahart 2007). The “natural response” of employers is to be more cautious about adding workers when financial conditions tighten (Langfitt 2007).

Who was Hyman P. Minsky, and what did he have to say about market economies and financial instability? Minsky was born in Chicago in 1919 and studied at the University of Chicago and Harvard University. He earned tenure as an economics professor at the University of California, Berkeley, but later moved to Washington University in St. Louis. From 1991 until his death in 1996, he worked as a senior scholar at The Levy Economics Institute of Bard College.

Minsky considered himself a Keynesian. He served as a teaching assistant to Harvard’s Alvin Hansen, who was sometimes called the leading disciple of Keynes in America. However, Minsky was not comfortable with the way Hansen and most in the economics profession interpreted Keynes. He believed that Adam Smith and Keynes had two fundamentally distinct views of the workings of a market economy. In the “Smithian” view, the internal and inherent (endogenous) processes of markets generate an economic equilibrium, business cycles are the product of exogenous shocks (e.g., unanticipated public policy interventions), and an economy is believed to be at full employment during all cycle stages. In the Keynesian view, however, Minsky maintained that endogenous economic forces breed financial and economic instability (Minsky 1992a, 1992b; Ferri and Minsky 1992), booms and busts are considered an inherent part of the system, and cyclical downturns are associated with an increase in *involuntary* unemployment.⁴

Minsky outlined his alternative interpretation in his 1975 book *John Maynard Keynes* (Minsky 1975). The book is a major American contribution to post-Keynesian economics. Minsky’s reading of Keynes rests on the latter’s appreciation of the distinction between risk and uncertainty. A situation involving *risk* is one where probabilities can be assigned with confidence. A situation involving *uncertainty* is different—there are no precise probabilities to rely on. According to Keynes, in a situation characterized by uncertainty, our knowledge is based on a “flimsy foundation” and is “subject to sudden and violent changes” (Keynes 1937, pp. 214–15).

In Minsky’s book on Keynes, the stress is on the central role that uncertainty plays in economic life. This is especially true in the accumulation of wealth, which is the aim of all capitalist investment activity. Minsky’s emphasis is consistent with an article Keynes wrote summarizing his *General Theory of Employment, Interest, and Money* (1936), in which he states: “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” (Keynes 1937, p. 213). In other words, investment depends heavily on conventional judgments and the existing state of opinion, but ultimately, investment sits on an insecure foundation. Another fundamental element in Minsky’s book is that *investment* is given a central role in understanding a nation’s aggregate output and employment. This emphasis is also rooted in Keynes’s summary of his *General Theory* (ibid., p. 221).

Financial Instability versus Market Efficiency

A core concept of conventional finance is the “efficient market hypothesis.” According to that hypothesis, even if individual decision makers get asset prices or portfolio values wrong, the market as a whole gets them right—that is, as a group, investors, lenders, and other practitioners are not predisposed to overconfidence and other biases. Minsky believed otherwise. He developed what he dubbed the *financial instability hypothesis* (FIH), which argues that the financial structure of a capitalist economy becomes more and more fragile over a period of prosperity. During an expansion, the economy (or a sector of the economy) evolves from what he called “hedge” finance to “speculative” finance, and then in the direction of “Ponzi” finance. In the so-called *hedge* case (which has nothing to do with hedge funds), borrowers are able to pay back interest and principal when a loan comes due; in the *speculative* case, they can pay back only the interest, and therefore must roll over the financing; and in the case of *Ponzi* finance, companies must borrow even more to make interest payments on their existing liabilities (Minsky 1982, pp. 22–23, 66–67, 105–06; Minsky 1986, pp. 206–13).

The FIH stresses that lending as an innovative, profit-driven business (Minsky 1992b, p. 6). Both the evolutionary tendency toward Ponzi finance and the financial sector’s drive to innovate are easily connected to the recent situation in the U.S. home loan industry, which has seen a rash of mortgage innovations and a thrust toward more fragile financing by households, lending institutions, and purchasers of mortgage-backed securities.

The expansionary phase of the FIH leads, eventually, to the Minsky moment. Without intervention in the form of col-

lective action, usually by the central bank, the Minsky moment can engender a meltdown, involving asset values that plummet from forced selling and credit that dries up to the point where investment and output fall and unemployment rises sharply. This is why Minsky called his FIH “a theory of the impact of debt on [economic] system behavior” and “a model of a capitalist economy that does not rely upon exogenous shocks to generate business cycles” (Minsky 1992b, pp. 6, 8).

Understanding the Crunch from Minsky’s Perspective

It is possible to identify some of the key elements that must play a role in a Minsky-oriented account of the 2007 credit crunch. Start with the housing boom, which began around the year 2000. After the “dot-com” bubble burst at the dawn of the new millennium, real estate seemed the only safe bet to many Americans, especially since interest rates were unusually low. At the same time, lenders became more creative, enticing new and increasingly less creditworthy home buyers into the market with exotic mortgages—for example, “interest-only” loans and “option adjustable rate” mortgages, or option ARMs. New players such as unregulated mortgage brokers promoted option ARMS because they were highly profitable for banks, which in turn offered the brokers high commissions. Securitization of mortgages meant that bankers bundled dozens of mortgages together and sold the bundles to investment funds such as hedge funds, which in turn used these mortgage bundles as collateral for highly leveraged loans.⁵ However, the mortgage bundles, financial derivatives (e.g., futures and options trading), and other investment tools widely used by the investment funds involved a lot more Keynesian *uncertainty* than probabilistic risk.

This points to yet another element that plays a role in the current crunch: the credit rating agencies, such as Standard & Poor’s. Ratings are supposed to be a guide to the likelihood of default, but the agencies are paid by the issuers of the securities, not by investors, so there is a conflict of interest among the agencies and those they rate. Moreover, the rating agencies do not verify the information provided by mortgage issuers.

When the aforementioned elements (which are not meant to be a comprehensive list of factors contributing to recent financial-market events) are mixed together, there is the observed wave of defaults by homeowners, highly leveraged

mortgage lenders, and holders of mortgage-backed securities. In other words, the eventual destination is the credit crunch or Minsky moment, which hit in midsummer of 2007. At that point, borrowing and lending—and the hiring of additional workers—became more cautious across the board.

This new cautiousness was partly due to panic, but it was also partly due to recognition of the fact that precarious borrowing had woven its way into the entire system—indeed, into the global financial system—and nobody really knew exactly where the greatest dangers were.⁶ Today, the effects are being felt on both Wall Street and Main Street. It has been widely reported that more than two million holders of so-called “sub-prime” mortgages—loans given to people with poor credit—could lose their homes to foreclosure (Pittman 2007). Indeed, U.S. mortgage foreclosure notices hit a record high in the second quarter of 2007—the third, record-setting quarterly high in a row (Associated Press 2007).⁷

Despite the arrival of a Minsky moment, a meltdown is not likely to follow. On both sides of the Atlantic Ocean, central banks have stepped in as “lenders of last resort” to help maintain orderly conditions in financial markets and to prevent credit dislocations from adversely affecting the broader economy. The Fed reduced the discount rate it charges banks, lowered the quality threshold on collateral used by banks to secure overnight borrowing, infused cash into the financial system, and engineered a decline in private sector interest rates by cutting the federal funds rate. Fed Chairman Ben Bernanke has also endorsed proposals for quick and temporary legislative action designed to protect some mortgage holders via government-backed enterprises, such as Fannie Mae and Freddie Mac (Thomson Financial 2007).⁸ All of these responses to the credit crunch are consistent with what Minsky would have advised, though he would also have stressed acting to preempt financial-market excesses by means of more rigorous bank supervision and tighter regulation of financial institutions (Minsky 1986, pp. 313–28).⁹

Nevertheless, the housing difficulties at the root of much of the credit crunch are likely to continue for some time. Since there is already a glut of homes on the market, the construction industry will most likely remain in a severe slump, and home prices can be expected to continue to fall.¹⁰

Conclusion: “I Told You So”

This brief demonstrates that the 2007 credit crunch can be understood as a Minsky moment. It should also be stressed, however, that pulling out Minsky’s ideas only during a crisis, then letting them fall back into obscurity when the crisis fades, does a disservice to his contributions, which continue to speak to us in meaningful ways about the financial system and economic dynamics.

Although Minsky’s career ended in 1996, his ideas are still relevant. His scholarship challenges a belief in the inherent efficiency of markets. As a consequence, it also challenges a laissez-faire stance toward economic policy. His ideas draw attention to the value of evolutionary and institutionally focused thinking about the economy.

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Notes

1. See the *Wall Street Journal* article on this topic by Justin Lahart (2007).
2. This brief presents a way of thinking about the current credit crunch. It is offered as a starting point for detailed analyses, not as a comprehensive dissection of the crunch or as a summary of such a dissection. The brief is motivated by the author’s long familiarity with Minsky’s perspective and a belief that studies of the contemporary financial realm would benefit from building on Minsky’s ideas.
3. Hedge funds are huge players on the contemporary financial scene. In 2000, it is estimated that global hedge fund investments totaled \$324 billion, but the amount exceeded \$1 trillion by early 2005 and was still growing in 2006 (Financial Services Agency 2006).
4. As Anwar Shaikh of The New School recently reminded me, Minsky’s distinction between Smith and Keynes relies on a caricature of the former. Minsky’s view of Smith may conform to the conventional wisdom (a colleague of mine

calls this the “neoclassical interpretation of the Smithian view”), but it is not fully consistent with a close look at Smith’s ideas.

5. 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 2004–06, nearly \$100 billion per year in option ARMs were sold to investors (Pittman 2007; Der Hovanesian 2006).
6. The Bank of England’s need to bail out the British financial institution Northern Rock (which has both depositors and shareholders fleeing at this writing) is an example of the international scope of the U.S. housing-driven financial crunch (see, for example, Larsen and Giles 2007). For a broader discussion of international dimensions of the 2007 crunch, see the article “Crunch Time,” posted August 9, 2007, at *Economist.com* (2007).
7. For an estimate of the long-term economic impact of the decline in the U.S. housing market during the first quarter of 2007—and a brief discussion of the U.S. real estate crisis from a Minskyan perspective—see Papadimitriou, Hannsgen, and Zezza (2007).
8. The proposals Bernanke endorsed would raise the limit (which is currently at \$417,000) on the size of the home loan these government-sponsored enterprises can make. Another proposal would enable the Federal Housing Administration to help subprime borrowers who have fallen behind in their payments to refinance (Thomson Financial 2007). Just a day before Bernanke’s remarks, the Bush administration announced it would let Freddie Mac and Fannie Mae increase their loan limits (which total about \$1.5 trillion) by 2 percent in the fourth quarter of 2007 (Tyson and Shenn 2007).
9. Although Minsky saw instability as inherent in capitalism, he also believed that steps could be taken to achieve greater stability and more consistent economic growth. His reform agenda included: a *monetary policy* component, which stressed the Federal Reserve’s need to serve as lender of last resort to prevent a financial crisis from spreading and becoming an economic (aggregate demand, output, and employment) crisis; a *fiscal policy* component, which emphasized the countercyclical use of federal budget deficits to sustain aggregate demand in the face of faltering private investment; an *employment policy* component, which involved government serving as the “employer of last resort”

(by making public service employment available for the jobless); and a *corporate reform* component, which included greater government supervision and regulation of financial markets and an antitrust policy oriented toward placing size (asset and/or employment) limits on corporations. Minsky saw these elements as an integrated and mutually reinforcing whole. For example, his corporate reforms were designed to reduce the need for lender-of-last-resort interventions and to avoid situations in which specific corporations would be seen as “too big to fail” (Minsky 1986, pp. 48–50, 250–53, 287–333; Minsky 1982, pp. 198–202).

10. Even more than hedge funds, the “poster child” (some would say the “Enron”) of the recent housing-driven credit cycle is the United States’ leading mortgage lender, Countrywide, which was one of the most profitable companies in the financial industry early in 2007, but by late August had burned through its entire credit line and was being kept afloat by a loan from Bank of America (ElBoghdady 2007; Reckard, Douglas, and Petruno 2007).

References

- Associated Press. 2007. “Mortgage Woes Push Foreclosures to Record High.” *MSNBC.com*, September 6.
- Der Hovanesian, M. 2006. “Nightmare Mortgages.” *BusinessWeek*, September 11.
- Economist.com*. 2007. “Crunch Time,” August 9.
- ElBoghdady, D. 2007. “No. 1 Home Lender Taps \$11.5 Billion Line of Credit.” *The Washington Post*, August 17.
- Ferri, P., and H. P. Minsky. 1992. “Market Processes and Thwarting Systems.” *Structural Change and Economic Dynamics* 3:1: 79–91.
- Financial Services Agency. 2006. “Global Market Size for Hedge Funds Exceeds \$1 Trillion.” *FSA Newsletter*, Office of International Affairs, Japan. March.
- Foley, S. 2007. “Anatomy of a Credit Crunch.” *The Independent*, July 27.
- Goldstein, M. 2007. “A Growing Subprime Web.” *BusinessWeek*, September 3.
- Keynes, J. M. 1937. “The General Theory of Employment.” *The Quarterly Journal of Economics* 51:2: 209–23.
- Lahart, J. 2007. “In Time of Tumult, Obscure Economist Gains Currency.” *The Wall Street Journal*, August 18.

- Langfitt, F. 2007. "Job Cuts a Symptom of Struggling Economy." *All Things Considered*, National Public Radio, September 7.
- Larsen, P. T., and C. Giles. 2007. "Bank of England to Bail Out Northern Rock." *Financial Times*, September 14.
- Magnus, G. 2007. "The Credit Cycle and Liquidity: Have We Arrived at a Minsky Moment?" *Economic Insights—By George*, UBS Investment Research, London. March.
- Minsky, H. P. 1975. *John Maynard Keynes*. New York: Columbia University Press.
- _____. 1982. *Can "It" Happen Again? Essays on Instability and Finance*. Armonk, N.Y.: M. E. Sharpe.
- _____. 1986. *Stabilizing an Unstable Economy*. New Haven, Conn.: Yale University Press.
- _____. 1992a. "Reconstituting the United States' Financial Structure: Some Fundamental Issues." Working Paper No. 69. Annandale-on-Hudson, N.Y.: The Levy Economics Institute. January.
- _____. 1992b. "The Financial Instability Hypothesis." Working Paper No. 74. Annandale-on-Hudson, N.Y.: The Levy Economics Institute. May.
- Papadimitriou, D. B., G. Hannsgen, and G. Zezza. 2007. "Cracks in the Foundation of Growth: What Will the Housing Debacle Mean for the U.S. Economy?" Public Policy Brief No. 90. Annandale-on-Hudson, N.Y.: The Levy Economics Institute. July.
- Pittman, M. 2007. "Subprime Bondholders May Lose \$75 Billion from Slump." *Bloomberg.com*, April 24.
- Reckard, E. S., E. Douglas, and T. Petruno. 2007. "BoFA Throws Countrywide \$2-Billion Lifeline." *Los Angeles Times*, August 23.
- Thomson Financial. 2007. "Fed's Bernanke Says Subprime Delinquencies, Foreclosures Will Get Worse." *Forbes.com*, September 20.
- Tyson, J., and J. Shenn. 2007. "Fannie Mae, Freddie Mac Regulator Eases Asset Limits." *Bloomberg.com*, September 19.
- U.S. Department of Labor. 2007. "The Employment Situation: August 2007." Bureau of Labor Statistics, September 7.
- Zibel, A. 2007. "Survey Finds High Level of Loan Failure." Associated Press wire story, September 5.

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Whalen has served as *BusinessWeek's* associate economics editor and as a resident fellow at the Levy Institute, where he worked with Hyman Minsky. He is editor of *Political Economy for the 21st Century: Contemporary Views on the Trend of Economics* (M. E. Sharpe, 1996) and has written extensively for academic and nonacademic audiences on U.S. economic trends, federal budget policy, and workforce insecurity. His publications include "Integrating Schumpeter and Keynes: Hyman Minsky's Theory of Capitalist Development," *Journal of Economic Issues*, December 2001; and "Economic Insecurity and the Institutional Prerequisites for Successful Capitalism" (with H. P. Minsky), *Journal of Post Keynesian Economics*, Winter 1996–97. He holds a Ph.D. in economics from The University of Texas at Austin.

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