

The Levy Economics Institute of Bard College

Policy Note

2008 / 2

SECURITIZATION

HYMAN P. MINSKY

Preface and Afterword by L. Randall Wray

Preface

Over the past year, many analysts have invoked the name of Hyman P. Minsky in attempts to understand the nature of the current financial crisis. Several studies have used Minsky's well-known financial instability hypothesis to explain how a fragile financial structure was created over the course of the U.S. real estate boom, which ultimately led to rising defaults and the collapse of the subprime securities market when Ponzi units could no longer service their mortgages. I have gone further, showing how Minsky's writings can help us to understand the longer-term forces at work that have resulted in a particularly unstable form of capitalism—what Minsky called "money manager capitalism" (Wray 2008). Hence, I believe that Minsky would argue that what we face is a systemic problem that goes far beyond subprimes and real estate, one that will require major institutional reform to re-create a financial system that is conducive, in Minsky's phrase, to "the capital development of the economy."

Minsky died in October 1996, at the beginning of the dot-com boom, which was soon followed by the real estate boom, followed in turn by a commodities boom. All three of these speculative excesses required finance, and each was fueled by innovative instruments and practices. The dot-com boom relied largely on the new-issue market, in which stocks were sold for start-up companies with no history on which to base the values of the firms. Standards were gradually lowered until firms with no prospective revenues but high costs could float equities at astronomical prices. Leveraged buyouts allowed management and the owners of upstarts like AOL to cash out as they

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took over profitable, venerable firms like Time Warner. When that euphoria finally came to an ignoble end, managed money moved into real estate. Here, the preferred financial instrument was the securitized mortgage product, essential for the "originate and distribute" model that could ignore risk while unserviceable debt drove the biggest real estate boom in U.S. history. But securities were not limited to the real estate market—everything from student loans to credit card receivables to auto finance was securitized and bought by highly leveraged pension funds and hedge funds. Even as that began to unwind, managed money moved into commodities, using futures markets to fuel another record run-up of prices—this time, prices of food and energy. Analysts are just now beginning to turn their focus to those excesses.

It was Minsky's belief that managed money capitalism raises important questions about stability, equity, and democracy. He worried that the longer-term transformation of the financial system away from regulated financial institutions (dominated by commercial and investment banks as well as thrifts and credit unions) and toward largely unregulated financial markets would reduce oversight both by the skeptical loan officers at banks and by government supervisors at the Federal Deposit Insurance Corporation, the Federal Reserve, the Office of the Comptroller of the Currency, and state regulatory agencies. Instead, managed money would rely on hired for-profits such as credit-rating agencies and accounting firms to check the natural tendency for declining credit standards in a boom. Clearly, these were not up to the task, since they would share in the euphoric expectations characteristic of expansions; they essentially became cheerleaders for dangerous practices. Further, since depressions and debt deflations have been eliminated by Big Bank (Fed) and Big Government (Treasury) interventions, downside risks would be ignored. Over the past few years, this has been recognized even by mainstream economists and policymakers, who refer to the "Greenspan put" or to "Bernanke's 'great moderation'"—the endemic belief within financial markets that policymakers will never let anything bad happen.

Minsky added that this transformation of the financial structure of the economy also produced growing inequality and rising insecurity for most Americans—conditions antithetical to democracy (Minsky and Whalen 1996). Hence, he advocated a number of policies that would reduce uncertainty while enhancing stability and democracy: support for strong trade unions; tax incentives to lead firms to offer family-friendly benefits; universal provision of high-level health care and education; full

employment policies, including government job creation; higher and more effective minimum wages; an expanded Earned Income Tax Credit and adequate child allowances; portable pensions; institutional constraints on, and regulation of, money managers; and a network of small, local community-development banks (Papadimitriou and Wray 1998).

While Minsky died too soon to observe the explosion in the securitization of home mortgages, he did write a prescient piece on the nature, and the implications, of securitization. This was published as a memo in 1987, and served as the basis of a lecture in his monetary theory class at Washington University as well as the foundation for informal discussion. Although I have made use of it in my own work, the memo has not been widely circulated. A number of researchers have requested copies, and so The Levy Economics Institute decided to publish the piece as a policy note. I have done some light editing of the original to eliminate obvious errors. I have also added a few explanatory words here and there in square brackets. Otherwise, what follows is Minsky's original memo, in its entirety. It can be read in conjunction with my latest policy brief (Wray 2008) and with Senior Scholar Jan Kregel's recent publications (2008a; 2008b) to see how securitization helped to create the current financial crisis.

Securitization

Hyman P. Minsky, Washington University, St. Louis

Notes prepared for discussion, June 27, 1987; edited and expanded August 1987, corrected September 1987

Heraclites: "You can not step twice in the same river."

At the annual banking structure and competition conference of the Federal Reserve Bank of Chicago in May 1987, the buzzword heard in the corridors and used by many of the speakers was "that which can be securitized, will be securitized."

Introduction

It is necessary to understand what securitization involves and how it *might* affect the development of the world economy if central bank interventions and the government interventions that *guide* institutional developments are to be successful. Securitization leads to the creation of financial paper that is eminently suitable for a global financial structure. There is a symbiotic relation between

the globalization of the world's financial structure and the securitization of financial instruments. Globalization requires the conformity of institutions across national lines and in particular the ability of creditors to capture assets that underlie the securities.

Securitization reflects a change in the weight of market and bank funding capabilities: market funding capabilities have increased relative to the funding abilities of banks and depository financial intermediaries. It is in part a lagged response to monetarism. The fighting of inflation by constraining monetary growth opened opportunities for nonbanking financing techniques. The monetarist way of fighting inflation, which preceded the 1979 "practical monetarism" of [then–Federal Reserve Chairman Paul] Volcker, puts banks at a competitive disadvantage in terms of the short-term growth of their ability to fund assets. Furthermore, by opening interest rate wedges, monetary constraint provides profit opportunities for innovative financing techniques.

The interest rates of the monetarist experiment destroyed the funding capabilities of the thrift "industry" in the United States by undermining the value of mortgages and thus impairing their net worth. The ability of the thrifts to create mortgages was unimpaired even as their ability to fund holdings was greatly impaired. Securitization as we know it began in the U.S. mortgage market. It enabled the thrifts to continue to initiate mortgages even though their funding ability was sorely compromised. Although modern securitization may have begun with the thrifts, it has now expanded well beyond the thrifts and mortgage loans.

Securitization also is a response to the cost structure of banks. Banks seem to need a 450-basis-point margin if fund income is to be the source of profits. This provides a great deal of profit space for innovative suppliers with lower costs. Bank participation in securitization is part of the drive, forced by costs, to supplement fund income with fee income. The development of the money market funds, the continued growth of mutual and pension funds, and the emergence of the vast institutional holdings by offshore entities provide a market for the instruments created by securitization.

Any attempt to place securitization in context needs to start with early-19th-century commercial bill banking in Britain and the recognition that accepting contingent liabilities is a fundamental banking act. The modern contribution is the development of techniques to "enhance credits" without accepting contingent liabilities or the investment of pure equity funds. Securitization

throws light on the nature of money: money is a financial instrument (a debt) that develops out of the financing of activity and positions in assets and becomes generally accepted in an economic community as a means of payment for goods and services and as an instrument by which debts are discharged. It is conceivable that in the not too distant future we could be using \$100 interest-bearing short-term securities as currency. Private money is a distinct possible future outcome of current developments.

Securitization implies that there is no limit to bank initiative in *creating* credits for there is no recourse to bank capital, and because the credits do not absorb high-powered money [bank reserves]. Both capital and reserve absorption may occur at the initiating stage of the credit [before the securities can be created and sold]. This has led to the terminology of "bridge financing." [But once the securities are moved off the bank balance sheet, neither capital nor reserves is leveraged any longer.] Securitization lowers the weight of that part of the financing structure that the central bank (Federal Reserve in the United States) is committed to protect. A need by holders of securities who are committed to protect the market value of their assets (such as mutual or money market funds, or trustees for pension funds) may mean that a rise in interest rates will lead to a need by holders to make position by selling position, which can lead to a drastic fall in the price of the securities.

Securitization and globalization reflect the new technology of communication, computation, and record keeping.

The two fundamental banking interfaces

There are two fundamental banking interfaces: the relation between the bank and its debtors, and the relation between the bank and its funders. In what follows, the term "bank" is a generic term not restricted to legally defined banks.

1. "Bank" and debtors

The initial creation of paper is based on cash flows from incomecreating activities [or from the sale of assets—preferably, assets that have appreciated in value]. In each case, the liability created and held by the bank commits future income. If the liability is of business, it is a prior allocation of profits; if it is of households, it represents a prior allocation of wages, etc.; if it is of government, it is a prior allocation of taxes; and if it is a liability of the rest of the world, it is a prior allocation of export earnings. Note that in every case, such paper links the present and the future. Today is the future for some past todays. Prior commitments are falling

due even as new commitments are entered upon. Cash flows served as both a source of funds and as the validation of prior commitments. The hedge, speculative, and Ponzi characterization of cash flows may be relevant. [This is a reference to Minsky's classification of financial structures. A hedge position is one for which expected cash flows exceed principal and interest payments for every period; a speculative position is one for which near-term cash flows only cover interest, although it is expected that principal will eventually be paid when cash flows rise at some future time; a Ponzi position is one in which cash flows do not cover even the interest payments, hence, interest is capitalized as debt grows.]

A banker operates on the basis of expectations of cash flows. What determines such expectations? In particular, "How do expectations change?" is a fundamental analytical-banking question in a market-based financial structure. In banking, the collateral [behind a debt] is of secondary importance—the bank-customer relation has failed whenever there is a need to capture collateral. Asset- or collateral-based lending implies that the cash flows to validate commitments will be forthcoming from the sale of the asset. The buyer obviously expects cash flows that will validate the price he pays. [Hence, cash flows are expected to come from incomes or asset sales. These cash flows will—or will not—validate the debts held by banks.]

2. Bank and "funders"

The funders of banks include:

- a. households as the ultimate owners; and
- b. intermediation and layers of intermediaries [interposed between the bank and the ultimate household owners of bank liabilities]. (The descriptive insights of [John] Gurley and [Edward] Shaw, on the one hand, and [Raymond] Goldsmith, on the other, are relevant here.)

A bank deals with both the issuer of debts (held as bank assets) and the funder (holder of the bank's liabilities). A bank's balance sheet reflects this two-sidedness of banking. Fund income depends upon the gap between the cost of money and the return on earning assets. Bank equity "enhances credits." Deposit insurance acts as the enhancer of credit for today's bankrupt banks and savings and loan associations in the United States. Deposit insurance is really a government guarantee rather than insurance. What are the actuarial relations [behind FDIC/FSLIC deposit insurance premiums—they do not really reflect the actual risks to the Treasury]? In securitization, the bank's balance sheet disap-

pears from the financing once the transactions are completed. There is no question of contingent liabilities and recourse so long as there is no issue of fraud. [Unless the initiating bank has provided guarantees for the securities, neither the bank nor the Treasury is on the hook should the underlying debts—such as home mortgages—go bad.]

In securitization, the underlying financial instruments [such as home mortgage loans] and the cash flows they are expected to generate are the proximate basis for issuing marketable paper. Income from paper (cash flows) is substituted for the profits earned by real assets, household incomes, or tax receipts as the source of the cash flow to support the paper pledges.

The steps and the players

[We can outline the securitization players and process as follows:]

- **1. The debtor:** the fundamental paper emitter and source of the cash flows from income [or asset sales] that validate the securities.
- 2. The paper creator: the bank loan officer who structures the credit and accepts the debtor's promises to repay; the negotiations between the debtor and the paper creator end up with paper that can be negotiated. Steps one and two are like conventional bank-customer relations.
- 3. The investment banker (note that the investment banker interfaces with many different types of units): finds and negotiates with the paper creator and buys the paper (bridge financing, the funding of bridge financing, the relation to commercial banks, exposure, and "out the window" are all terms that enter here). The paper becomes the corpus trust. On the basis of the assets in trust, the investment banker creates securities, devising ways to enhance credit (insurance, complex of liabilities, ersatz equity in the form of junk bonds). The investment banker hires "econometricians" or financial economists to demonstrate that the risks of default on interest and principle of some class of the securities it proposes to issue are so small that these instruments deserve to have an investment rating that implies a low interest rate. [As discussed below, credit-rating agencies work with the paper creator to put together packages that will receive high ratings; they devise models that demonstrate low credit risk to justify the ratings. This is an important credit enhancement.] Securitization is viable—profitable for all concerned—if the total cash pledged by the securities is less than the total cash the corpus of the trust is expected to yield.

- 4. The trustee: holds the basic paper—the corpus of collateral for the securities; acts in the interest of the security holders; receives the cash flows from the underlying instruments and forwards them to the security holders; and is empowered to end the trust, sell out the corpus, and transmit proceeds to security holders according to the hierarchy of rights if the securities rating falls below some agreed level. [In many cases, the paper creator agrees to take the securities back onto its own balance sheet if they cannot be sold at a guaranteed price or if the rating falls below the agreed level.] If securitization spreads, the trustee business will boom. There is a need to develop equivalents to the U.S. trust company if securitization is to be truly global.
- **5.** The servicing organization (often the paper creator; loan servicing is a source of bank fee income): receives payments from the corpus and transmits the funds to the trustee.
- 6. The rating services: place the resulting securities into risk classes. In the security contract there is a commitment to keep at least some of the securities in some particular set of low-risk classes. If the securities fall below some rating, or perhaps are threatened to fall below some rating, the trustee is supposed to act to protect the interests of the security holders. This may lead to the sale of the underlying assets, the corpus of the trust. There is a danger that the equivalent of making position by selling out position will result—leading to falling values of the securities.
- **7.** The maker of a secondary market: the initiating investment banker, often the underwriter. This is usually a dealer market, not a broker market. This will be a thin market if price and quality of the securities deteriorate.
- **8:** The funders: households, pension funds, banks with poor paper-creating facilities, foreign institutions, etc.

Afterword

In this memo, Minsky argued that securitization resulted from two developments: the globalization of finance and the declining importance of banks in favor of managed money. The long depression-free period that followed World War II created global managed money seeking returns. Packaged securities with risk weightings assigned by respected rating agencies were appealing for global investors trying to achieve the desired proportion of dollar-denominated assets. This occurred as the bank share of all financial assets fell from around 50 percent in the 1950s to around 25 percent in the 1990s. At the same time, the financial markets were freer from the New Deal regulations that had made these markets safer. By the time of the real estate boom in the United States that eventually led to the subprime crisis, there was no longer any essential difference between a "commercial bank" and an "investment bank." The whole housing sector that had been made very safe by the New Deal reforms had been transformed into a huge global casino. Minsky argued (1986, p. 45) that the New Deal reforms related to home finance had been spurred by a common belief that short-term mortgages, typically with large balloon payments, had contributed to the Great Depression; ironically, the "innovations" in home mortgage finance leading up to the speculative boom—including, most prominently, securitization—largely re-created those conditions.

Today, we can surmise that the financial innovations of the past decade greatly expanded the availability of credit, which then pushed up asset prices. That, in turn, encouraged not only further innovation to take advantage of profit opportunities, but also ever more debt and greater leveraging. The upbeat analyses conducted throughout the boom relied on modern orthodox finance theory, incorporated into complex models that appeared to show risk was being systematically reduced and shifted to those best able to bear it. With the benefit of hindsight, we can now say that risks were neither shifted nor reduced. The financial crisis still appears to be spreading from one market to another, and from one country to another. We might justifiably wonder whether "it" (another debt deflation) could happen again. I expect that the combination of Big Government and Big Bank, plus the remaining safeguards built into the system by the New Deal, will prove once again to be sufficient to prevent a recurrence of a great depression. However, the bigger question is whether analysts and policymakers will learn from the mistakes of the past couple of decades and begin to formulate policy that will constrain the natural thrust toward fragility that makes these crises occur with greater frequency and virulence.

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