IS THE CURRENT FINANCIAL DISTRESS CAUSED BY THE SUBPRIME MORTGAGE
CRISIS A MINSKY MOMENT? OR IS IT THE RESULT OF ATTEMPTING TO
SECURITIZE ILLIQUID NON COMMERCIAL MORTGAGE LOANS?

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Abstract.
Does Minsky’s theory explain recent market instability? For financial fragility, Minsky argued, specific preconditions must occur. These preconditions have not occurred, therefore recent financial market instability is not a Minsky moment. Instead the recent financial market instability is due to an insolvency problem of large underwriters caused by their attempt to “securitize” (make liquid) mortgages (where the latter are normally illiquid assets). The solution for such an insolvency problem is large direct infusions of new capital in these institutions and/or removing nonperforming loans from their books. An easy money policy per se will not do.

I. ILLIQUIDITY OR INSOLVENCY?
In the winter of 2007-2008 financial markets appeared to be in disarray. Many media types, Wall Street analysts, etc. referred to this as a “Minsky moment” of financial fragility. Hyman Minsky [1986, 1992] developed a theory of financial fragility that argued that in the normal course of the business cycle upswing, financing of new investments followed a specific path from a conservative financing operation (hedge financing) towards more fragile financing (speculative and Ponzi financing) of new investment projects. Two of the most distinguished scholars and disciples of Minsky’s financial fragility analysis have indicated that the Minsky analysis requires that: “Over the course of any expansion, the economy moves from hedge to speculative to Ponzi finance. Minsky argued that this is a necessary precondition for an unstable financial system” [Papadimitriou and Wray, 1999, p. 10, emphasis added]. If this path is moving to more fragile debt financing operations (explained in section II infra) has not been followed, then this financial market distress is not a Minsky moment.
The path to a Minsky moment is due to more and more investor-borrowers committing themselves, via debt contracts to specified dates of future cash outflows that can not be met by expected future cash inflows on those specified contractual dates, even though, in the long run, the investment is expected to generate enough cash inflows to ultimately pay for itself and earn a respectable profit. Since liquidity means that one can meet all one’s contractual commitments for cash outflows as they come due, if a borrower can not expect to meet his/her contractual cash outflows at any specific date, then the borrower has a liquidity problem. When a systemic liquidity problem threatens the stability of the economy, then the central bank tries to resolve the problem via an easy monetary policy of injecting liquidity into the money market. This makes it inexpensive for borrowers with a liquidity problem to obtain liquidity, thereby resolving, at least temporarily, their liquidity problem.

In this note we will explain why the financial market problem resulting from the subprime crisis does not meet the criteria set down by Minsky for his speculative and Ponzi financing operation. (The explanation of hedge financing, speculative financing and Ponzi financing will be developed in Section II infra.) Consequently with no movement from hedge to speculative to Ponzi finance, the “necessary precondition” for a Minsky moment has not been met.

Instead, the current financial market problem was set off by insolvency problems of large financial market underwriters who attempted to transform illiquid non-commercial mortgages into liquid assets via securitization (see section IV infra). When a systemic insolvency problem threatens the stability of the economy, an easy money policy per se is not an adequate solution. If there is a systemic insolvency problem of financial institutions, then steps to increase the net worth of insolvent entities are required to prevent this insolvency problem from creating instability in the economy.

In 1989, for example, the United States faced a systemic insolvency problem when over 700 S&Ls carried hundreds of thousands of non performing mortgage loans on their books. Today’s volume of non performing sub prime mortgage loans in CDOs (Collateral Debt
Obligations), SIVs (Structured Investment vehicles), and other exotic financial assets thus share the same characteristic that brought on the 1989 S&L crisis – many nonperforming debt obligations. The Bush I Administration and the S&L bank regulators recognized the problem for what it was, an insolvency problem where the net worth of these 700 plus S&Ls were either negative or, at least, far below the safe level of net worth that bank regulators required. The solution was for a government sponsored agency, the Resolution Trust Corporation, to remove the nonperforming loans from the balance sheets of insolvent S&Ls and then merge the remaining entity with another S&L that did not have any insolvency problem. The S&L problem could not have been resolved simply by the central bank flooding the money market with liquidity.

Today’s subprime nonperforming loan problem has brought on the potential insolvency problem for major bank-underwriters of mortgaged backed assets. To sell these mortgage backed assets to an unsuspecting public, these underwriters claimed that they could transform illiquid mortgages into liquid assets via “securitization”. In order to securitize, i.e., make liquid, the tranches in mortgage backed assets, the underwriters had to assure buyers that the underwriters would function as a “market maker” in the market for these assets. A “market maker” is an institution that claims to guarantee holders of assets that the market for resale of these assets always will be well organized and orderly\(^3\). (The role of a market maker in securitizing any asset is spelled out in detail in Davidson [2007, pp. 80-89].) In an orderly market, holders of assets believe they can always execute a fast exit strategy and liquidate their holdings at a price that represent an orderly movement from the market price. (Section IV infra will explain why securitization of mortgage backed assets resulted in a systemic insolvency problem for underwriters.)

II. EXPLAINING HOW A MINSKY MOMENT OCCURS DURING A BUSINESS CYCLE.

Minsky’s financial fragility theory classifies the financing of the purchase of large real illiquid investment (durable goods) projects into three categories: hedge finance, speculative finance, and Ponzi finance. Each type of finance operation in the Minsky taxonomy requires the buyer of the
real investment goods to issue a security. This issued security must include some form of debt (bonds) that commits the issuer to a schedule of future specified dates of contractual cash outflows.

In the hedge finance operation, the borrower expects the cash inflows generated by the purchased real investment will easily meet the future contractual cash outflows specified in the debt contract. (In the case of noncommercial resident mortgages, where the house does not generate a future cash inflow, a hedge finance borrower expects other sources of future cash inflows will be readily available to meet all the future contractual cash outflows over the life of the outstanding mortgage bond.) The greater the weight of equity financing in the purchase of the investment project, the greater the likelihood that the issuer of the security is engaged in a hedge financing operation. Minsky argues that hedge financing is the typical form of financing purchases of real investment projects during the early stages of the upswing of a business cycle.

Minsky’s financial fragility theory then goes on to hypothesize that as an investment boom develops more and more of the financing of the purchases of real investment projects are either speculative financing and/or Ponzi financing operations.

In speculative financing the borrower knows, given the terms of the debt contract, the contractual cash outflows to service the debt obligation will, at some specific date in the future, exceed the cash inflows at that date generated by this investment project, even though over the life of the asset enough cash inflows will be generated to pay for the investment. Thus, on entering into the debt contract, the debtor-purchaser knows that at some date in the future, he/she will have to refinance the remaining contractual cash outflows. Essentially this is a speculative finance operation since the debtor is presuming (speculating?) that, when needed, the outstanding contractual debt obligation can be “rolled over”. If at the time of the expected “roll over” of debt, no refinancing lender is available, the only option left for the borrower is Ponzi financing. (Of course if at that moment, the central bank does flood the money market with liquidity, then it is likely that lenders will be willing to refinance the debt at a reasonable cost.)
Ponzi financing is the most fragile financial system and it is the one most likely to lead to a “Minsky moment”. In a Ponzi financing scheme, the purchaser is aware that the expected future cash inflows generated by the investment are not sufficient to meet the future contractual cash outflows required to service the initial debt security obligation. Accordingly the Ponzi finance purchaser issues a second set of debt securities which, at least initially provides enough cash inflow to meet the upcoming contractual cash outflows. Unfortunately however, this second debt issuance increases the level of future contractual cash outflows and so the purchaser (debtor) is ultimately required to issue a third set of debt securities to meet the now larger contractual cash outflows of the first two security issues. This leads to a Pyramid Ponzi scheme – and like all Ponzi schemes this financing pyramid must fail when there are no takers for the subsequent issues of securities to meet existing contractual cash outflow obligations. At that point when the Ponzi pyramid financial scheme collapses we have a Minsky moment.

III. WHY THE SUB PRIME CRISIS DOES NOT MEET THE CRITERIA OF A MINSKY MOMENT

At the time of the signing of the initial sub prime mortgage debt obligation, the borrower was led to believe that he/she was undertaking a hedge financing position. In most sub prime mortgages there is either no provision for early prepayment or else so large a prepayment penalty is specified that the borrower (and the lender)should recognize that “rolling over” the debt is not a viable option. Consequently, if the debtor is aware of the prepayment penalty terms of the initial mortgage contract, then, the borrower could not even think of engaging in speculative finance. Even if the borrower was unaware of the prepayment clause in the debt contract, once this clause is brought to the borrower’s attention, then, the borrower realizes that if he/she could not meet the monthly debt servicing cash outflow, he/she could never refinance this mortgage. Accordingly, Minsky’s speculative finance operation is never available to sub prime borrowers. To create a Minsky moment in the sub prime situation, therefore, the only alternative would be for the sub prime debtor-purchaser to engage in Ponzi finance. For a sub prime mortgage
borrower to engage in a Ponzi finance transaction, he/she would have to obtain a second mortgage to help pay the contractual cash outflows specified in the first mortgage debt. Clearly most sub prime borrowers who have little or no equity in their homes would have no possibility of obtaining a second (or even a third) mortgage. Accordingly, the Ponzi finance operation was never a viable option for these sub prime borrowers.

It should be obvious therefore that the financial markets distress initiated by sub prime mortgages does not meet the speculative and/or Ponzi finance operation characteristics specified by Minsky to describe his financial fragility situation. So the precondition for a Minsky moment, as specified by Papadimitriou and Wray was never involved in the sub prime crisis.

IV. THE INSOLVENCY PROBLEM

When the Glass-Steagall Act was repealed in 1999, the seeds for developing a serious insolvency problem for underwriters of mortgage backed securities were planted. Under the 1933 Glass Steagall Act financial institutions had to choose either to be a simple bank lender or an underwriter. The Act kept bank lenders and underwriters legally separated. Consequently under the Glass Steagall Act, mortgage loans created by banks were illiquid assets, that once originated could not be resold. The 1999 repeal of Glass-Steagall permitted bank originated loans to be readily sold by the originator to underwriters (often an affiliate of the parent bank holding company) usually within thirty days. Thus the mortgage originating bank did not worry about a borrower defaulting as long as the debtor could make his first monthly mortgage payment. After that 30 day period, the problem of mortgage default and foreclosure was no longer on the mortgage originator’s books. The Black Queen of the costs of possible default had been passed to someone else’s books.

The underwriters packaged these bank originated mortgage loans and sold tranches to investors looking for a safe rate of return (as assured by the bond rating agencies). To encourage the unsuspecting investors (including local governments looking for a temporary
place to put their unused tax revenues, other banks world-wide e.g., Northern Rock in the UK, private investors, pension funds, etc.) to purchase tranches in these packaged mortgage backed assets, the underwriters guarantee of ‘securitization” implied that the underwriters, as a market maker of the securitized asset, assured purchasers that purchaser could always sell off their position at either the original purchase price, or, at least, at some orderly price change if the market price started to decline below the original purchase price. Thus investors in the tranches of mortgage backed assets believed they had little to fear in terms of possible capital loss from these investments.

How were these market maker assurances given? In some cases the underwriter, who obtained lucrative fees for packaging and selling tranches in these mortgage backed assets, provided tranche purchasers with liquidity “puts”. In this liquidity “puts” case, the underwriter was committed to buy back (at the original sale price) any tranches that the holders could not sell in the open market for a price equal to or above the original sale price. From hindsight it appears that the underwriters who provided liquidity “puts’ never expected many asset holders to exercise such ‘puts”.

In other cases,. the underwriter acted like a typical market maker where if the decline of the market price of tranches started to become disorderly, the “market maker”, would buy sufficient quantity of the offered tranches to maintain an orderly market even in the face of declining market price. To exercise this orderly price decline function, the underwriters were, in essence, selling off good market value assets from their balance sheets to obtain cash to purchases assets whose market values were declining. Thus the Black Queen of defaults and resulting declining market valued assets came back to haunt the underwriters who had thought they had passed off the Black Queen via the selling of tranches of securitized assets. The result was a reduction in the net worth of the underwriters until their net worth threatened to fall below what is considered a safe capital (net worth) standard for such financial institutions. At that point the underwriters would stop trying to maintain an orderly market, and the remaining
outstanding tranches of these mortgage backed assets became illiquid assets. No one was sure of the market value of these assets.

As more and more sub prime borrowers defaulted on their mortgages, underwriters, because of their liquidity “puts” obligations or simply because they tried to function as market makers, bought back and accumulated tranches of mortgage backed assets. In some cases underwriters might still be holding unsold tranches. When these unsold and bought back assets were “marked to market” on the underwriters’s balance sheets, it became clear that the underwriters faced a severe insolvency problem as the value of their net worth declined dramatically. The solution to this insolvency problem is to obtain an infusion of a large sum of new capital into the balance sheets. This infusion will build up the net worth sufficiently so that it meets the safe capital requirement for these financial institutions.

By providing huge capital infusions, the sovereign wealth funds of some oil exporting nations and of other nations such as China and Russia, as well as infusions by other wealthy fund investors, came to the rescue of large underwriters such as Citi Group, Merrill Lynch, etc. in the early winter of 2007-2008. Nevertheless at this writing in early February 2008, these large underwriters still have a significant volume of tranches on their balance sheets, and only time will tell whether the new capital injections already supplied will be sufficient to end their insolvency problem.

Most of these U.S. underwriter-bank conglomerates are “too big to fail”. If these underwriters still have a significant volume of these assets on their balance sheets, then a further infusion of capital and/or the taking of illiquid market tranches off the balance sheets may be necessary. If these institutions are really “too big to fail”, then government will have to somehow arrange to bail out these institutions.

The investor-holders of the remaining outstanding tranches have no well organized orderly market in which to sell off their position. If these outstanding tranches are to be “marked to market” on the balance sheets of the holders of these tranches, then there are
innumerable investors, funds, banks, and other institutions that also will face a potential insolvency crisis on their balance sheets. How to provide aid to some of these potentially insolvent investors and homeowners is suggested in Davidson [2008].

NOTES

1. The author is Visiting Scholar, Schwartz Center for Economic Policy Analysis, New School, and Editor, Journal of Post Keynesian Economics
2. For a discussion of how to resolve the insolvency problem of homeowners caught in the bursting of the housing bubble in 2007-8, see Davidson,( 2008).
3. Non commercial mortgage contracts are not homogeneous with one another. Each mortgage contract represents a commitment of a different borrower whose credit history, income, etc. differs from other borrowers. Moreover the collateral, i.e., the single family residences backing the loan, is also nonhomogeneous, as each home represents a different location, region,, state of repair, etc. Homogeneity is normally a characteristic for assets that are securitized, i.e., readily traded in well organized and orderly markets. If the asset units traded are homogeneous, then the purchaser does not have to worry which specific unit (or units) he/she is purchasing. If the units are not homogeneous than the purchaser would typically inspect the specific unit he/she was purchasing to establish the condition of the unit.
4. For a discussion of the historical record leading up to repeal of the Glass-Steagall Act and why this made bank mortgage originators uncaring about the ability of borrowers to repay their contract obligations see . Davidson (2008).

REFERENCES


