Bank Financial Group

TD Economics

Special Report

July 15, 2008

CAN ALL THE KING'S MEN PUT THE U.S. FINANCIAL SYSTEM BACK TOGETHER AGAIN?

HIGHLIGHTS

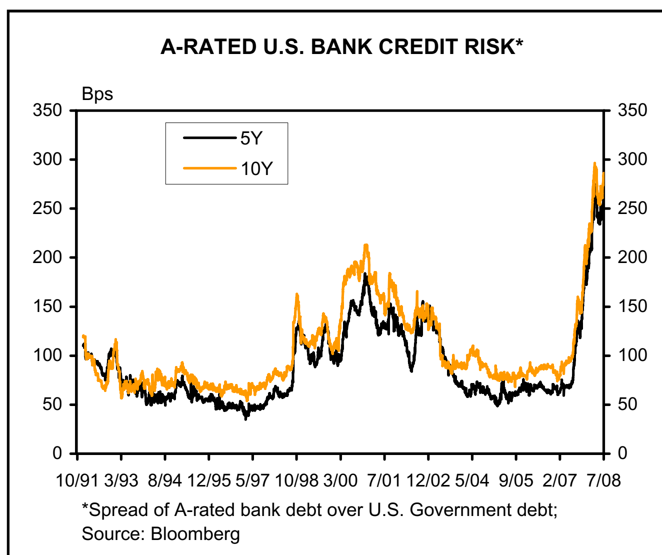
- **Fannie Mae and Freddie Mac were conspicuous in their absence from the early stages of this financial crisis, but their difficulties do represent progress in nearing an end.**
- **The first year of the crisis saw the excesses within the spectrum of subprime players work themselves out.**
- **U.S. credit markets remain in a catatonic state, and the second year looks likely to be dominated by difficulties among those highly leveraged to mortgage lending more broadly.**
- **The final stage will see the spectrum of capital-constrained firms at worst, go out of business, or at best, unable to take full advantage of potential opportunities due to the lack of credit.**
- **Unlike the corporate MBS that drove losses over the last year and were principally held by U.S. and European investors, U.S. Agency debt is principally held by U.S. and Asian investors and central banks – suggesting mark to market losses and forced selling could be more muted but raising risks for Asian central banks.**

The credit crunch continues to be an accident trying to happen. In the current financial landscape, credibility is king and in short supply. Recent concerns over the U.S. Government-Sponsored Enterprises (GSEs) Fannie Mae and Freddie Mac, and private institutions IndyMac and Lehman Brothers, have not uncovered any new skeletons in the closet. Rather, they have highlighted that otherwise solvent financial institutions remain susceptible to market fears.

Credit Crunch – Act II

The credit crunch has not been a tornado, wreaking random destruction through financial markets. Rather, the victims to date have had identifiable risk factors. For example, as the table on the next page shows, ABS issuers and finance companies had nearly doubled their exposure to mortgages through this decade – with a lot of this being subprime debt. These institutions were also highly dependent on short-term financing such as commercial paper to finance longer-term obligations. When capital markets seized up, these institutions learned the age-old lesson that it is not the speed that kills, but the sudden stop.

A-RATED U.S. BANK CREDIT RISK*

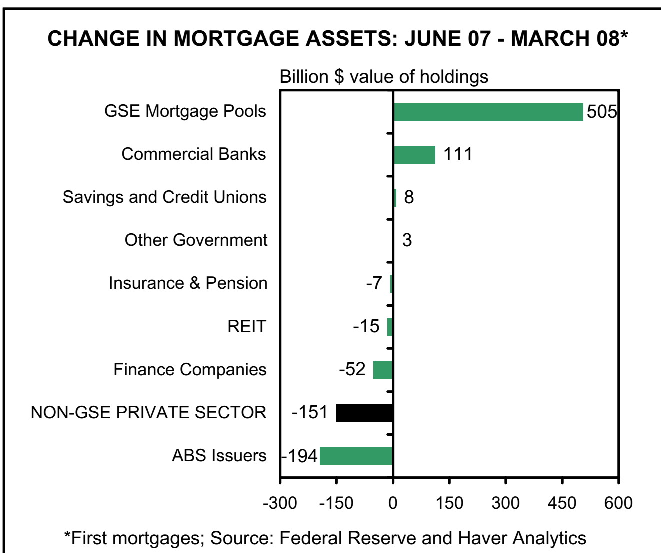


*Spread of A-rated bank debt over U.S. Government debt; Source: Bloomberg

However, in spite of the collapse of Bear Stearns being seen as a cathartic watershed moment in financial markets, the strains in credit markets barely dissipated over the last few months. In particular, an interplay of two factors is driving the current phase of the credit crunch:

- **Ongoing losses**: Falling home prices continue to drive new losses for those financial institutions holding the rights to these mortgages. This includes lenders who kept these mortgages themselves, as well as investors who purchased them in the form of mortgage-backed securities (MBS).
- **Inability to raise new capital:** Those taking these losses would like to replenish their capital by issuing new debt. However, issuing debt has remained difficult for all and prohibitively expensive for those with lower credit ratings or seeking to issue debt for longer maturities (see chart on page 1). So those that need it most can't get it and those that need it least can get it – but for a price.

While commercial banks and credit unions increased their collective mortgage exposure over the last decade to a much smaller degree than ABS issuers, these increases were asymmetric. Those who were particularly leveraged to subprime lending suffered significant losses. Actual failures have been rather sparse, though. Before last week, the FDIC had stepped in and taken over just six small banks since last summer that were judged to have become undercapitalized. Over the weekend, Indymac became the seventh bank taken over by the FDIC, and largest since 1984. Ninety other banks are on the FDIC's "problem list," but $52 billion in net assets remain in the Deposit Insurance Fund before any new federal money could be needed. While large, IndyMac was a bank whose mortgage business in recent years was focused on Alt-A lending – lending to those with credit between prime and subprime – and whose operations were centered in California which is seeing some of the largest home price declines. Lehman Brothers is the largest underwriter of U.S. MBS, making them vulnerable to the ongoing strains, as well. Now, growing unemployment is driving a more traditional cycle of rising delinquencies among borrowers. This is creating new losses in the more stable prime lending markets. Moreover, there are two challenges with the new mortgages that banks have to overcome. First, these loans have overwhelmingly been to very low-risk borrowers, which means low margins and little profit for banks. Second, securitization markets remain impaired, meaning lenders have increasingly had to keep mortgages on their own books and take the hits should these loans go sour. And this is where the concerns with Fannie Mae and Freddie Mac enter the picture.



U.S. MORTGAGE ASSETS BY HOLDER			
	% of total assets		US$bn
	End-2000	2008Q1	2008Q1
U.S. ECONOMY	6	9	11,215
Government Sector	41	45	5,003
Fannie/Freddie Mortgage Pools	97	97	4,447
Other Govt Sponsored Entities	11	14	456
Other Government	4	3	100
Financial Sector	7	11	6,043
Commercial Banks	15	19	2,216
ABS Issuers	26	50	2,062
Savings and Credit Unions	43	46	1,203
Finance Companies	15	24	458
REIT	13	29	98
Insurance & Pension	0	0	6
Other	0	0	169

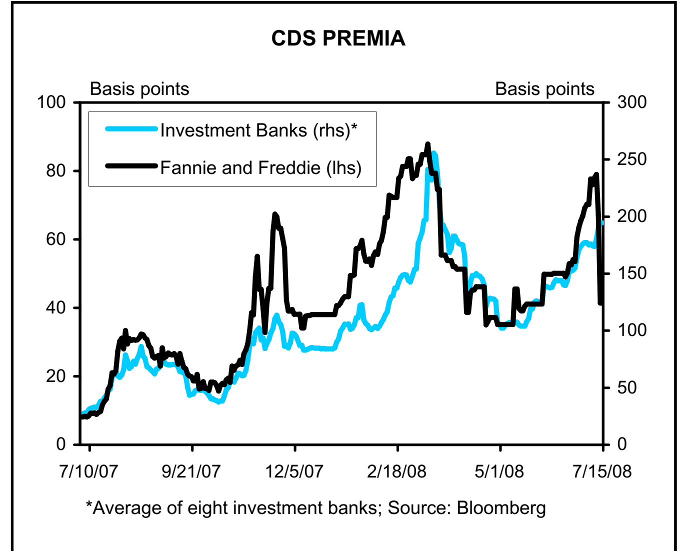
*Excludes Fed and Foreign Sectors; Includes HELOCs; Source: Fed

Mae Day and the Mac Attack

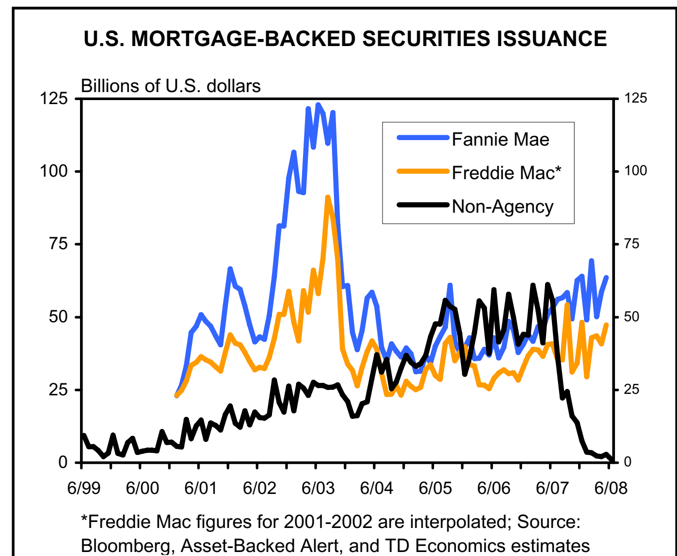
The MBS market outside of Fannie Mae and Freddie Mac remains dead (see chart on the next page) as the issuance of MBS by private companies is now virtually zero. This has placed an exceptional strain on these two institutions to keep the secondary mortgage market running in order to provide ongoing funding for lenders. From June 2007 through March 2008, the value of GSE mortgage assets rose by over $500bn while the value of the private sector fell by $150bn (see chart to left). With the paltry pace of new sales and home price declines dragging down the value of existing homes, both of these figures

are likely to fall. The loss of available private MBS issuance has been partly responsible for the limited availability of lending for new mortgages and were the GSE's issuance to dry up – due to a lack of available capital with which to buy new mortgages from banks – mortgage lending in the U.S. would retrench even further. This would mean the likelihood of higher mortgage rates and even lower home prices.

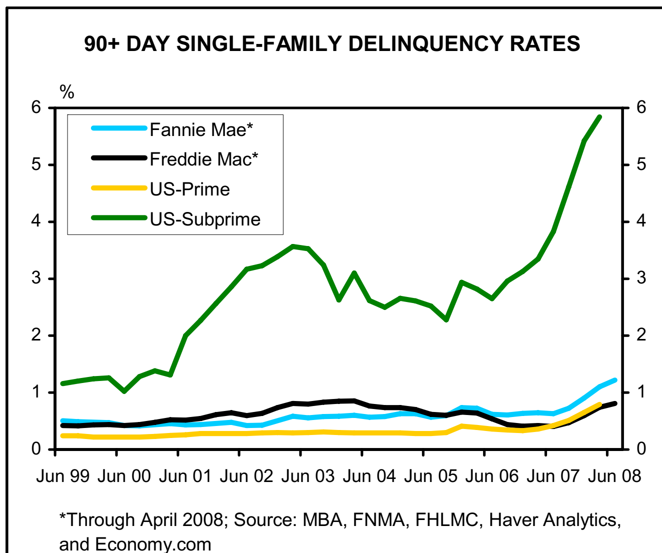
Initial concerns about Fannie and Freddie arose when it was feared some proposed accounting changes would force them to raise up to $75 billion in new capital in an environment that is still not friendly to borrowers. These proposed changes have since been rescinded, but the loss in Fannie and Freddie's equity value has only reinforced the concerns over how the two firms will recapitalize. These questions are exacerbated by the rising delinquencies in Fannie and Freddie's conventional mortgage assets where less than 10% is Alt-A loans (Fannie's higher delinquency rate reflects a higher share of these Alt-A loans). As a result, the price of insuring against the default of the two firms' debt in CDS markets came much closer to revisiting their mid-March highs – though narrowed considerably as it became clear the government would step in – than has been the case for the average investment bank (see chart). However, while these GSEs do operate within the private sector, their implicit moral mandate is a social one – to promote homeownership through the continued functioning of the secondary market for mortgages. Because of this, the government would never allow these institutions to fail any more than it would let the Department of Defense or Federal Reserve go bankrupt. This also



*Average of eight investment banks; Source: Bloomberg



*Freddie Mac figures for 2001-2002 are interpolated; Source: Bloomberg, Asset-Backed Alert, and TD Economics estimates



*Through April 2008; Source: MBA, FNMA, FHLMC, Haver Analytics, and Economy.com

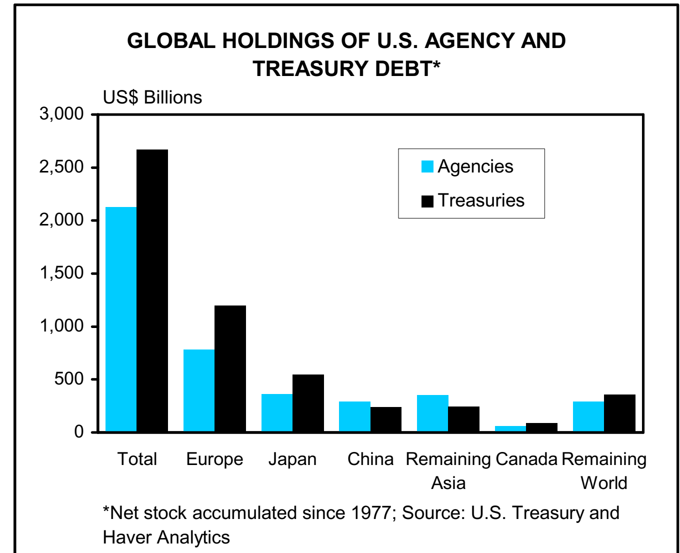
suggests that it is not necessarily appropriate to value these institutions using traditional metrics. It has been suggested that if Fannie and Freddie's Tier 1 capital ratios were to be calculated the same as other banks, these values would be near zero. Since a bank needs to have a Tier 1 capital ratio of at least 6% to be considered well-capitalized, the implication given the GSE's $5 trillion in U.S. mortgage assets is that a government bailout would need to amount to at least $300bn. But, this would only be true for a private firm required to mark to market. While shareholders may not like the answer, the truth is that what is more important in the eyes of the government is that Fannie and Freddie continue to perform their function rather than maximize shareholder value.

Fanning the Flames Overseas

Of additional concern is the size and distribution of international holdings of Agency debt. Over $2 trillion dollars (of the $3.5 trillion in debt Fannie and Freddie have issued and not retained on their own balance sheets) is held abroad. This is just $500 billion less than all the U.S. Treasury bonds and bills held in foreigners' portfolios. Unlike corporate MBS which drove financial losses over the last year, and which Europe had a particular appetite for, the holdings of U.S. Agency debt is highest for Japan, China, and Asia more broadly. It is also more heavily found in the holdings of foreign central banks. The implications are that Asia may stand to lose relatively more than others should the value of Agency debt fall. This may also create differential pressures on other safe and substitute assets like Treasuries to rally should investors shift their holdings. While the conservative streak in central bank portfolio managers will likely limit some volatility and the need to mark to market, this also poses a risk that an impaired flow of U.S. Agency debt could hamper the ability of Asian central banks to manage their currencies' relative strength against the U.S. dollar.

Kiss my Fannie

The fates of Freddie and Fannie are therefore of global concern. U.S. government efforts to restore the credibility of the GSEs, though, are not just slapping lipstick on a pig. Fannie Mae and Freddie Mac's capital issues would be a concern were they truly private firms, but they are not. Their debt has been implicitly backed by the full faith and promise of the U.S. government and Secretary Hank Paulson's recent actions have sought to move this guarantee from implicit to explicit by asking Congress to grant the Treasury the authority to buy unlimited stakes in the companies. By expanding the GSEs' lines of credit and making the Federal Reserve's discount window also available, these actions help to address lingering concerns of near-term liquidity. This is exactly what is needed to stem the crisis of confidence that has plagued these GSEs in the last week. This means the Agencies' debt will not default but means nothing for stockholders except that their stake in the companies will be diluted as much as is needed to keep the institutions running. It is interesting; however,



*Net stock accumulated since 1977; Source: U.S. Treasury and Haver Analytics

that the government is still trying to provide this financing through market mechanisms. Initial capital infusions are likely to come in the form of preferred shares purchased by the government rather than an outright government takeover. Even under the worst-case scenario of full nationalization, the government would not only take the $5 trillion in liabilities explicitly onto their balance sheet, but the $5 trillion in mortgage assets, as well. This action would certainly raise questions about the overall health of the U.S. financial system but should imply only a limited impact on the creditworthiness of the U.S. government itself.

The actions to date ensure that the last line of defense in U.S. mortgage financing will remain open. However, these actions do not create new appetite for MBS or forestall further losses in U.S. home prices and mortgage assets. As such, lenders and investors in MBS will continue to come under stress and see losses pressure balance sheets. Rather than saying difficulties are spreading, though, we think it better to characterize them as moving forward. The financial flu has moved from the head to the chest and left a lot of congestion still to be cleared out. During this time, it will be impossible for the economy to operate at full capacity, difficult for the Federal Reserve to raise interest rates, and likely risk further firms falling prey to a crisis of confidence stemming from a lack of credibility. The credit crunch is not over.

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