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NEWS & VIEWS

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Sub-prime mortgages: The view from the sidelines

The events of the last few weeks in sub-prime mortgages have rocked the financial markets, and rightly so. The papers and the web are rife with stories of end-of-cycle misbehavior, regret and recrimination among the various players in the mortgage finance chain—lenders cutting corners for market share and growth, borrowers stretching to buy homes they couldn't afford, appraisers and real estate agents colluding on home values—not to mention the enabling of the Wall Street securitization machine, the ratings agencies and, some would argue, a Federal Reserve that kept rates too low for too long. Depending on who is speaking, the consequences for this cyclical turn could range from brief and sharp pain narrowly centered on the sub-prime lenders and borrowers to a deep consumer-led economic recession featuring a tidal wave of defaults and a credit contraction. We would say that once the books have been written, the documentaries have been made and the finger-pointing ends with jail time, it will have turned out to be closer to the latter than the former.

But first, let us clear up one thing: One of the features of any market correction is the fevered compilation of lists: Who are the sub-prime lenders? Where are the loans being made? Which companies are at risk? Funnily enough, Annaly Capital Management has been turning up on some of these lists and press reports as a participant in the sub-prime market. **This is not just wrong; it is the exact opposite of right. Annaly Capital Management—and the FIDAC-managed funds and companies executing our core strategy—does not take credit risk.** We own mortgage-backed securities guaranteed by Fannie Mae, Freddie Mac and Ginnie Mae, which carry actual or implied AAA ratings. Even our FIDAC investment products that are required to go outside of Fannie and Freddie for diversification purposes only invest in the highest credit quality paper. This is not an investment decision that we just made recently. We make our returns through taking, and managing, interest rate risk. So please, don't throw out this baby with the bathwater.

We try to keep our strategy simple and transparent so that investors can understand what drives performance. But we've felt compelled to write an essay like this before. In June 2005, because of all the Fannie and Freddie (the Agencies) headlines and regulatory saber-rattling and irresponsibly inflammatory editorials, some investors were questioning the safety and soundness of Agency MBS, so we wrote an essay about it (see "We take virtually no credit risk", June 22, 2005, on our website at www.annaly.com/commentary.html). In it, we explained that investors in Agency paper are protected by many levels of security: Besides the guarantee of Fannie Mae and Freddie Mac (Ginnie Maes are backed by the full faith and credit of the US Treasury)—and the loan qualification, risk analysis, balance sheet and regulatory oversight behind them—the MBS holder is protected and secured by the collateral of the mortgage borrower's home, the equity in the home, property/casualty and life insurance, the rights of foreclosure and the settlement process, and the reduction in the principal amount from monthly amortization. In their triple-A ratings of the senior unsecured debt of Fannie and Freddie, Moody's, S&P and Fitch also cite their government charters and financial market primacy. Just as important is the opinion of the market, which has continued to trade these securities as having the implied backing of the US Government.

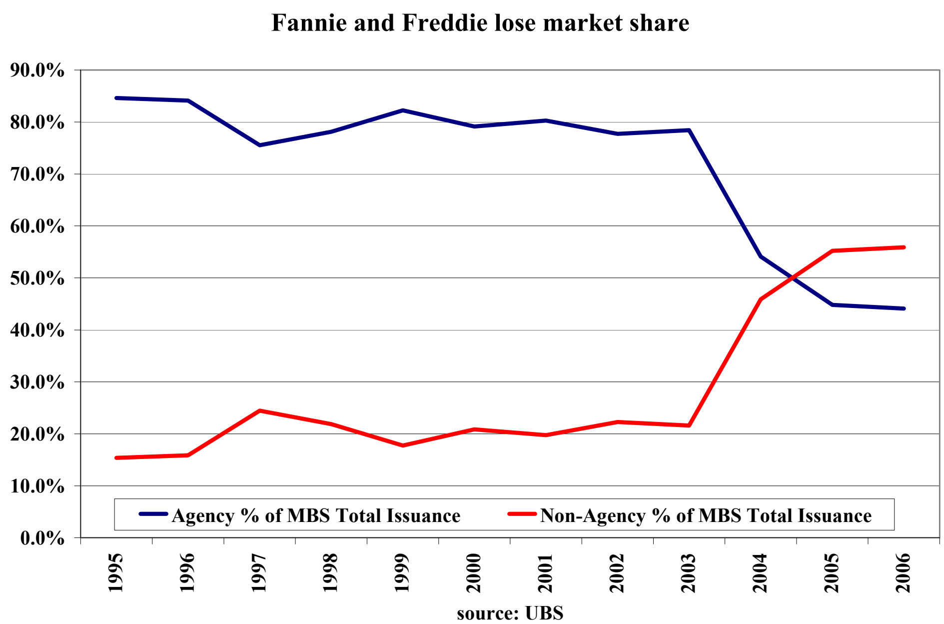
Sub-prime mortgage-backed securities are different from Agency MBS. The profile of the typical borrower in a sub-prime pool today is a loan-to-value ratio of 81% (without a piggyback, or second mortgage at origination), a FICO credit score of 623 and a debt-to-income ratio of 41%. The profile of the typical borrower in an Agency mortgage pool today is an LTV of 72%, FICO score of 720 and debt-to-income of about 30%. In other words, right off the bat, even before you get to the Agency guarantee, the sub-prime borrower is more likely to have more credit difficulty because of these underwriting standards.

Mortgage-backed securities that are not backed by the guarantee of Fannie Mae and Freddie Mac get their rating from the structure of the securities themselves. Thus, for a mortgage-backed security that is backed by pools of sub-prime mortgages, the ratings are due to subordination, over-collateralization and excess spread. To deal with the credit risk, sub-prime securitizations rely on senior/subordinate structures that tranche up cash flows to distribute credit risk among the various classes. The graphic below is an example of a generic $100 million sub-prime mortgage-backed security. The AAA tranche starts out with 20% of subordination below it, meaning that there would have to be $20 million of losses before it would suffer. Losses themselves would be borne by, in order, the first-loss C Class, the BBB tranche, the A tranche and the AA tranche. The ratings agencies bless the structure. In this way, Wall Street can take $100 million of lower credit mortgages and carve up the cash flows to create $80 million of a triple-A security.

Class	Rating	$MM	% of Pool	Sub-CE
A	AAA	80.00	80.00%	20.00%
M - 1	AA	7.00	7.00%	13.00%
M - 2	A	6.00	6.00%	7.00%
B	BBB	5.50	5.50%	1.50%
C	(Overcollateralization)	1.50	1.50%	

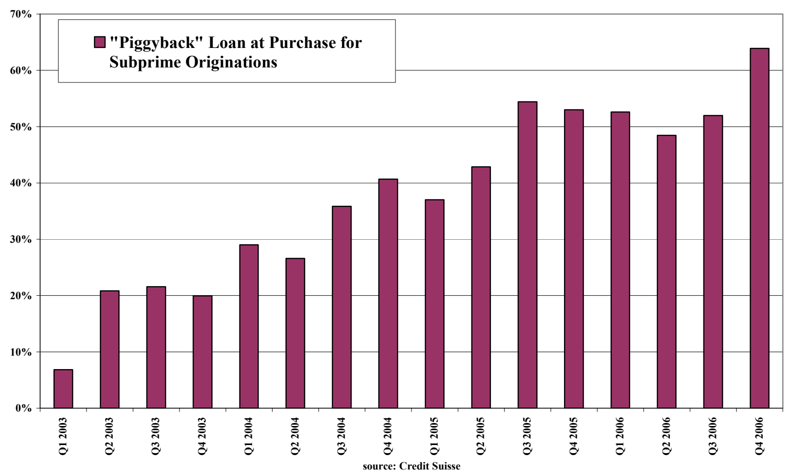
The creation of these mortgage-backed securities has exploded as the demand for the various tranches has skyrocketed, with over $2 trillion in residential mortgage-backed securities issued in 2006 alone. The powerful growth in the creation of new CDO structures accounted for a significant portion of the demand for the underlying product.

With the explosion of issuance, it shouldn't be a surprise that much of the activity is taking place outside of the province of Agency MBS. Fannie and Freddie have guidelines about what kinds of loans they can include in their MBS, so-called conforming loans. They can't be larger than $417,000, and the LTV at origination can be no higher than 80%. Plus, the borrowers are prime credits. The curious part, then, of the boom in housing in the US over the past five years is that it has occurred largely without the participation of Fannie and Freddie, and generally in riskier parts of the market. The graph below illustrates the loss of market share by Fannie and Freddie as non-agency activity has taken over.



Underwriting standards have declined as this process has continued. As houses got more expensive, mortgage lenders had to get creative in order to make them affordable. For example, the graph below shows the deterioration in one important underwriting criterion—the percentage of sub-prime loans in which the borrower required a second loan, or so-called piggyback loan, in order to make the downpayment. In the fourth quarter of 2006, two-thirds of all sub-prime borrowers needed a piggyback, up from 7% in the first quarter of 2003. Other criteria have also slipped: loan-to-value ratios have risen, debt-to-income levels have risen, and the percentage of no-documentation and low-documentation loans has risen.

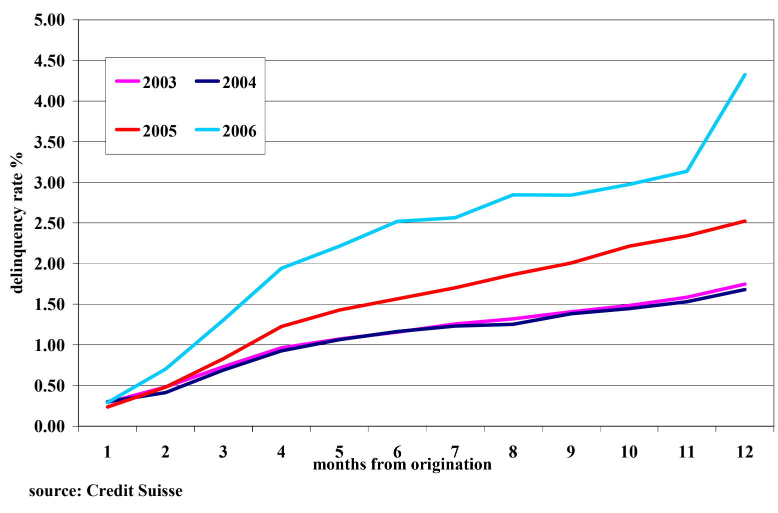
Borrowers stretched and lenders helped



One quote that will live in infamy from this sad chapter in American finance was uttered by William D. Dallas, founder and CEO of Ownit Mortgage Solutions, one of the 40-plus sub-prime mortgage lenders that have been forced into bankruptcy over the last few months. He was asked why his company continued to lower lending standards even as the risks grew. “The market is paying me more to do a no-income verification loan than it is paying me to do the full documentation loans,” he explained. “What would you do?”

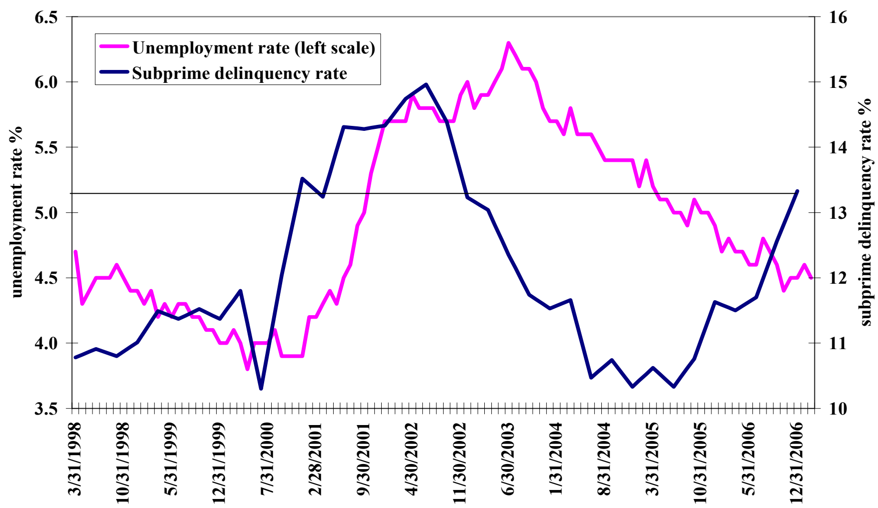
With this degradation of underwriting standards, many of these loans were doomed from the start. Indeed, as the next graph illustrates, looser underwriting standards have led to worsening credit performance as the housing cycle has exhausted itself. As measured by 60-day delinquency rates, the 2006 vintage of sub-prime loans has performed worse than any of the three prior years during its first 12 months.

2006 vintage subprime loans are off to rockiest start



So why do we think the troubles in sub-prime will not be a contained, minor problem? First, we are seeing rising delinquencies and defaults at a time of low unemployment. Typically, credit issues will come about when the economy slows, and people get laid off and run into difficulty meeting their financial obligations. As the graph below sets forth, the last time the delinquency rate was this high, the unemployment rate was almost 6%. (And the time before that, it was right at the beginning of the last recession with unemployment headed north.) If the jobs picture worsens with the slowdown in the economy, look for credit issues to get even worse.

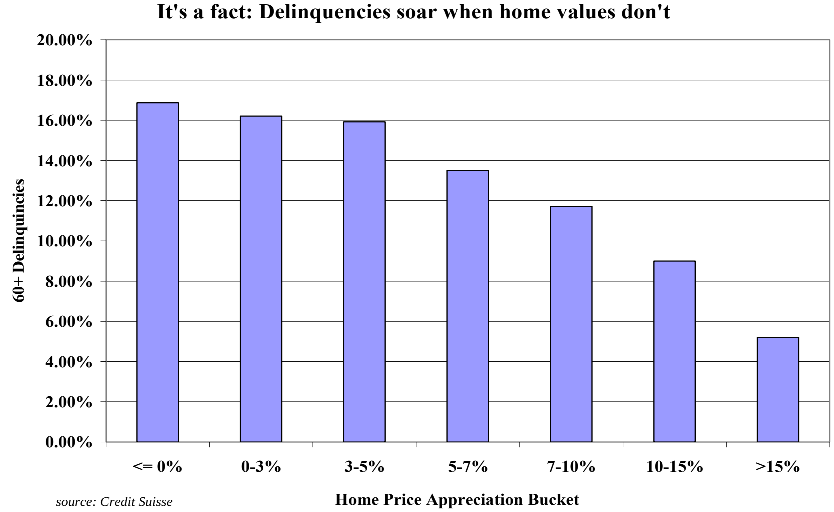
Subprime delinquency rate vs Unemployment rate



source: Bloomberg

Second, the severity of losses gets worse in times of lower home price appreciation. With the supply-demand imbalance in housing right now—over 4 million new and existing homes for sale and record-highs of months of supply—one sure way to clear the excess inventory is for prices to find a market-clearing level. Rising default rates could add another half million homes to the for-sale totals. Nationally, prices are sluggish but they haven't found that market-clearing level. The graph below filters delinquencies by the home price appreciation in the area. It's clear that the strong home price appreciation of the past several years has contributed to better credit performance. It's also clear that the current trends in home price values will likely lead to loss rates that are closer to historic highs. This should affect credit availability as lenders reduce their exposure to risk.

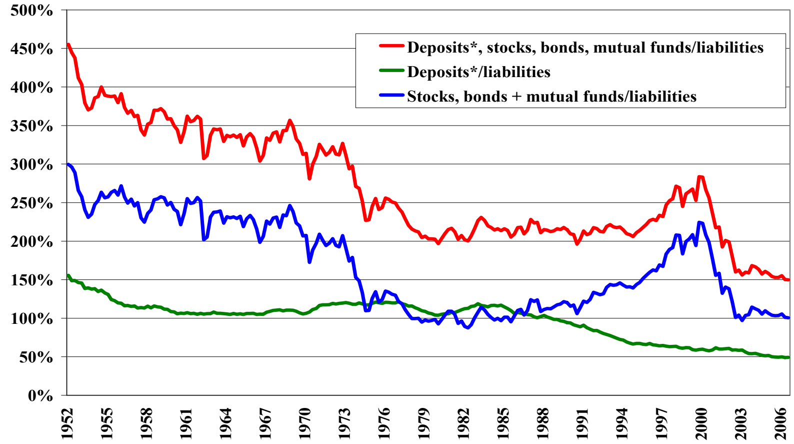
It's a fact: Delinquencies soar when home values don't



source: Credit Suisse

Third, on a national basis, the average homeowner is less liquid than ever. Needless to say, we are no longer a nation of savers. To find out how bad it is, we reviewed the Fed's flow of funds data which aggregates the national household balance sheet, and tracked the historical ratio of liquid assets to liabilities. For liquid assets we looked at deposits (which includes bank deposits and money market funds) and securities (which includes stocks, bonds and mutual funds). As the graph below illustrates, in the 1950s our parents and grandparents had enough in deposits (green line) to cover liabilities 1.5 to 1, but now we only keep cash around to cover 50% of our liabilities. Maybe we are using stocks and bonds as a savings proxy, a disintermediation of the banking system? No. Grandpa and Grandma used to have $3 in securities (blue line) for every $1 in liabilities, but now it's down to 1-to-1 coverage. Put it all together, and we find that liquid assets (red line) only cover liabilities 1.5 to 1, and this at a time when the S&P 500 is near all-time highs. Clearly, the average American does not have the same resources available to meet an emergency. Some would argue that there is always the collected unextracted equity in our homes. But newer homeowners likely don't have that much, and in any event we believe that the equity extraction mechanism will not be working quite as well in a period of low home price appreciation and poor credit performance.

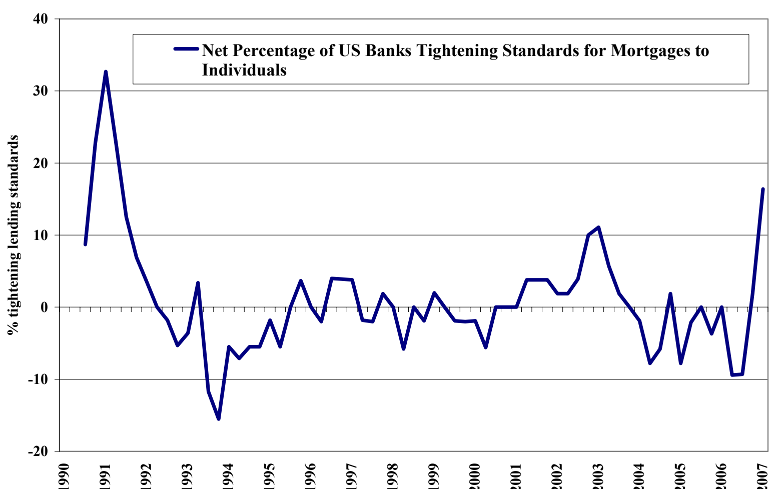
Living on the edge? The US homeowner is less liquid.



source: Federal Reserve. *Deposits include deposits and money market fund shares

Fourth, the availability of mortgage credit is already contracting. Most of the sub-prime lenders who are still in business are eliminating higher LTV loans, and raising their rates even as long-term rates are inching down. It will be harder for all borrowers to get loans in this environment. The graph below presents the results of a quarterly survey the Fed conducts with US banks in which they are asked if they are changing lending standards. At the last survey, 15% of respondents said they were tightening lending standards, the highest since the housing and consumer-led recession of 1991.

Harder to get credit from banks



source: the Federal Reserve

Our last reason for why this sub-prime problem is a potentially far-reaching one has no graph to go along with it. It takes some conceptual thinking. Some have suggested that the size of the sub-prime market share is small even with its recent growth. There is no single official source for these data, but Street research estimates that sub-prime accounts for approximately 12% to 15% of the entire $10 trillion mortgage universe and approximately 20% of the $2 trillion in residential mortgage-backed securities issued in 2006. The Alt-A universe of borrowers, which exists somewhere between sub-prime and prime because the borrower is typically unable to document income, adds another 10% to outstandings and 20% to 2006 originations. Alt-A borrowers, particularly the more recent vintages, are also exhibiting some credit difficulties. So it’s small but not insignificant. More to the point of this paragraph, however, is that the leverage on this segment of the market is significant. A primary source of demand for non-Agency mortgages—including sub-prime or Alt-A—has been the investor in Collateralized Debt Obligations or CDOs. A CDO is basically a securitization of securitizations. The growth in CDOs has been so strong that not only do you have CDOs that own the MBS, but you’ve got CDOs that synthetically mimic the performance of the MBS through the use of the derivatives market, and finally there are CDOs that own other CDOs. Thus for every dollar of sub-prime MBS there may be many more investment dollars balanced on the same collateral. And the demand for the actual securities is so strong that it has shrunk risk premia. We have been seeing a draining of liquidity to fund new CDO issuance, which should slow new mortgage creation. It will also be interesting to watch from the sidelines when performance slips and losses creep into the structures and the rating agencies begin to downgrade.

In conclusion, there have always been sub-prime borrowers, and sub-prime borrowers have always been worse credit performers than prime borrowers. Moreover, credit performance always gets worse when the economy slows, or home prices stop rising to the same extent, or interest rates rise. What makes each credit cycle different is the severity of the downside. This credit cycle, coming off such incredible highs, is bound to have lower lows. Now that homes for sale are far exceeding the demand for homes, construction is coming to a screeching halt, home price appreciation is changing to home price depreciation and performance issues are shutting off the funding spigot, the virtuous housing cycle is turning into a vicious one.

The Fed is watching all of this, we think, with a keen eye. In testimony last month, Ben Bernanke voiced a concern for the marginal, at-risk sub-prime borrower. “Several credible reports,” he said, “say that we are facing a tidal wave of defaults and foreclosures, which could strip these families of their major, if not their only, source of wealth and long-term economic security.” It is, we believe, a great time to own triple-A assets.

Jeremy Diamond
Managing Director
March 21, 2007

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