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Sub-Prime Meltdown

Root Causes and Potential Fixes Needed to Restore Confidence

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Life of Loan Collateral Transparency



The crisis in the subprime mortgage market has grabbed headlines for months now, and for good reason. Some subprime lenders have closed their doors for good, while others have adversely affected the profits of their parents, some of the biggest companies in the world. Capital markets investors are still holding their breath, waiting to see how far the ripples reach.

How could this happen? First, let's examine some of the problems in subprime lending that are latent in the system, especially in the secondary markets. Then, we'll propose a life of loan solution to assist in transparency in the mortgage markets.

Today, mortgage lending is a confusing and obtuse process for most borrowers, requiring pages and pages of documents to be signed at the loan closing. Most borrowers, however, are clueless as to their meaning. In essence, the signed documents cover three major topics—disclosures required by law or regulation, credit assessment on the borrower, and collateral valuation on the property. To originate a mortgage loan, lenders must approve the borrower's credit and the collateral standing for the loan in the event of default. The verification process

for the applicant's credit is straightforward—one or more credit repositories are accessed, a credit score is obtained, and the lender's credit modeling program, in conjunction with their

automated underwriting program, spits out an approval with corresponding terms and conditions. Then the lender orders the appropriate collateral documentation to estimate the value of the property, as well as check for other risk issues, such as hazard areas (like flood, earthquake, or lava flow zones), and title ownership of the property. The loan is approved, closed, re-checked for appropriate documentation and disclosures, and prepared for sale. A copy of the documentation is sent to the servicer and maintained by the originator in their imaging system of record.

What happens to the loan? It may be sold to a government sponsored enterprise (the two largest are Fannie Mae and Freddie Mac), a larger lender or Wall Street firm, or securitized directly by the originating lender via a special purpose entity (or trust). Typically, at a high level, the loan is pooled, checked for completeness, disclosures, and authenticity, and packaged for securitization. A rated bond is issued backed by the loans in the pool. Collateralized mortgage obligations (where the cash flows are stripped or "tranching") carry a rating on the early cash flows and no rating by the credit rating agencies on the later cash flows. The last cash flow, known as the residual, is typically not rated in any issue. Because its performance is heavily collateral-dependent, the performance of the underlying property is usually important to the performance of the residual.

Unfortunately, the estimation of collateral value is conducted only once, at least with any degree of accuracy—generally at inception of the loan. As the life of the loan increases, most downstream estimates are conducted via some limited valuation approach or with limited data.

For example, many buyers routinely screen loans using automated valuation models or broker price opinions. While this process is more cost effective and faster, it tends to be less precise.

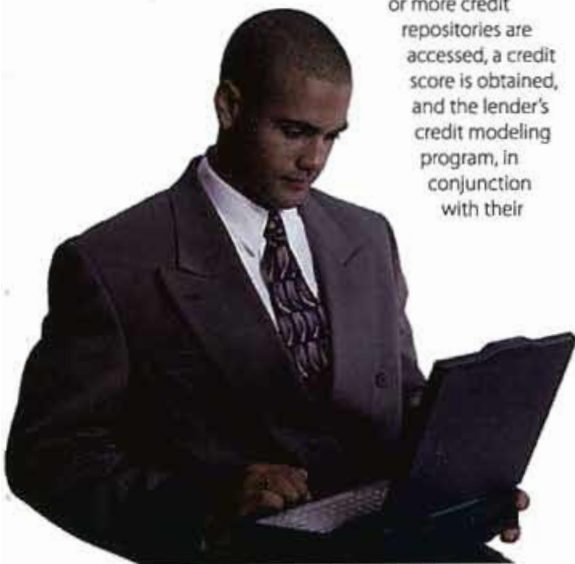
This is why mortgage-backed securities investors are holding their breath right now—as more subprime borrowers default, investors have no accurate, up-to-date way of knowing the collateral value of the loans backing their bonds. Depending on each individual market of each individual default, investors could either lose their expected returns or ride out this latest storm unscathed. Everyone is taking a wait-and-see approach. But if the markets had better collateral data and a more cost-effective way of receiving it downstream, investors wouldn't have to wait. They'd have the insight they needed right now.

The key lies in tracking the initial appraisal—still the best, most accurate, most complete source of valuation information—over the life of the loan. If the initial appraisal document could be available through electronic images and data for analyses by downstream users, investors could stay current on collateral value. This is not what happens now—far from it.

Today, originating lenders typically produce either images of appraisals on CDs or paper files for prospective buyers. Due diligence firms then re-enter limited data fields for analysis on behalf of prospective purchasers. Files that are questionable necessitate the purchase of AVMs and BPOs to substantiate values. This process is not only inefficient, it may also be unnecessary. Today, many originators may have all data from an appraisal sitting in an electronic vault, unbeknownst to prospective purchasers.

Originators, loan purchasers, due diligence firms, trading desks and secondary market participants need an efficient, accessible way to share those actual appraisal files and appraisal data and images. This data sharing could be accomplished simply by originators willing to share their appraisal data in an open format and would provide for better execution in the secondary

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• **demographic and economic market data** – Mapping the portfolio to such data can identify risk factors impacting home values and affordability such as employment trends, interest rates, foreclosure ratios, flips and market appreciation/depreciation.

• **home values** – Properties with values significantly higher than the neighborhood median are at higher risk of default. The higher the price relative to the market, the more difficult it can be to sell at full price under stress situations. Illiquidity can have a negative impact on default severity and frequency.

• **loan to Value ratios** – Obtaining updated valuations on the servicers portfolio may highlight higher than expected ratios due to decreasing values and/or inflated origination appraisals. The 2007 National Appraisal Survey released in December said 90% of the 1,200 appraisers surveyed reported feeling pressured to restate, adjust or change values, up from 55% in the first such survey in 2003.

• **lien obligations** – Lien data can identify silent seconds, judgments and improve accuracy of LTV calculations.

• **terms/interest rates** – Longer loan maturity or interest only payments result in a slower rate of amortization and borrower equity accumulation. High interest rates are another risk factor as they pay down less principal in the early years as loans with lower interest rates. A 30-year mortgage with a 6% rate pays down twice as much principal in the first five years as does one at 10%. High rates can also reflect that little or no "points" were paid, or higher underwriting risk.

• **loan type** – Many of today's non-traditional mortgages (40 year, Interest Only, Negative Amortization, Pay Option Arm, Piggy-Back, 103 & 107's, short-term ARMs) carry the risk of little or even negative equity buildup and payment shock for those with rate resets.

• **loan purpose** – Purchase and Refi's for lower interest rate have the lowest default frequency. Conversely, when equity is liquidated through a cash-out refinance, default frequency rises. In these cases, inflated appraisals are more common because the property value is solely the

opinion of an appraiser not a sale of the property.

• **property types** – Attached and multi-family properties typically realize greater losses in the event of default because these property types are less liquid than stand-alone homes and can remain on the market for longer. In a distress situation, this illiquidity could lead to higher carrying costs and higher default frequency.

• **occupancy** – A primary residence provides more value to an owner than a rental or secondary home and is therefore less likely to be subject to loss.

• **mortgage insurance** – Most high LTV loans carry mortgage insurance which will decrease the severity of loss in the event of default. When PMI is avoided through a piggy-back loan, the risk of default and severity of loss is increased.

• **concentration** – There will be increased risk when there is disproportionate concentration within state or metropolitan statistical area (MSA).

• **credit** – Lower FICO scores are a strong indicator of early payment default, however, the probability decreases as the loan ages. A credit history of late payments and default increase risk of future default. Ongoing credit monitoring will alert the servicer to current debt loads, additional liens and any delinquencies or defaults.

• **mortgage debt to income (DTI)** – Very high debt to income ratios tend to have higher default rates.

• **presence of co-borrowers**: Research shows that mortgages with two or more borrowers tend to perform better than mortgages with only one borrower. Many factors can contribute to default, some carrying more weight than others. Identifying risk factors and understanding the severity of those combinations that are present allows the servicer to focus limited resources in a more proactive and strategic approach to loss mitigation. ■

Tom O'Grady is the President and CEO for Pro-Teck Services. Tom can be reached at (800) 886-4949 x611 or togrady@protek.com.

Life of Loan (con't pg 45)

markets. Appraisal data sharing also would enable downstream participants to better price collateral in mortgage-backed residual interests. Better pricing of residuals should result in higher prices, lower yields, and more liquid markets, resulting in higher prices for originators—and in turn, more loans available for the consumer. At the very least, residual buyers and investors will have a better picture of what they are buying and will be armed with to-the-minute knowledge the next time the mortgage market takes a precipitous turn.

It takes two numbers to originate a mortgage—a credit number on the borrower and a collateral number on the property. Downstream buyers and the secondary markets have been limited in their collective abilities to price mortgages on both these numbers because of a lack of access to sufficient appraisal data and images.

Credit information and analytics are now plentiful, and their widespread use transformed the U.S. mortgage market. To achieve continued growth and sustainable profitability, collateral information and analytics must develop to the same level. Credit analytics developed in part from a willingness to share information. It's the same for collateral. To make all mortgage markets better, all mortgage participants must be willing to share collateral data in a national repository.

With access to collateral data and transparency throughout the life of the loan, the subprime wreck we're currently facing could be reduced to a mere speed bump. ■

Bill Rayburn is the CEO for FNC. Bill can be reached at (662) 236-2020 or lcox@fncinc.com.

Multiple Listing Services (con't pg 57)

known benefit of this data source is that you can reach over 75% of the available national MLS data by addressing just the top 120 MLS organizations.

The specific need for MLS data will vary by region and by data requirement. For example, in Southern Florida, using the MLS collected square foot data may be of great value, while in Texas gaining access to the home sales price would be paramount. Thus, not all of the MLS data is needed all the time. Keeping this in mind, there are three basic approaches to get what you need from an MLS organization:

• **"Facilitate"** –Hiring an outside facilitator