A New Level of Transparency: Consumer Credit Migration in the Capital Markets

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One of the positive outcomes of the recent credit crisis is that it has changed the commonly accepted standards for transparency. Structured finance marketplace participants are recognizing the need for fundamental changes. These changes will improve asset-level transparency and allow for proper assessment of the risk versus return tradeoff of investing in mortgage pools or credit-enhanced mortgage securities.

Recent market dislocations and the drastic reorganization of resources have led to enhanced research and development efforts around transparency and how to bring it to the market. The results are evident now in the form of updated analytical infrastructures.

Analysts are testing new data elements for inclusion in their evaluative models to clearly discern the true quality of the loans and enhance the due-diligence process. This time around, the emphasis is on strengthening the weak link of credit review, which in the past lacked emphasis due to the familiarity the market had with bank underwriting standards, asset performance and the dependence on rating agency criteria.

The market turmoil has created an appreciation for robust portfolio evaluation and pricing. Thorough evaluation requires a detailed and complex road map of crucial data elements to accurately anticipate future loan payment behavior. Loan-level mortgage information once considered an analytics luxury for the private-label mortgage-backed securities market is now becoming a standard. Today’s marketplace has several sources for this information: First American Core Logic / Loan Performance, Lewtan Technologies, Risk Span, Bloomberg, Black Box Logic and others, as well as the rating agencies Standard & Poor’s, Moody’s Investors Service, Fitch Ratings and the issuers themselves.

Then there is the effort to upgrade those loan-level data sets through the American Securitization Forum’s (ASF) Project RESTART effort, which recommends new data elements on loans and includes deidentified data elements derived from consumer credit data. While the implementation details of the ASF recommendations are being defined, the credit reporting agencies are moving forward directly to the capital markets with their consumer data and analytical offerings matched to mortgage loans backing these deals. As a result, mortgage analysts are testing these new data variables and are working to reconcile loan-level performance with consumer credit it nuances to produce a new set of key influencers that can better predict future prepayment and default behavior.

These key influencers, or “attributes,” comprise consumer credit report data elements distilled down into specific characteristics that have been proven to be highly predictive and reliable. These attributes offer significant insight into the likelihood of future payment and reference a variety of credit-related statistics, including number of open credit lines, balance amounts, credit utilization rate, estimated income, fraudulent activity, owner occupancy, public records, payment delinquency status, and types of credit accounts and loans.

Mortgage collateral information for private-label MBS deals is reported upon issuance and then updated monthly, providing critical insight into the payment changes that have occurred at the asset level. To leverage consumer credit data, it is just as important to refresh it monthly and some may argue even more frequently depending on the environment.

Below is an example of two consumers who appeared to have the same level of...
risk at mortgage origination, but their risk profiles diverged significantly over time, as seen by the change in their credit attributes. The table below shows their credit performance from June 2006 to June 2008.

The largest users of credit reporting agency data are lenders that use consumer credit attributes as part of their lending review process. It’s no secret to them that how consumers pay on other debt types can predict their performance on another credit line or loan, such as their mortgage.

An Experian study of 4.5 million consumers with current first mortgage accounts shows the correlated credit behaviors. The following graphs represent findings from this study.

Graph 1: Borrowers exhibiting high levels of credit card utilization were 27 times more likely to become delinquent on their mortgages.

Graph 2: The number of new credit accounts that a borrower has sought over the past two years is an early indicator of near-term mortgage delinquency. Here we see that borrowers who applied for five or more new credit accounts over the past two years were eight times more likely to default on their mortgage within the next three months.

As capital markets participants search for meaningful data to help optimize forecasting payment performance, credit data previously used by lenders is now able to provide new information and the additional “lift” in model performance they have been seeking.

As a test case, Experian analysts developed a default model combining key influencers from adjustable rate mortgage loan data with consumer credit data. The results depicted in Graph 3 identify meaningful differences in model performance as key consumer credit variables were added.

Used here is the Gini coefficient, a statistical measure to determine the model score performance. The Gini coefficient range is between 0 and 1. (Flipping a coin has a Gini of 0.) When applied to testing model outcomes, the higher the Gini coefficient, the greater the model’s ability to rank order observations on the likelihood of the modeled outcome. As depicted by the change in the Gini coefficient, the power of the model’s ability to predict performance was enhanced by 18.75 percent when key consumer credit variables were added to the loan-level data.

The linkage of credit data to collateral data provides mortgage-backed security investors with an option to receive the

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The example in Graph 4 shows the direct correlation between an increase in the balance-to-limit ratio and mortgage payment performance deterioration and thus acts as an early warning indicator. As consumers are increasingly overextended, their mortgage payment performance deteriorates a few months later.

Consumer credit data provides a “live” picture of the underlying credit migration and offers an opportunity for new and improved analysis of new and secondary market loan pools or Residential Mortgage-Backed Securities.

As the market continues to evolve, updated loan-level data combined with current real-estate information helps to secure the asset evaluation side of the mortgage analytical spectrum. Complementing that, updated deidentified consumer credit data will fill in the missing link to understanding the consumer payment patterns and help investors upgrade their credit default and prepayment models to better determine future delinquency and default behaviors when valuing mortgage loan pools and mortgage-backed securities.