

# RISKSPAN RE-CAP

October 2009; Volume 1, Issue 4  
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## Valuation Trends

### Examining Drivers of Default In Today's Credit Environment

With an unprecedented number of homeowners underwater on their mortgages, credit analysts have scrambled to develop a better understanding of the relationship between risk of default and various borrower and collateral characteristics.

To examine these relationships, analysts must first identify the appropriate metrics for measuring default risk. In an environment where credit performance is deteriorating, it is important to look not only at the recent default rates but also at the speed at which the delinquency pipeline is filling up. Investors cannot rely on recent defaults because they are a lagging indicator, often occurring more than a year after borrowers have stopped making mortgage payments. To this end, RiskSpan uses the cumulative non-performing roll rate—the rate at which loans that are current or under 60 days delinquent transition into a worse delinquency bucket—as its primary driver for default projections.

Analysts must also re-evaluate traditional views on risk characteristics. RiskSpan analyzed recent securitized data (2006-mid 2009) to calculate cumulative non-performance roll rates for different product types and different current CLTV buckets to explore the relationship between performance and various risk characteristics. The three charts below highlight a sample of this analysis: a comparison of roll rates by documentation type and occupancy status for the Alt-A 30-yr ARM product universe.

**LTV as Primary Driver:** LTV clearly has a positive correlation with default and delinquency risk, as is evident in the accompanying charts. The slope of the delinquency roll rate curve increases at higher CLTV levels. A borrower who has equity in their home can sell the house or refinance if they have trouble making a mortgage payment, whereas the only options for a troubled borrower who is underwater are to default or, in some instances, seek a modification.

**Occupancy Factor:** Financially secure borrowers have less incentive to stay current once they have negative equity, especially if they are an investor and their motivation for owning is to either flip the property or collect rental income in excess of the mortgage payment. And indeed, along most of the x-axis, mortgages backed by owner-occupied homes outperform investor-owned (see Figure 1). Interestingly, the investor and owner performance converges once current CLTV exceeds 130%, possibly indicating that at some level of negative equity, the owner/occupier begins to view his home as an investor would.

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Documentation Factor: While there is a noticeable gap between owner and investor performance, the level of loan documentation is a more powerful performance differentiator (see Figure 2). For loans with CLTV in excess of 100%, the roll rate spread between no-doc and full-doc is close to 250 bps and only about 50 bps between investor and owner (see Figure 3).

Whether using RiskSpan services or other risk management solutions, credit analysts should monitor performance trends and relationships and incorporate their observations into their analysis of portfolio risk.

Figure 1.

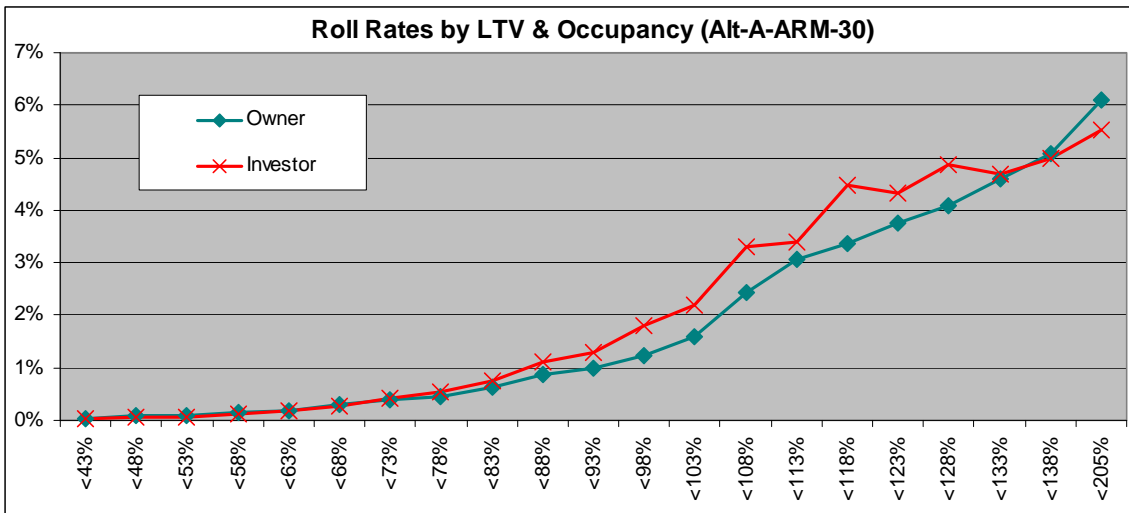


Figure 2.

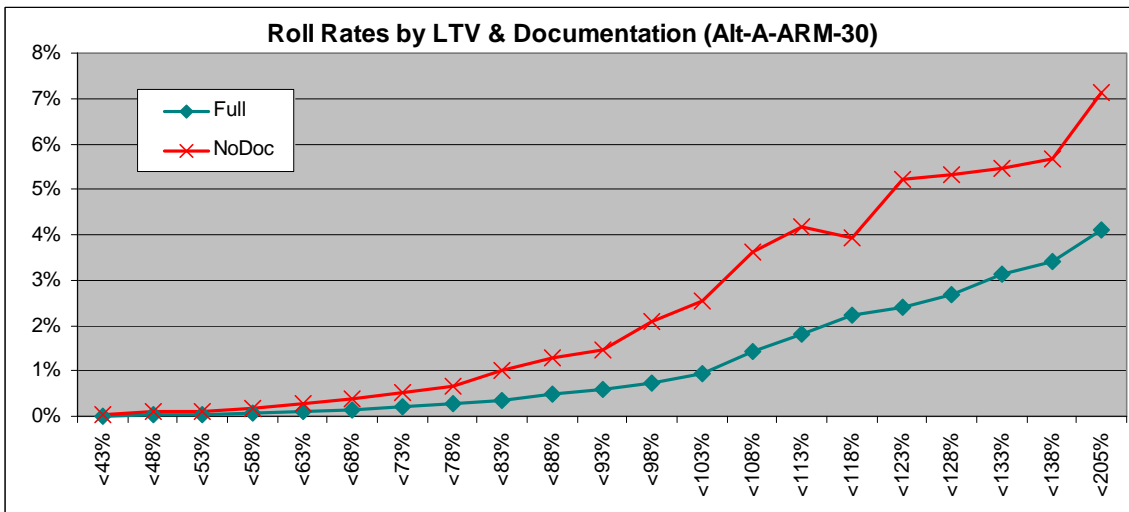
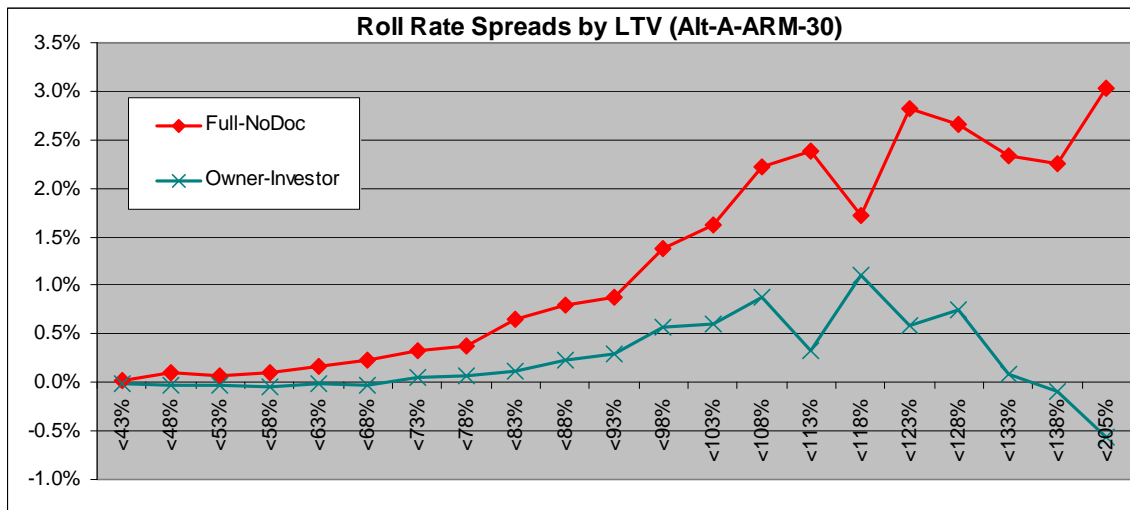


Figure 3.



## Product Corner

### Tools to Manage Credit Risk in Residential Mortgage Loan Portfolios

Today, every portfolio lender is focused on developing better tools to quantify and manage credit exposures embedded in their residential mortgage loan holdings.

Managing credit exposures requires detailed product level information about both the borrower and the collateral for the loan. Models are largely built on historical information but need to be calibrated to current conditions. Consequently, that information needs to be accurate, up to date and readily accessible. In addition to tracking loan performance data, portfolio managers are looking for additional information about current home prices and key borrower risk factors that impact the ability and motivation of borrowers to continue to make their mortgage payments. There have been enormous advances in the availability of this type of information. The key issue is no longer the availability of information but rather how to tie it all together and to be able to generate actionable management information.

RiskSpan's approach to solving this problem has been to add additional functionality to its Velocity® analytics platform to collect and manage critical data and channel it into a client's credit model – either RiskSpan's proprietary credit model or any other. The enhanced platform, RS Velocity® Whole Loan, combines comprehensive data management tools, prepayment and credit models, a stochastic (OAS) modeling framework and reporting capabilities on a single integrated web-based platform.

The new components included:

- 1) RS ETL (**E**xtract, **T**ransform and **L**oad) Tool to take disparate data from multiple servicing systems and map it to a common format. This process also involves checking for errors and omissions, correcting bad data and filling in the gaps wherever possible. A comprehensive tracking system is also necessary to manage this process on an ongoing basis.
- 2) Stratification and Query Tool to query the data and organize and report on it in a useable way. The RiskSpan Stratification Tool is designed to stratify data using multiple combinations of loan characteristics, borrower demographics, borrower credit information, and details about the collateral and its current value. Historical default and loss data can then be used for performance attribution, benchmarking and trend analysis. Those same groupings can then be loaded into the analytics system and the performance data can be utilized to calibrate the prepayment and default models.

A comprehensive data management and analytics system like RS Velocity® Whole Loan enables originators, portfolio investors and secondary market players to quickly analyze credit and prepayment trends, project future performance and establish fair market values across a wide range of potential economic and interest rate scenarios. The key is to be able to combine historical data with robust forward looking analysis. Specific applications for the output of this type of system include the tuning of modification programs, the establishment of realistic bands for loan loss reserves, the ability to produce enhanced income projections and the ability to monitor and manage performance across individual products, origination channels and servicers.

While no one can accurately predict the future, historical data and models can provide valuable insight into the range of possibilities that exist and the magnitude of risk that is embedded in the portfolio.