

US RMBS Seasoned Loan PD

Model Summary Document (MSD)

1. Model Purpose and Description

The model generates loan-level remaining lifetime probability of default for Fitch prime and Fitch Alt-A loans based on the surveillance data using a logistic regression approach.

2. Model Assumptions

The model applies the assumptions in the US RMBS rating criteria. The model also tests the assumptions for linear regression such as multicollinearity and linearity relationship between variables and outcome.

3. Model Inputs

The key variables used in the models are: score, change of cltv, loan age, overall weighted delinquency, 60 days delinquency, 90 days delinquency, dirty loan penalty. We also cap/floor two variables: loan age and change of cltv. Overall weighted delinquency is a time-decay weighted delinquency.

4. Model Development Data

The development sample is composed of loan-level information of 16 million agency loans originated during 1999 ~ 2011 from *Freddie Mac* and *Fannie Mae*, 1.79 million prime loans and 1.86 million Alt-A loans originated during 1991 ~ 2011. The concept of the Fitch sector will also be applied in the seasoned loan model as in the origination PD. All loans in the sample are first-lien and fixed-rate and none interest-only closed mortgages.

All data cleaning, data analysis and modelling are performed with R statistical software.

5. Model Limitations

The model is only intended to be used to evaluate US RMBS transactions.

6. Material Changes

This is the v1.0.0, any future changes will be reflected here.

Contact Information

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