

**Repurchase Demands:  
*Could Fraud  
be at the Core?***

**YES!**

## **REPURCHASE DEMANDS: *Could Fraud be At the Core?***

### **Current Environment**

- “Abnormally high” level of repurchase demands
- Mergers and implosions
- Fraud’s contribution is not fully documented but is significant

## **REPURCHASE DEMANDS: *Could Fraud be At the Core?***

### **Significant Risks**

- “Institutionalized” fraud
- Unlimited supply of schemes and schemers
- May take up to four years to discover

## **REPURCHASE DEMANDS: *Could Fraud be At the Core?***

- **Fraud is expensive**
- **In first year, loans originated in fraud are**
  - 8x more likely to go delinquent
  - 20x more likely to enter foreclosure process

## **REPURCHASE DEMANDS: *Could Fraud be At the Core?***

- **Direct lender loss is 40 to 60 percent of original loan amount**
- **Additional costs to communities, local governments, investors and secondary market**

# REPURCHASE DEMANDS: *Could Fraud be At the Core?*

## Speakers

**Rachel Dollar, Esq.**

*Lanahan & Reilly, Mortgagefraudblog.com*

**Murray Markowitz**

*Moody's Investor Service,  
RBMS Team, Asset Finance Group*

**Derek Stanford, Ph.D.**

*Interthinx*

**Corey Carlisle**

*Mortgage Bankers Association*

# MORTGAGE ORIGINATION PRACTICES AND SECURITIZATION TRANSACTIONS:

*The Moody's Analytical Approach*

**Murray R. Markowitz**

*Vice President – Senior Analyst*

*Asset Finance Group*

*New York, New York*



**Moody's Investors Service**

## ORIGINATION PRACTICES

- **What is a lender doing to verify the accuracy of information it receives with respect to a loan:**
  - before that loan is funded?
  - after that loan is funded?



## BORROWER INFORMATION

- **How does the originator verify:**
  - Borrower identity
  - Social Security Number
  - Credit history
  - Employment history
  - Income and assets



## GOALS OF VERIFYING PERSONAL INFORMATION

- Detect identity theft
- Detect “straw buyers”
- Detect inaccurate information provided to qualify for a loan



## **HOW IS BORROWER INFORMATION VERIFIED IN DIFFERENT DOCUMENTATION PROGRAMS?**

- **How is borrower employment verified in a stated documentation program, if at all?**
- **Is the information that the borrower provided reasonable?**
- **What does the lender look at for self-employed borrowers?**



## DOWN PAYMENTS

- Source of income
- Duration of control



## APPRAISALS

- Process
- Monitoring
- Due diligence



## APPRAISAL MONITORING

- Automated Valuation Models
- Other Software Systems
- In-house Reviewers



## **AFTER FUNDING**

- **Quality control**
- **Audits**
- **Training programs/continuing education**



## HOW DOES MOODY'S USE THE INFORMATION?

- **Securitization pool review process**
- **High quality origination practices in theory lead to reduced frequency of default and severity**
- **Moody's does not receive information on a loan-level basis**



## REPRESENTATIONS AND WARRANTIES

- **Representations and warranties are given by the sellers**
  - Loan characteristics
  - Validity and enforceability of the lien
  - Good title/validity of title insurance
  - Valid
  - Compliance with laws
  - No fraud



## REMEDIES FOR BREACH

- Remedy is repurchase of the loan from the trust or substitution of another loan or loans
- Problem of proof
- Early Payment Defaults
- Systemic fraud may mean larger repurchase obligations



## **EVALUATING REPRESENTATIONS AND WARRANTIES**

- **Financial strength and stability of the entity providing reps and warranties**
- **Problem of high volumes of repurchases.**



# **Beneath the Surface:**

## ***Measuring Risk in Mortgage Data***

**Derek Stanford, Ph.D.**  
*Director of Analytics  
Interthinx*



## INTRODUCTION

- Repurchase risk often lurks beneath the surface data
- Misrepresentation frequently causes this hidden risk
- **This talk will focus on two areas:**
  - Data issues related to accurate risk measurement
  - Methods to meet these challenges

## PART 1: DATA

- Surface level
- Risk from false values
- Risk from missing values
- Data context



## PART 2: METHODS

- Individual values
- Interactions
- Predictive models

## DATA: SURFACE LEVEL

- **The standard risk paradigm:**
  - Borrower
  - Collateral
  - Other participants
- **Underwriting guidelines and traditional credit characteristics**
- **Exclusionary lists**

*Surface level assessment misses critical risk indicators.*

## DATA: FALSE VALUES

- Risk assessment based on false values is misleading
- Intentionally fraudulent values carry more risk than typos
- Statistical models need to account for the “errors in variables” problem

*Assess risk based on the real values,  
not just the values in front of you.*

## DATA: MISSING VALUES

- **Missing at random vs. Missing with intent**
- **Solutions: Measure it, then fix it**
  - Statistical methods
  - Forensic methods

*What you don't know  
can hurt you.*



## DATA CONTEXT

- **What is context?**
  - History (of the property, participants, etc.)
  - Age of the data
  - Knowing what questions to ask

***Context is a matter of synthesis, not analysis.***

## METHODS: INDIVIDUAL VALUES

- **Define boundaries**
  - Valid range
  - Purpose of dataset
- **Implement processes for clean, complete data**
- **Examine individual effects**

*Build understanding by starting with the smallest pieces.*

## METHODS: INTERACTIONS

- The effect of one variable depends on the value of another variable
- Multiple pieces of data must be considered together

*Understanding is more than the sum of the parts.*

## METHODS: PREDICTIVE MODELS

- **Quantitative estimates**
  - Overall risk, or sub-models for specific risk sources
  - Margin of error, Confidence interval
- **Statistical models allow:**
  - Solutions for some kind of missing data problems (imputation)
  - Inclusion of multiple risk types (survival analysis)
  - Clear modeling of time-lag effects (time series)
  - Simulation studies

*Appropriate data required.*

## CONCLUSION

**Beware what  
lurks beneath  
the surface!**

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