

MORTGAGE BANKERS ASSOCIATION

MBA'S NATIONAL MORTGAGE SERVICING CONFERENCE & EXPO 2009 / TAMPA

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Loan Level Analytics

Combining Data, Analytics, and Process

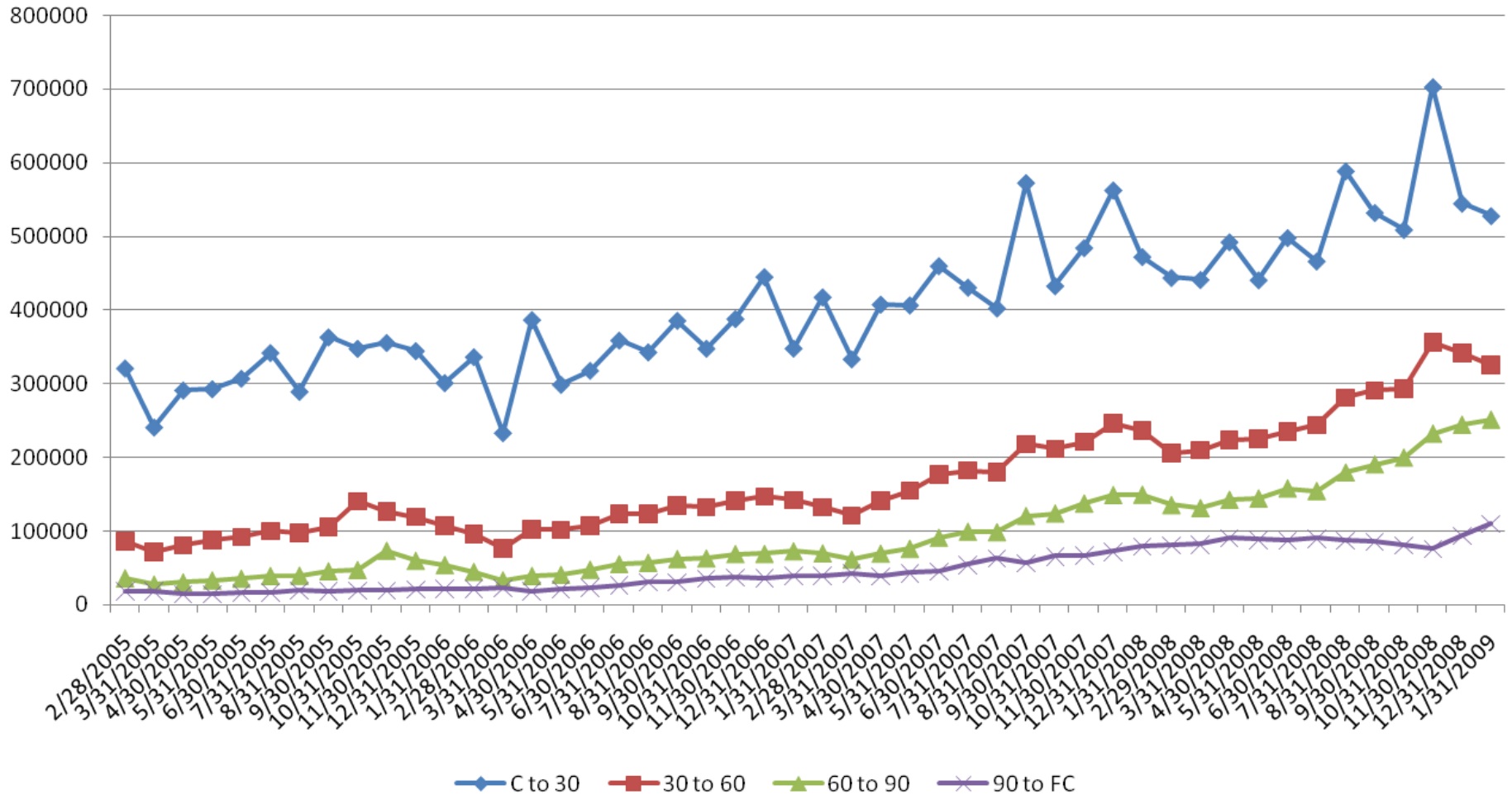
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- Loan Level vs. Pre-Aggregated vs. Survey
 - Survey
 - Good for understanding high level performance trends
 - “Easy” to provide
 - Difficult to QC, and ensure definitional consistency
 - Pre-Aggregated
 - Good for reporting
 - Easier to work with, smaller data sets
 - Needs interpolation for comparative purposes
 - Loan Level
 - Most granular and powerful, requires most expertise to work with
 - Necessary for transition matrices and payment string analysis
 - Necessary for modeling

- Payment String Analysis
 - Track payment behavior of individual borrowers over time
 - Incorporate historic payment behavior into PD analysis
 - For example: For FHA 2006 Originations located in Florida there is a large disparity in performance when studying data on a County level:

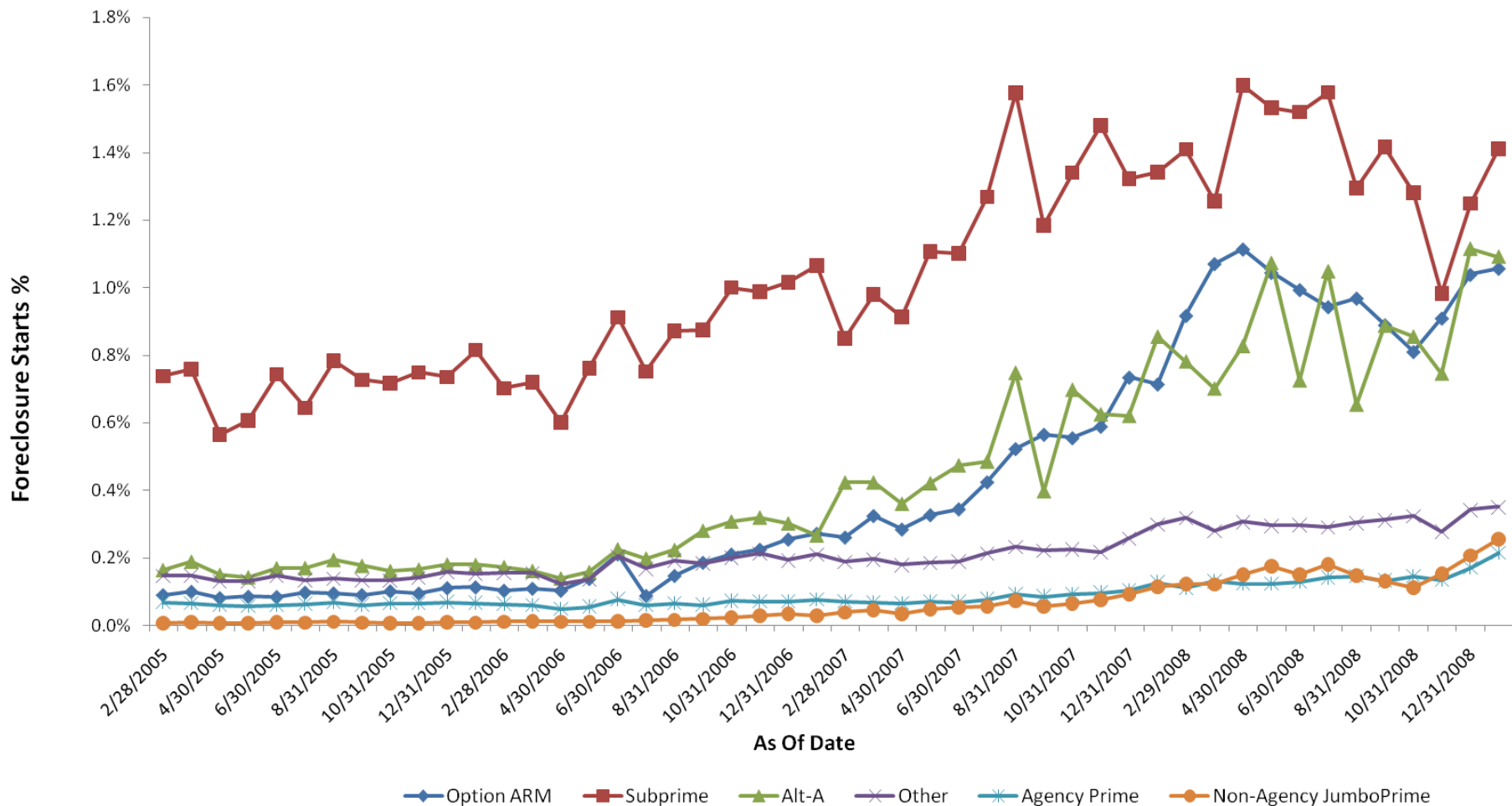
	Duval County	Miami-Dade County
60 Days or More in the First 6 Payments	3.5%	6.0%
Everbeen 60	25.5%	49.1%
% of 60 Day Delinquencies that cure in the following month	21.6%	8.2%
% of 60 Day cures that subsequently result in Foreclosure	25.5%	50.0%

Loans Rolling to a More Delinquent Status for All Loans

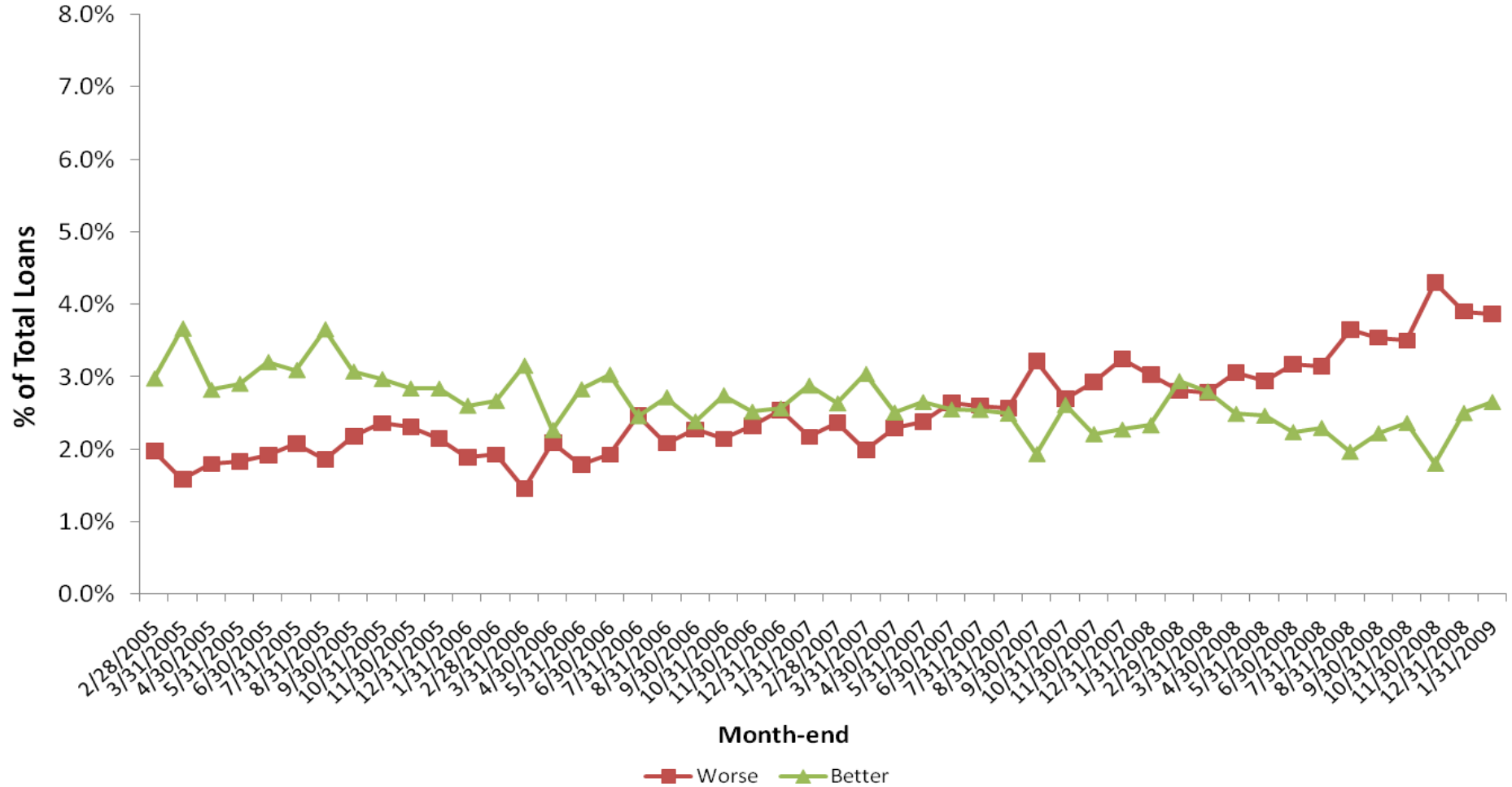


Loan counts are based on LPS Applied Analytics Servicing Database of over 34 million mortgages.

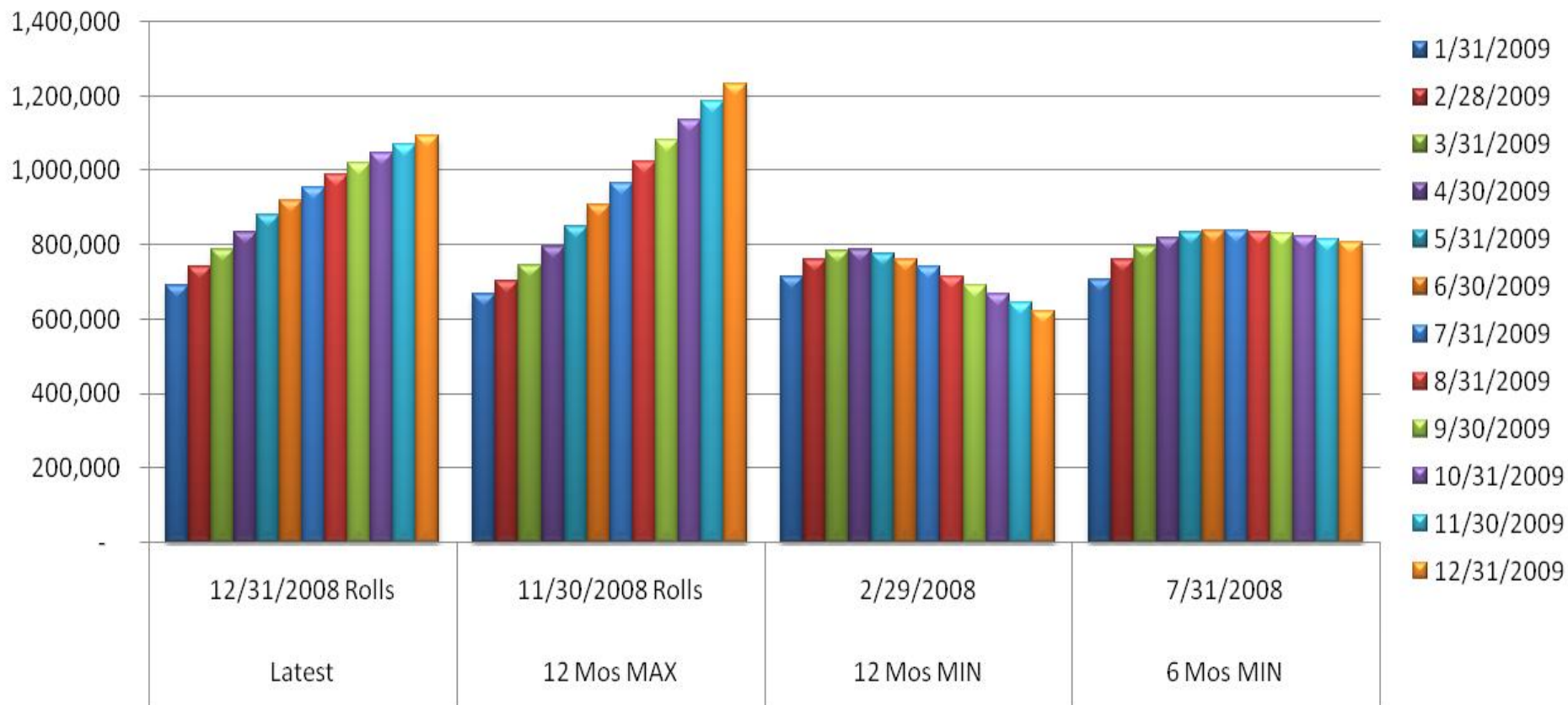
FC Starts by Product Type

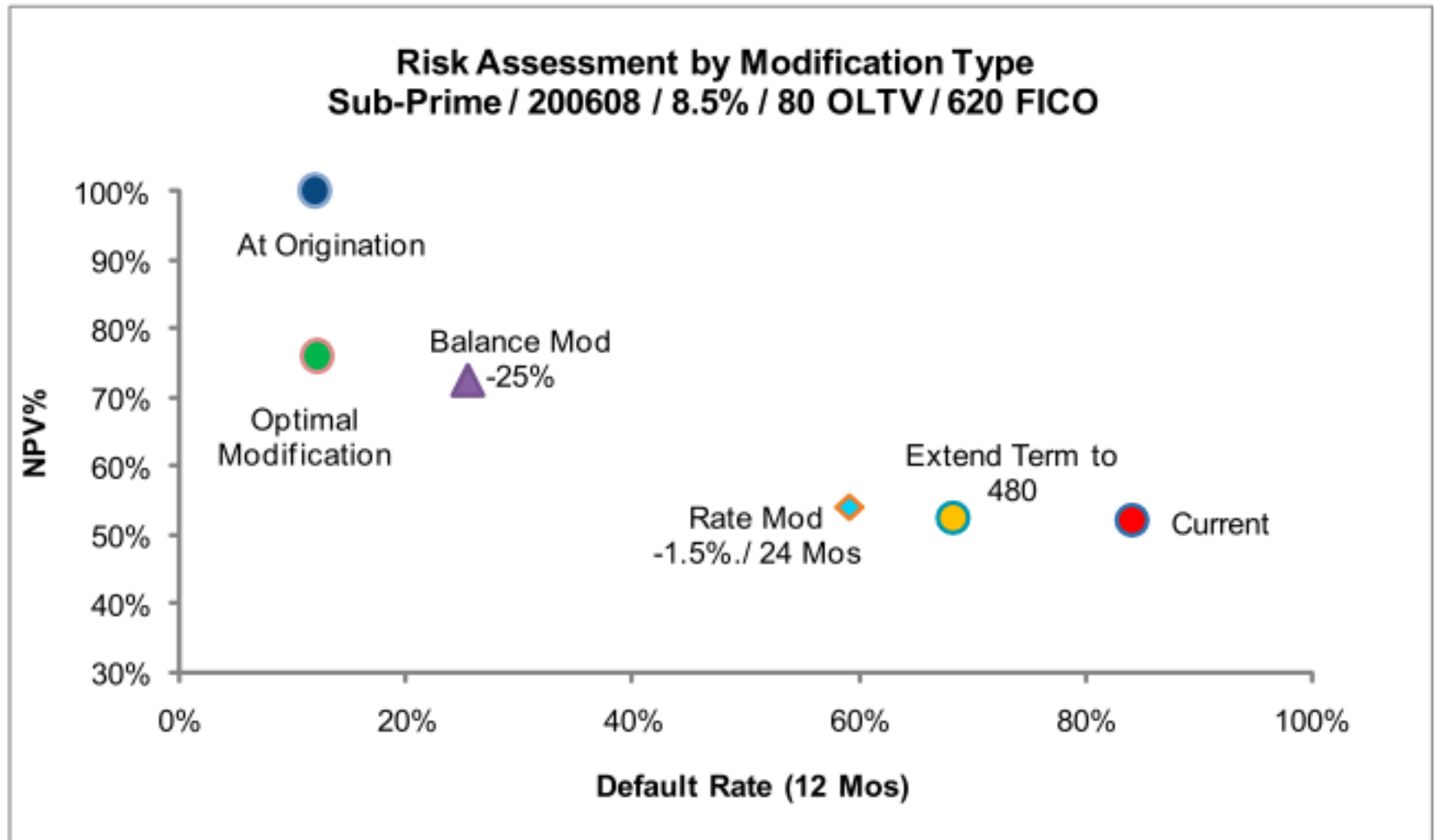


Roll Rate by Date Across Better/Worse Delinquency



Foreclosure Inventory Projections by Scenario





A systematic process should be followed to make value-optimizing decisions, including customer contact strategies

- » Ensure the right governance and management model is in place to drive successful implementation

- » Strategies should be dynamic based on constant test-and-control monitoring

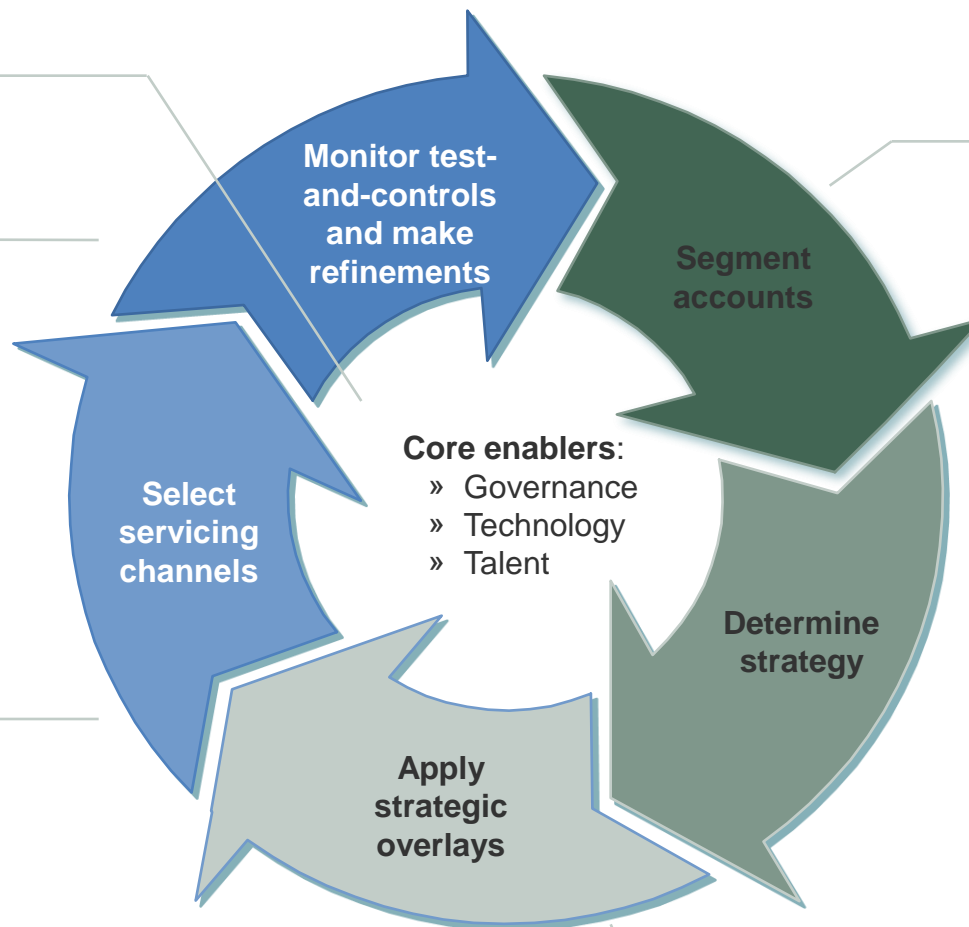
» **Key questions:**

- Are we using optimal contact strategies within each segment?

- » For each strategy-overlay combination, select the best servicing options and implement through a champion-challenger model

» **Key questions:**

- Trade-off may be cash now versus value later – where do we land on that continuum?
- Which segments should be serviced internally vs. externally?



- » Develop enhanced risk based segmentation to form the basis contact and treatment decisions

» **Key questions:**

- Include pre-delinquency?
- Include other portfolios/relationships?

- » Determine optimal strategy for each specific segment, e.g., classic collections, loss mitigation, liquidation / debt reclamation, foreclosure

» **Key questions:**

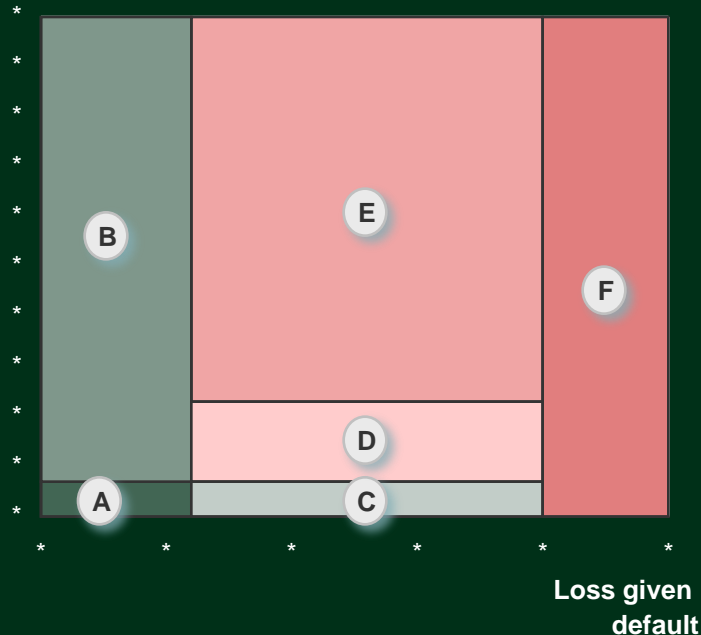
- How do contact strategies vary by segment and account status?
- How should we think about timing?

- » Apply select overlays (e.g., geography, relationship, contact) to bifurcate strategies for optimal servicing

Step 1: Develop a value-at-risk segmentation model for troubled assets. Contact strategy (and cost) can vary for given segments

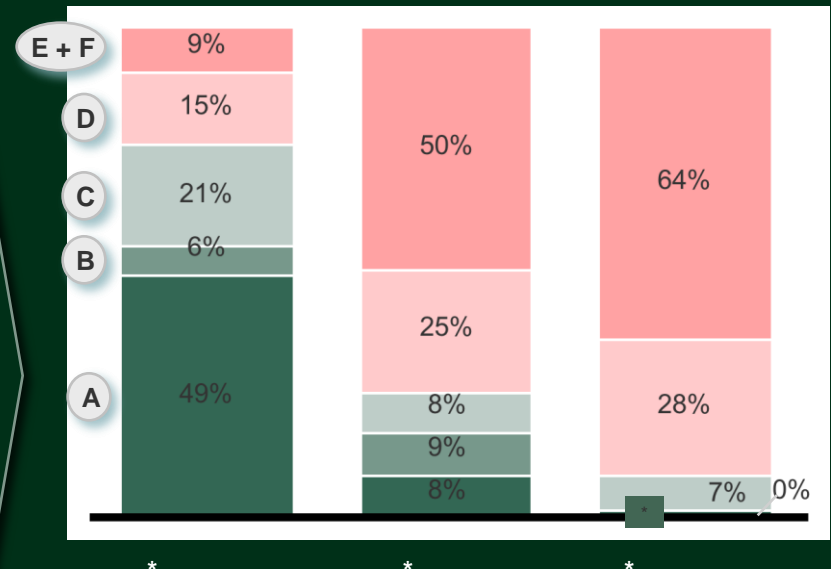
The segmentation of customers by PD together with the distribution of LGD across accounts. . .

Probability of default



- » PD / LGD model requires historical bureau data, collections performance data, performance on other products, macro economic forecasts, etc

. . . demonstrates a significant concentration of losses



- » Best in class collections models are able to separate the 24% of accounts that result in 92% of losses for targeted focus or bad portfolio separation
- » Impact potential of these models can be tremendous

The “non-Delinquent” Loan Model is built to predict the likelihood that the loan (currently not past due) will be 1 (or worse) payments behind in three months or less.

Samples used to build models were pulled as of 3/31/08 and performance is as of 6/30/08. (2nd quarter 2008 performance).

Key Attributes or Predictors

Current Loan Balance (+)
 Household Deposit Amount (-)
 Average Payment Amount (-)
 Minimum Payment Amount Last 12 Months (-)
 Number of Missed Payments Last 12 Months (+)

Model Performance Expectations

Miamisburg Mortgage	0 Days Delinquent (Not currently Past Due)	Bad = 1+ payments late (within 90 days)	
<u>Segment</u>	<u>Expected % of Population</u>	<u>Expected Bad Rate</u>	<u>Bad Rate "Index"</u>
F (Very High Risk)	5.11%	4.71%	6.93
H (High Risk)	15.30%	1.19%	1.75
M (Moderate Risk)	32.18%	0.54%	0.79
L (Low Risk)	39.03%	0.19%	0.28
S (Super Low Risk)	8.38%	0.06%	0.09
Total	100.00%	0.68%	

The 30-59 Day Loan Model is built to predict the likelihood that the loan (currently 30-59 days past due) will be 3 (or worse) payments behind in three months or less.

Samples used to build models were pulled as of 3/31/08 and performance is as of 6/30/08. (2nd quarter 2008 performance).

Key Attributes or Predictors

Current Loan Balance (+)
 Household Deposit Amount (-)
 Average Payment Amount (-)
 Maximum Payment Amount Last 12 Months (-)

Model Performance Expectations

Miamisburg Mortgage	30 - 59 Days Late (1 Payment Past Due)	Bad = 3+ payments late (within 90 days)	
<u>Segment</u>	<u>Expected % of Population</u>	<u>Expected Bad Rate</u>	<u>Bad Rate "Index"</u>
F (Very High Risk)	12.92%	46.27%	2.55
H (High Risk)	24.74%	23.49%	1.30
M (Moderate Risk)	23.25%	12.14%	0.67
L (Low Risk)	26.57%	10.88%	0.60
S (Super Low Risk)	12.52%	5.04%	0.28
Total	100.00%	18.13%	

The 60+ Day Loan Model is built to predict the likelihood that the loan (currently 60+ days past due) will be 5 (or worse) payments behind in three months or less.

Samples used to build models were pulled as of 3/31/08 and performance is as of 6/30/08. (2nd quarter 2008 performance).


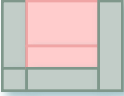
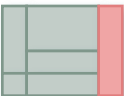
Key Attributes or Predictors

Current Loan Balance (+)
 # of Days Past Due (+)
 Average Payment Amount (-)
 Maximum Payment Amount Last 12 Months (-)

Model Performance Expectations

Miamisburg Mortgage	>= 60 Days Late (2+ Payment Past Due)	Bad = 5+ payments late (within 90 days)	
<u>Segment</u>	<u>Expected % of Population</u>	<u>Expected Bad Rate</u>	<u>Bad Rate "Index"</u>
F (Very High Risk)	11.64%	86.82%	1.54
H (High Risk)	24.54%	77.45%	1.37
M (Moderate Risk)	29.24%	57.13%	1.01
L (Low Risk)	31.98%	32.12%	0.57
S (Super Low Risk)	2.60%	10.26%	0.18
Total	100.00%	56.35%	

Step 2b: Apply strategies to specific segments across the collections and loss mitigation time-line.

Bucket:		1	2	3	4	5	6+	Post C/O
		(1-29 DPD)	(30-59 DPD)	(60-89 DPD)	(90-119 DPD)	(120-149 DPD)	(150-179 DPD)	(180+ DPD)
Segments								
Low value at risk 		Classic collections (i.e., core collections) <ul style="list-style-type: none"> Objective: to capture payments Dialer based (with sub-segment hold-outs for self cures) Limited palette without modifications Low cost communication strategies Leverage service opportunities/points of service 						Recoveries
Underwater and at risk 		Loss Mitigation (i.e., loss mit / collections hybrid) <ul style="list-style-type: none"> Objective: to cure customers (potentially with mods) Improved call-level strategy and penetration (outbound and inbound calling) Early stage palette plus rationalized set of modifications Focused and continuous communication through all channels Borrower outreach 						
Deeply underwater 		Debt reclamation (i.e., liquidation collectors) <ul style="list-style-type: none"> Objective: to maximize value of incurable accounts or to build willingness Outbound and inbound calling Loss mitigation palette plus liquidation options (e.g., settlements, principal reduction with upside sharing) Contact specialists 						
Specialist groups <ul style="list-style-type: none"> » Micro-segment owners developing contact, communication and treatment strategies. » Foreclosure – foreclosure strategy run in parallel to other strategies. » Mod processing – back office support function to review and approve only. No customer contact. » Short sale group – engages with customers and realtors undergoing a short sale or deed-in-lieu. » Back office skip group. 								

Step 3: Apply a set of overlays to select the optimal message, treatment and execution channel for debt servicing



- » **Strategic segmentation**
 - Serves as the foundational element to identify channel specific strategic pathways

- » **Contact / no contact**
 - Depending on servicer's ability to contact customer's in early stage buckets, different approaches to servicing should be considered

- » **Complete customer financial situation**
 - Other relationships with institution
 - Other assets or high ability to pay
 - Success in early buckets

- » **Geography**
 - The location of the collateral may require an alternative servicing approach