



Quantifying Fraud Loss

Measuring the Effectiveness of
Anti-Fraud Efforts

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Why is it important to Quantify Fraud Loss?




- To understand the magnitude of the problem at your institution
 - How much money are you losing to fraud?
- To measure the effectiveness of your current Anti-Fraud Program
 - Are you spending and deploying resources in the right areas?
 - Are you preventing or mitigating enough fraud?
- To drive changes in your anti-fraud program going forward
 - Focus on areas of fraud concerns
 - Invest in resources that will make the most impact

Determine the Magnitude of Fraud

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- Fraud is rampant in the industry
 - Mortgage fraud is in the news
 - Fraud losses are growing
 - Market appreciation hid fraud
 - More desperate players
 - Ease of committing fraud
 - Big Returns
 - Low likelihood of repercussions
 - How much is your company losing on fraud?
 - Senior Management, investors, regulators...everyone will want to know!

Analyze your current Anti-Fraud Program


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- Evaluate your current controls (processes, tools, systems, training, etc.)
 - Are the controls efficient?
 - Are the controls standardized across all regions?
 - Are there newer more effective processes?
 - Are there redundancies/duplications?
 - Determine the cost of your Anti-Fraud Program
 - What are your internal costs?
 - What are your external costs?
 - Identify gaps or problems
 - Limitations of systems used across departments
 - Lack of flexibility
 - Systems don't speak to each other
 - Weak departments, regions or business channels
 - Acquired companies with different fraud controls/systems
 - Certain products may be more susceptible to fraud
 - Include different breakdowns of data
 - Product
 - Regions
 - Document Type, etc.

Analyze Your Anti-Fraud Program



- Tangible Benefits
 - Prevention
 - Mitigation and Recovery Efforts
- Intangible Benefits
 - Deterrence of fraudsters
 - Reputation in community for fighting fraud
 - Feedback of lessons learned to improve operations

Improve Your Anti-Fraud Program

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- Develop Plan of Attack
 - Use Key Performance Indicators to measure effectiveness
 - Evaluate ROI (cost vs. benefits)
 - Look for opportunities
 - Return on mitigation
 - Tools, systems to replace old processes
 - Add/remove/modify existing programs
 - Be careful! Dollars spent on fraud prevention are not proportionate to dollars saved from Anti-Fraud efforts
 - One small gap can lead to millions in losses
 - Eliminate overkill—don't need belt and suspenders approach

Implementation

- How to calculate Fraud Loss?
 - Focus on loans with identified fraud from audits
 - Delinquent audits (including High Loss)
 - Investor audits
 - MI Denials
 - FPD/EPD Reviews
 - Miscellaneous Referrals (Servicing)
 - Liquidated Losses with Fraud Findings
 - REOs
 - Short Sales
 - Charge Offs
 - NPAs
 - Active Loans with Fraud Findings
 - Likelihood of loss (based on finding type and loans status)
 - Loss severity (based on lien position)
 - Breakdown of losses
 - Regions
 - Products
 - Doc Type

Challenges and Limitations

- Challenges and Limitations
 - Limited sample of loans audited
 - Not economically feasible to audit all loans
 - Show fraud as a % of audited loans
 - Extrapolate % of fraud and estimate fraud loss on a larger similar pool
 - Audits limited in scope to identify fraud
 - Can't find all fraud—limited time and resources—must balance
 - System challenges
 - Different originating system platforms
 - Data integrity
 - Changing data (archived loans)

Solutions

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- Solutions
 - Develop various scopes to identify fraud
 - Target audits
 - Certain products
 - Regions
 - Business Channels
 - Develop Central Data Warehouse to hold data
 - Standardized data and terms
 - Allows for enhanced reporting and analytics

Fraud Loss Report (Sample)



FRAUD PREVENTION AND MITIGATION FINANCIAL SUMMARY

(\$000s)

Losses

Total Liquidated Losses
Liquidated Losses - Loans Audited
Liquidated Fraud Losses (Fraud Findings)
Percentage of Fraud Losses

	Q1 '07	Q2 '07
Total Liquidated Losses	10,000	12,000
Liquidated Losses - Loans Audited	5,000	5,000
Liquidated Fraud Losses (Fraud Findings)	1,000	1,500
Percentage of Fraud Losses	10.0%	30.0%

Fraud Costs

	Q1 '07	Q2 '07
Total Fraud Costs	6,000	6,000
Prevention	5,000	5,000
Mitigation	1,000	1,000

Effectiveness of Anti-Fraud Efforts

PFQC Fraud Catches
Appraisal Fraud Catches
Net Loss Recovered/Avoided
Total

	Q1 '07	Q2 '07
Total Anti-Fraud Efforts	45,000	45,000
Prevention	15,000	15,000
Mitigation	n/a	n/a
Appraisal Fraud Catches	5,000	n/a
Net Loss Recovered/Avoided	n/a	25,000
Total	20,000	25,000

Numbers provided are not from actual Fraud Loss Report

Fraud Loss Report (Sample)



Actual Fraud Losses	Q4 2007		
	Loan Count	% Total Loan Count	Actual Loss
Total Liquidated Losses			
Audited Loans			
Fraud Loss			

Finding Type	Q4 2007		
	Loan Count	% Total Loan Count	Actual Loss
Asset			
Collateral			
Credit			
Employment/Income			
Occupancy			
Grand Total			

Measure all costs

- Internal Fraud Cost Per Loan
 - Identify all departments with Anti-Fraud activities
 - Approvals & Monitoring of Third Parties (brokers, appraisers, closing agents, etc.)
 - Underwriting activities
 - Quality Control (Pre and Post)
 - Repurchases and fraud collections
 - Determine each area's percentage of anti-fraud efforts
 - Multiple cost of department for a given time period (e.g., quarter, month) with Fraud%
 - Divide total by loan production to get Total Fraud cost per loan for each area
 - Add up totals to get Internal Fraud Cost Per Loan

$$\text{Internal Fraud CPL} = \frac{\text{Department Costs Allocated to Fraud}}{\text{Loan Production}}$$

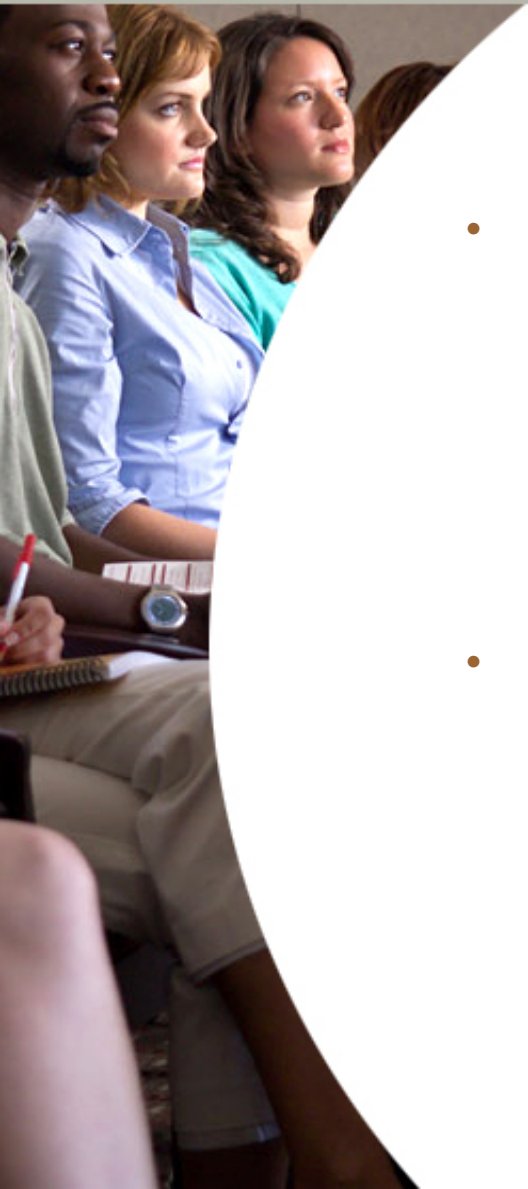
Measure all costs

- External Fraud Cost Per Loan
 - Identify all external anti-fraud vendor tools
 - Determine each tool's percentage of anti-fraud efforts
 - Multiply cost of vendors for each quarter with Fraud%
 - Divide total by loan production to get Total Fraud cost per loan for each vendor
 - Add up totals to get External Fraud Cost Per Loan

$$\text{External Fraud CPL} = \frac{\text{Vendor Costs Allocated to Fraud}}{\text{Loan Production}}$$

$$\text{Internal Fraud CPL} + \text{External Fraud CPL} = \text{Your Company's Total Fraud CPL}$$

Measure Mitigation and Recoveries



- Prevention (Pre-funding)
 - Pre-Funding Catches (Underwriter, PFQC, Review Appraisers, etc.)
 - Number of Fraud Catches, UPB, Estimated Loss
 - Conditions on abandoned loans
 - Vendor tool catches
 - Fraud Hunting
 - Miscellaneous Referrals (industry consortiums, law enforcement, etc.)
- Mitigation
 - Repurchases (Losses Avoided)
 - Fraud Recoveries
 - Insurance
 - Legal Pursuit
 - Other

Legal Perspective

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- Levels of Intent
 - Perpetrators and conspirators
 - Aiders and Abettors
 - Collateral Enablers or Insurers
 - Contract or warranty
 - Negligence
 - Bad faith / constructive knowledge
 - Mitigation
 - Repurchases (Losses Avoided)
 - Fraud Recoveries
 - Insurance
 - Legal Pursuit
 - Other

Legal Perspective

