FannieMae

Single Family Allowance and Expected Loss Overview for FHFA

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Key Takeaways

- The allowance reached its highest level in Q4 2011 and is expected to reduce to $69B by year-end 2012
  - New models being implemented are likely to result in a further decline of the allowance as they will include recent history that reflects improved performance
- We believe the allowance as of year-end 2011 was appropriate
- Credit losses are expected to remain elevated through 2013 as delayed foreclosures from prior periods come through the pipeline; losses decrease in 2014 and 2015 as delinquencies are cleared through default or workout
  - The biggest risks to the current forecast are policy changes driving further decline in home prices

Agenda

Single Family Allowance

- Overview
- Reserve Accounting Principles and Application
- Reserve Methodology
- Models
- Analysis

Credit Expense Forecast

- Overview
- Loss Forecast Model
- Credit Expense Drivers
- Analysis
- Sensitivities

Key Takeaways

Loan Loss Reserves

- The allowance for loan losses (ALL) is a reserve that includes both an estimate of charge-offs related to incurred losses on collectively impaired loans and an estimate of expected losses on individually impaired loans
- The ALL is estimated for all loans using methodologies consistent with two different accounting standards, depending on the circumstances of the underlying loans:
  - FAS 5 Collective Reserve Estimate: Loans are grouped into homogeneous pools based on common underlying risk characteristics such as origination year and seasoning, loan-to-value ratio and product type.

    or
  - FAS114 Individual Reserve Estimate: Loans are individually impaired to reflect lifetime expected losses using a discounted cash flow approach (NPV) or fair value of collateral (CDV) in case default is deemed probable.
- Loans that meet requirements for individual impairment are removed from the FAS 5 collective allowance and reserved for using a methodology consistent with FAS 114. These populations include:
  - Troubled Debt Restructuring loans (includes HAMP trials and other types of loan modifications)
  - Loans purchased out of trust as credit impaired (SOP 03-3)
- For a number of reasons, moving a loan from FAS 5 to FAS 114 generally has resulted in significant additional impairment.

Total Allowance for Loan Losses = FAS 5 Collective Reserve + FAS 114 Individual Reserve

Note: SOP 03-3 is a run off book after 1/1/2010 due to consolidation (FAS166/167).

Reserve Accounting Principles and Application

Collective (FAS 5)

- The collective (FAS 5) allowance for loan loss represents the future credit losses estimated on current and historical experience (incurred).
- A collective allowance is held for all loans which are held for investment.
- SAB 102 guidance allows management to adjust the loss reserves to account for recent trends that may not be fully captured within the standard model.
- Forward looking views, e.g. home price forecast, are ***not*** permitted when estimating losses.

Individual Impairment (FAS 114)

- Individually impaired loans are removed from the FAS 5 collective allowance, and the impairment is calculated individually for each loan. Those populations include:
  - Troubled Debt Restructuring loans (includes HAMP and other types of loan modifications)
  - Loans purchased out of trust as credit impaired (SOP 03-3) generally for the purpose of modification

Reserve Methodology

Collective (FAS 5)

- Represents credit risk
- Losses for incurred period
- Backward looking

- Loans are grouped by common underlying risk characteristics such as origination year, loan-to-value ratio and product type
- The estimate relies on delinquency status, MTMLTV and macro-economic variables to derive cumulative default rates
- Default rates are estimated based on observable, historical performance.
- Recent loan loss history is used to estimate how much of the original commitment will not be recovered (severity rate)
- Adjustments for makewholes, repurchases and other projected risks are made to the modeled results
- A reserve requirement is calculated by applying the following formula:

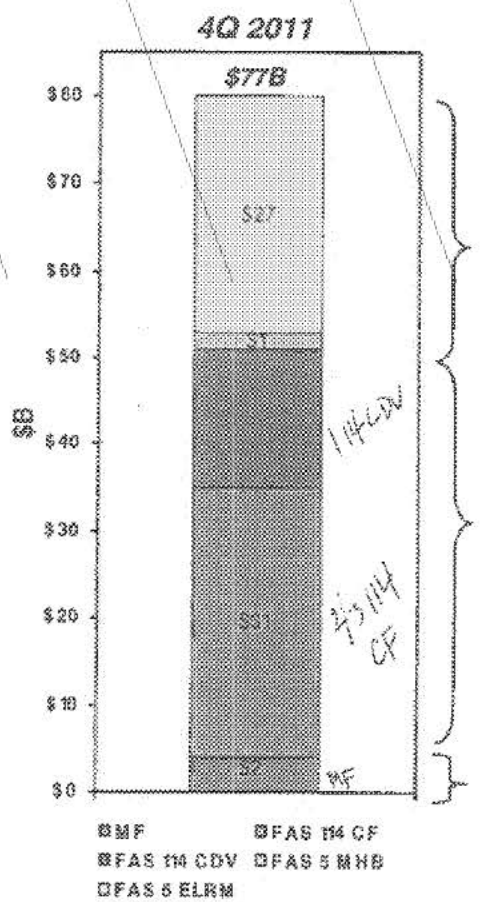
  Unpaid Principal Balance X Default Rate X Severity Rate = **Loss Allowance**
- Management then assesses the estimate to determine whether other trends and conditions suggest any adjustments

Individual Impairment (FAS 114)

- Reflects credit risk, collateral, & concession
- Losses over life of loan
- Once a TDR, always a TDR

- Individually impaired loans are valued based on:
  - Net present value (NPV) of modeled cash flows discounted by the loan's effective interest rate
  - In cases where default is determined to be probable, the fair value of collateral (CDV) is used
- Impairment is assessed at the loan level and is recognized when a loan's recorded investment exceeds the net present value (NPV) of cash flows or CDV
- Cash flows used for impairment assessment represent the company's best estimate of future expected cash flows

Allowance Models



SF FAS 5:
- **ELRM:** Econometric Loss Reserve Model uses long term historical Fannie Mae loan experience to estimate incurred losses on the active book
- **MHB:** estimates the guaranty liabilities for private label wrap securities

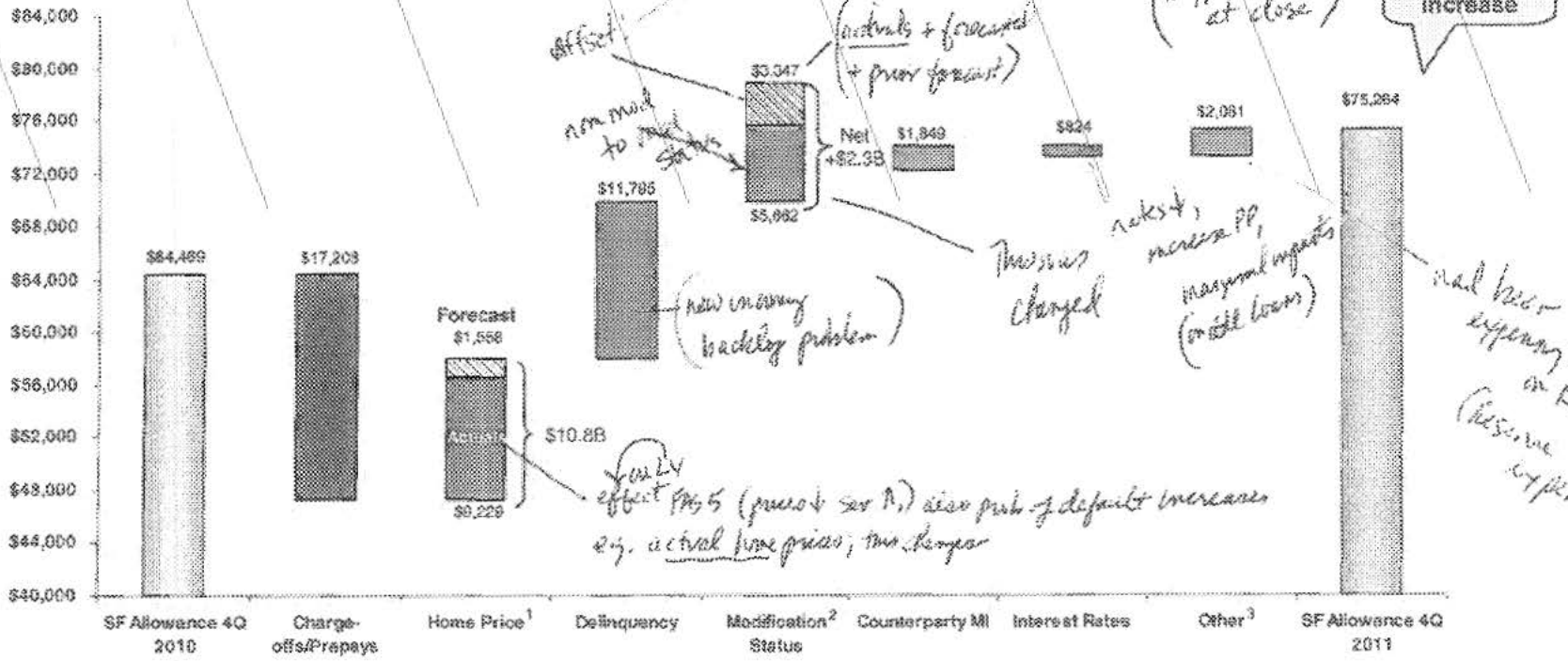
SF FAS 114:
- **FAVM:** Foreclosure Asset valuation Model is used to predict disposition amount of REO property for CDV loans
- **CreditWorks:** uses historical Fannie Mae loan experience to generate cash flows used in the calculation of the individual reserve

Multifamily:
- **MFLAM:** Multifamily Loss Allowance Model uses a transition matrix to predict probability of default

To capture the different risks associated with the Allowance, multiple models are used

Note: All makewhole benefits for both FAS 5 and FAS 114 are allocated to FAS 5 for operational reasons

2011 YoY Change in SF Allowance over 2010



[1] Includes impact of REO severity

[2] Incremental FAS 114 impairment on new volume less benefit from closing modifications

[3] Includes T&I model changes and other impacts

The total reserve for Single Family increased by $11B in 2011, primarily driven by declines in actual and projected home prices, continued new entrants into delinquency, continued modification volume and deterioration in the credit quality of mortgage insurers.

Benchmark Analysis

Comparison to Trailing Charge-off:

Trailing Charge-off Estimate[1]	$ 38,488
SF Allowance Estimate	$ 75,264
Variance - Allowance to Trailing CO	$ 36,776
Allowance Months of Coverage to Trailing Charge-offs	46.93

1) Trailing Charge-off Estimate (8 * trailing quarter) excluding SOP03-3

The Allowance of $75B is around 16 quarters of Charge-Offs

Comparison to the Corporate Forecast:

SF FAS 5 Allowance Estimate (Incl. T&I)	$28,051
SF FAS 114 Allowance Estimate	$47,214
Total SF Allowance Estimate	$75,264

2 Years of Charge-off in Corporate Forecast	$41,277
Allowance Months of Coverage to Corporate	43.76

The Allowance of $75B is 1.8x the 2 year Corporate Forecast of Charge-Offs

Comparison to default count projection:

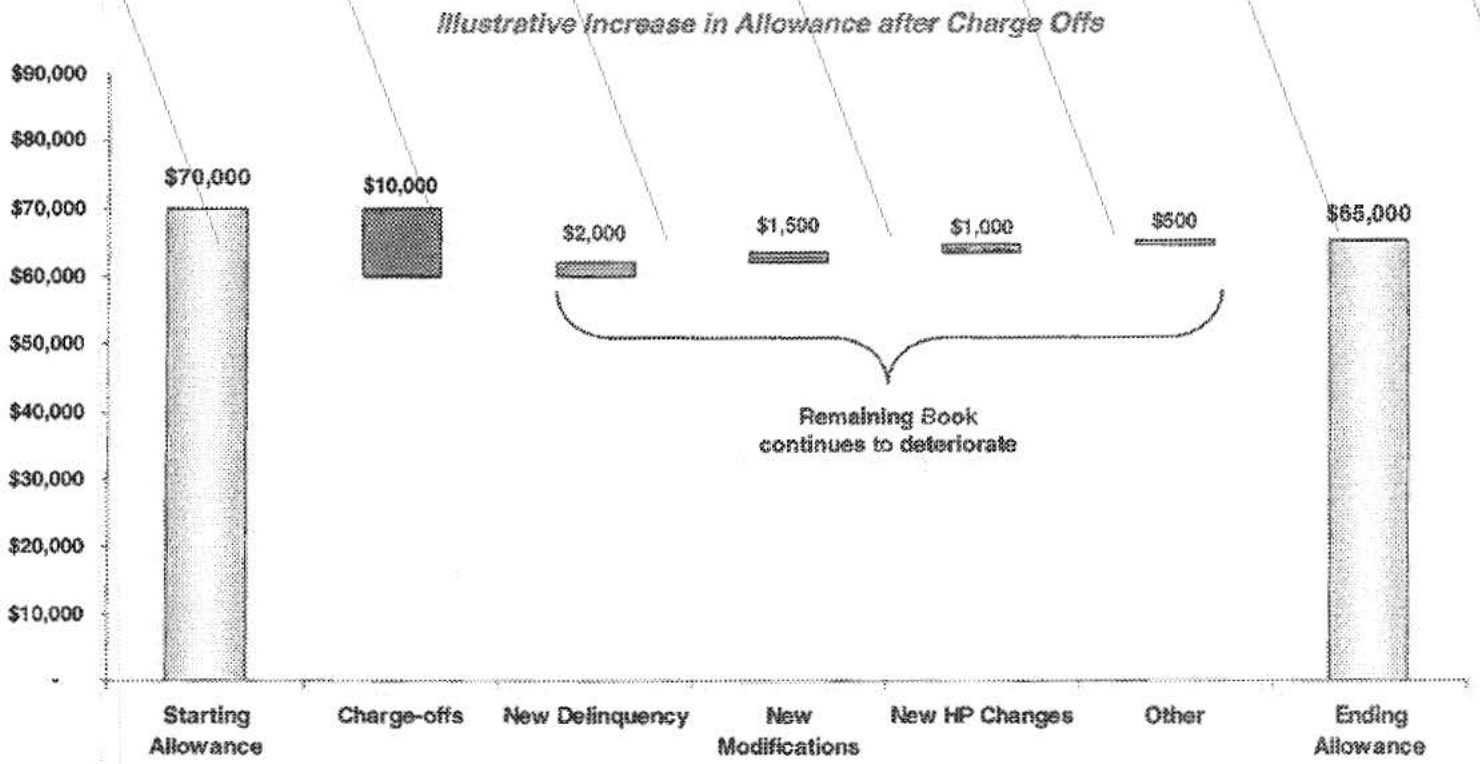
Emergence Period Default Count	Core	Alt A	EATPR/MCM	Subprime	Other	Grand Total
ELRM Incurred	522,720	229,678	117,211	11,904	23,726	905,238
	57.74%	25.37%	12.95%	1.32%	2.62%	
LFM as Benchmark	414,809	127,518	85,096	7,367	(Note 1)	634,790
	65.35%	20.09%	13.41%	1.16%		

(1) Other includes HECM, FHA/VA, and Title 1. LFM has these included in Core, AltA, and EATPR/MCM

The estimated defaults in the Allowance model are 1.5x those in the Forecast model

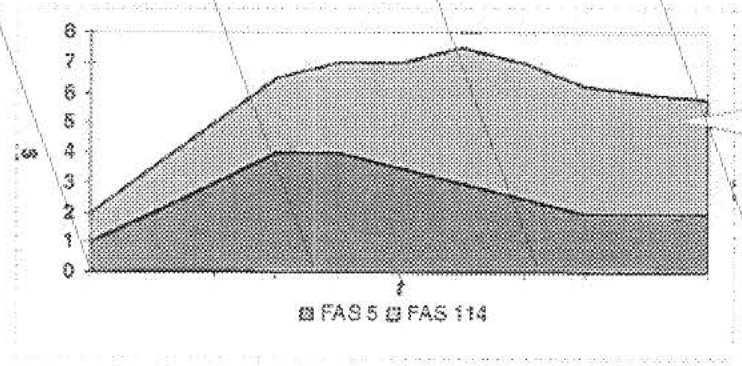
The allowance is larger than forecasted charge-offs for the next two years as a result of foreclosure slowdowns and loan modification programs in delaying the charge-off event.

Illustrative Allowance Reduction and Increase

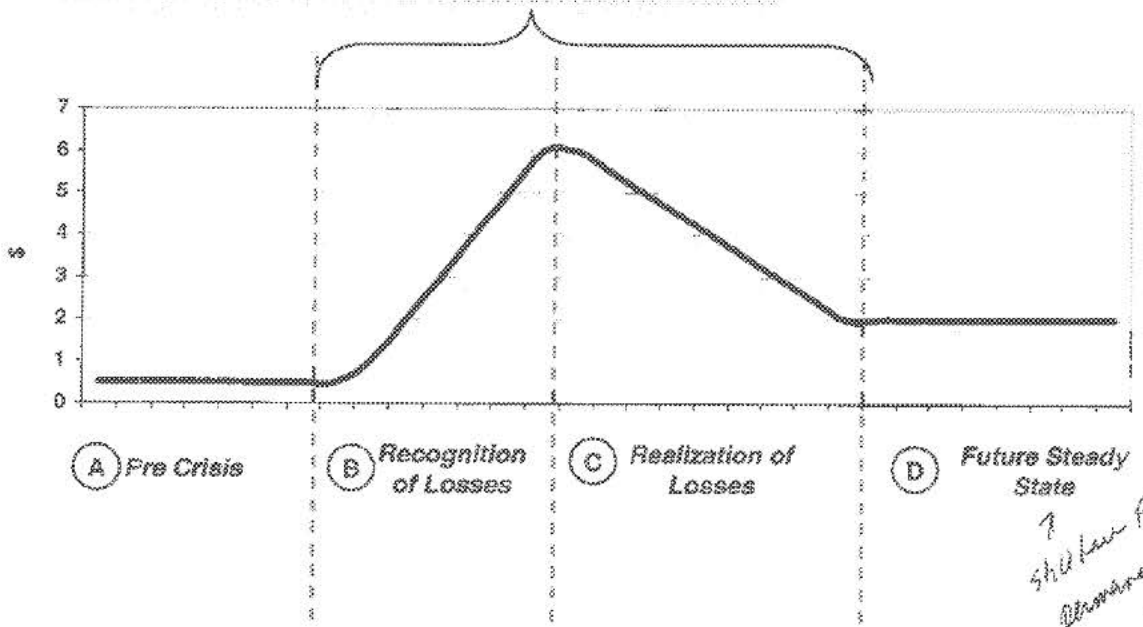


The decrease in the Allowance through charge offs is outpacing the increase resulting from deterioration in the remaining book

Evolution of Reserves Through Time



As modifications continue to exceed expectations, they will remain on the books longer and thus FAS 114 will remain elevated



Note: Graphs are illustrative

(A) *Pre Crisis*

- Historical Losses Average ~$200M/year
- Individual Impairment < ~$10M/year

(B) Recognition of Losses

- As evidence of "incurred loss" emerges, allowance grows over ~15 quarters by $70B

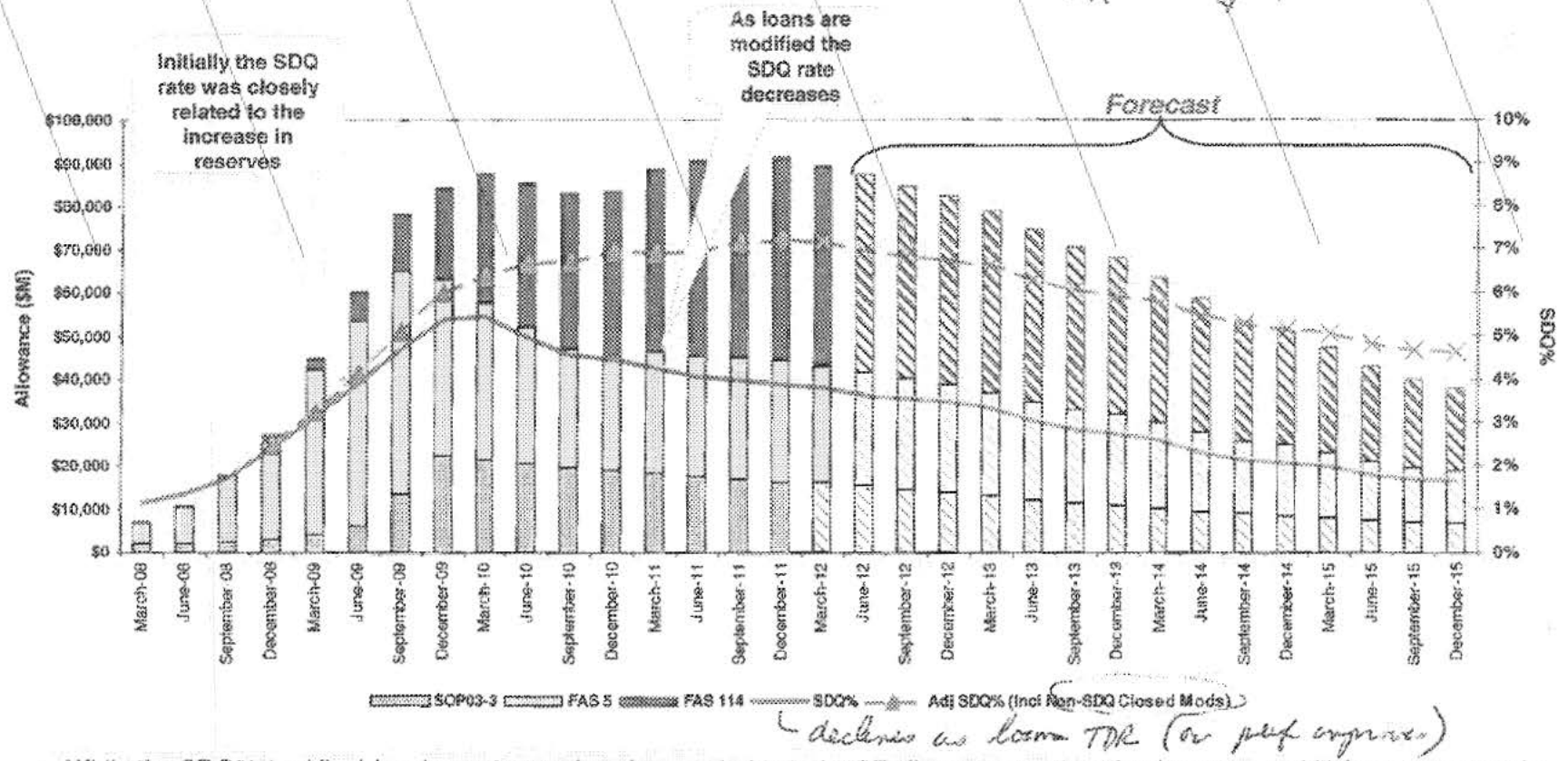
(C) Realization of Losses

- As foreclosure delays are overcome and incremental delinquencies decrease, the Allowance decreases
- Incremental delinquencies decrease—the Allowance reduces

(D) Future Steady State (Go Forward Book)

- Post Crisis Losses Average > ~$1B/year
- Individual Impairment < ~$300M/year

SF Allowance vs. SDQ%



- While the SDQ% (red line) has been decreasing since early 2010, the SF allowance continued to increase, stabilizing more recently
- This is because modification volume, which brings loans 'current' and therefore *lowers* SDQ%, serves to *increase* the allowance due to the loans transferring to FAS 114 and the typical higher average impairment
- The "Adjusted SDQ%" (dashed red line), which adds back Non-SDQ closed modifications and assumes they would have remained SDQ, has remained relatively flat

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Key Takeaways

Credit Loss: Basic Calculation

Defaults X Severity = Credit Losses

Count of Defaults for 5-year period (2011-2015):

1.46 million

Average Severity of Loss (Avg. UPB * Avg. Severity):

$168K * 40% = $67K

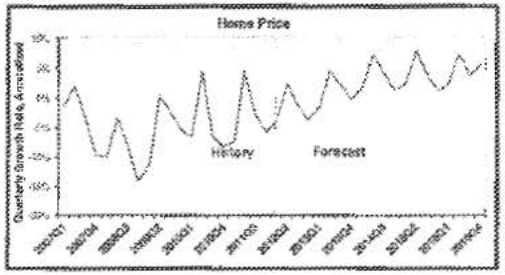
Total 5-year Credit Losses:

$98 billion (approximately)

Defaults predicted using transition rates:

Monthly Transition Rates		Roll To					
		Current	30 DLQ	60 DLQ	90+ SDQ	Default	Prepay
Roll From	Current	0.97	0.01	0.00	0.00	0.00	0.01
	30	0.30	0.46	0.23	0.00	0.00	0.01
	60	0.10	0.15	0.35	0.40	0.00	0.00
	90+	0.02	0.01	0.01	0.93	0.03	0.00

Severity predicted using recent trends for REO and non-REO charge-offs, indexed to home price forecast, as well as recent trends for Foreclosed Property Expenses



February 2012 Base Forecast (December Book)

What is the Loss Forecast Model?

- The Loss Forecast Model (LFM) is a system of equations designed to predict the credit performance of Fannie Mae's Single Family book of business from a given point in time, including new loan acquisitions and modifications
- The LFM is built to mimic the actual life cycle of a loan, modeling the monthly transitions with discrete outcomes of either prepayment, default, or delinquency status
- The primary business application of the LFM is the SF Corporate Expense Forecast, a 5 year projection of Credit Loss and Credit Expense
- LFM has also been used to:
  - Evaluate solvency of MI companies
  - Quantify impacts of high touch servicers as part of their compensation
- LFM is needed when timing of loss and/or delinquency is required
- LFM is also used in many other internal reports and applications across the corporation

Top Drivers of the Credit Expense Forecast

Economic Drivers

Home price forecast
- The most important driver of the forecast, as it affects both the default volume and severity
- Peak-to-trough metric indicates overall decline, but long term recovery is key as well

Interest rate forecast (prepayments)
- Prepayments have little effect on credit results, as loans that are likely to default tend not to prepay

Book Profile

Delinquency status
- A key driver of default probability

MTMLTV
- Also a key driver of default probability, but also the key driver of severity

Actual Results

REO values, sale prices, expense rates, and inventory levels
- Recent actuals are a secondary driver of severity

Modeling Assumptions

Default speed (the rate at which SDQs are liquidated)
- Primarily affect the timing of credit losses
- Slower default speed pushes credit losses further into the future and increases the allowance in the near term

Business Outlook

Workout volumes
- A key driver of overall results, as workouts reduce defaults and therefore credit loss, but have an associated credit expense

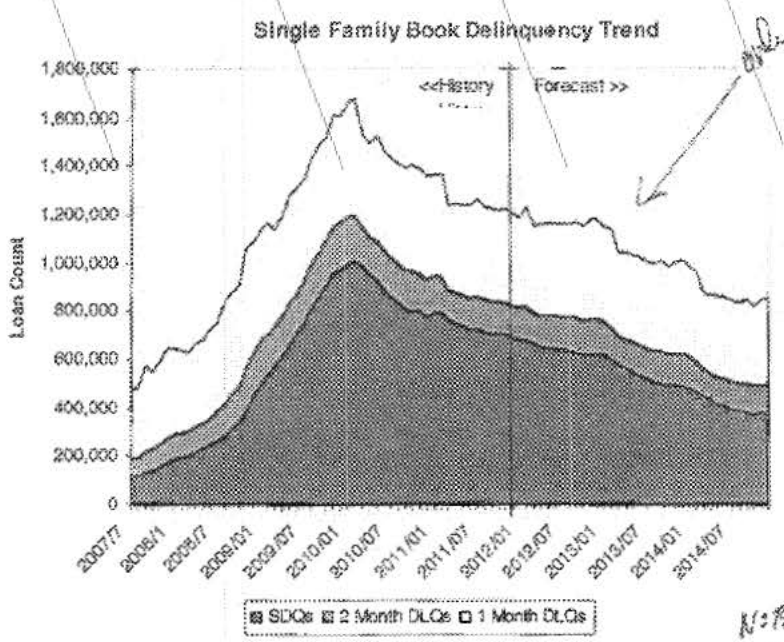
REO sale volume
- Slower REO sales increase Foreclosed Property Expense (FPE)

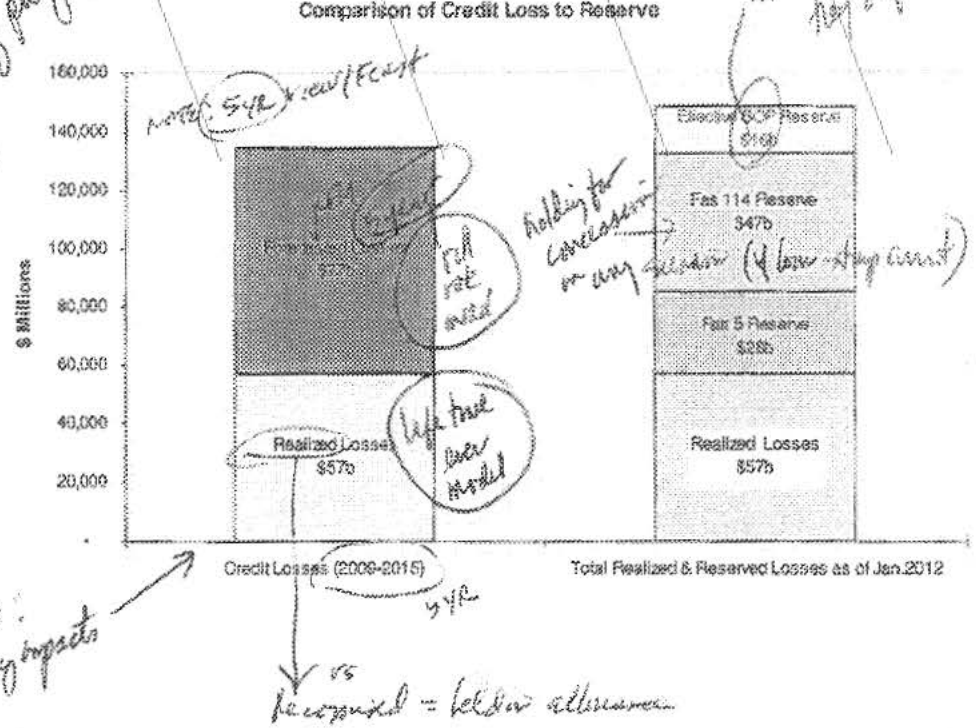
SF Credit Loss and Credit Expense Forecast

(Dollars in millions unless otherwise noted)	February 2012 Base Forecast (Dec Book)								
	2009	2010	2011	2012	2013	2014	2015	2010-2014	2011-2015
Charge-offs	12,064	20,407	17,038	18,679	21,818	16,603	11,156	94,545	85,294
Foreclosed Property Expense	1,182	2,658	1,890	2,276	3,274	3,061	2,212	13,159	12,713
Total Credit Loss	**13,246**	**23,066**	**18,929**	**20,955**	**25,091**	**19,664**	**13,368**	**107,705**	**98,007**
SOP 03-3 Charges, gross	20,241	177	116	52	51	54	65	451	339
Prior Year SOP 03-3 Contra	(722)	(2,033)	(2,042)	(2,142)	(2,258)	(1,573)	(1,062)	(10,048)	(9,078)
Impact of new HSA Loans	347	58	(589)	(11)	-	-	-	(521)	(579)
Incremental Provision	38,199	1,622	10,795	(6,708)	(11,698)	(14,217)	(11,511)	(20,207)	(33,339)
Total Credit Expense (Corporate)	**71,310**	**22,890**	**27,229**	**12,146**	**11,186**	**3,929**	**860**	**77,380**	**55,349**
Total Defaults (#)	184,638	344,141	290,937	296,721	344,744	290,901	232,750	1,567,444	1,456,053

Credit losses remain elevated through 2013 as delayed foreclosures from prior periods come through the pipeline; losses decrease in 2014 and 2015 as delinquencies are cleared through default or workout

Credit Losses Expected to Decline as Book Continues to Improve





While SF Book delinquency status has consistently improved since January 2010, the allowance only recently peaked. Given forecasted credit losses, we believe Fannie Mae is adequately reserved.

Sensitivities of Single Family Credit Loss Forecast

	Single Family Credit Sensitivities ($ in Billions)	Current Projections		Impact on Credit Losses (+ Increases Losses)	
		2012	2012-2015	2012	2012-2015
	Current forecast of Single Family credit-related expenses				
Influenced by Management Actions	*HAMP:*				
	Modification Effectiveness[1]: Increase effectiveness rate for existing and forecasted modifications to 49%[2] (2012-2015 cumulative effective rate projection is currently 44%)	42%	44%	($1.2)	($3.6)
	Modification Volumes: Increase modification volume by 10%	122K	331K	($0.0)	($1.1)
	REO:				
	REO Execution: Increase of 2% in REO sales execution ratio (sales proceeds to carrying value)	98%	98%	($0.4)	($1.8)
	PLMS:				
	PLMS Execution: 500 basis point increase in sales execution for pre-foreclosure and third party sales	62%	66%	($0.5)	($2.1)
	Other:				
	NUC Recovery Rates: Increase recovery rate to 85% *(2011-2015 cumulative recovery rate projection is currently 75%)*	N/A	75%	N/A	($2.2)
Exogenous Factors	Home Price Index Sensitivity: National peak-to-trough decline of approximately -36% through the end of 2015 *(current national peak-to-trough decline projection is -23% through Q1 2013)*			$1.4	$22.0

[1] *Mod Effectiveness is defined as % of defaults avoided by successfully completing a loan modification as opposed to taking no action.*

[2] *Sensitivity assumes existing and forecasted modifications from 2009 to 2015.*

Weekly's stress case

Forecast sensitivity to what

Note: Sensitivities are mutually exclusive.

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