

The Actuary and FAS 163*

2009 Casualty Loss Reserve Seminar

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September 15, 2009

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Agenda

- Reserving Pre-FAS 163
- FAS 163 Background
- Premium Recognition and Measurement
- Claim Liability Recognition and Measurement
- Disclosure
- Impact
- Closing

Reserving Pre-FAS 163

- Loss Reserves
 - Unallocated/active credit/portfolio/non-specific/watch list reserves
 - Case reserves
 - Inconsistency
 - Case vs. unallocated reserves
 - “We believe our definition of case basis credit reserves differs from other financial guarantee participants” (Ambac 2008 10-K)
 - Deterministic vs. stochastic
 - Discount rate (investment portfolio yield vs. risk free rate)
- UPR
 - Upfront premium
 - Installment premium
 - Establish UPR for premium written over installment period, not entire term

FAS 163 Background

- Statement of Financial Accounting Standards No. 163, Accounting for Financial Guarantee Insurance Contracts (FAS 163)
- Issued May 2008
- Effective for financial statements issued for fiscal years beginning after December 15, 2008

FAS 163 Background (cont.)

Scope

- Limited to FG insurance and reinsurance contracts issued by insurance enterprises included within FAS 60
- Does not apply to FGI contracts that are derivative instruments
 - Example 1: Credit default swaps (CDS)
- Does not apply to insurers that seem similar to FGI
 - Example 1: Mortgage guaranty insurers
 - Example 2: Credit insurance

FAS 163 Background (cont.)

Purpose

- To create consistency in the recognition and measurement of financial guaranty claim liabilities
 - Requires FGI recognize a claim liability prior to an event of default when there is evidence that credit deterioration has occurred in an insured financial obligation
- To clarify how FAS 60 applies to FGI contracts, including the recognition and measurement to account for premium revenue and claim liabilities
 - Goal to increase comparability in financial reporting of FGI contracts
- To expand disclosures about FGI contracts
 - Goal to improve the quality of information provided to users of financial statements

Premium Recognition and Measurement

- Unearned premium revenue
 - Recognize at inception of FGI contract
 - UPR =
 - NPV (premiums due) or
 - NPV (premiums expected to be collected)
 - Homogenous pool of assets underlying the insured financial obligation is contractually prepayable
 - If prepayments are probable, and the timing/amount can be reasonably estimated
 - Subsequent UPR (revisit prepay and discount rate)
 - Discount rate – Risk-free rate at inception and based on the contract period

Premium Recognition and Measurement (cont.)

- Premium revenue recognition
 - Proportional to insurance protection provided
 - Corresponding adjustment to UPR
 - Periodic premium recognized =

$$\text{Periodic O/S Insured Principal} \times \left(\frac{\text{NPV Premium During Contract}}{\text{Sum of periodic O/S Insured principal during contract}} \right)$$

“The Constant Rate”

Premium Recognition and Measurement (cont.)

Single Premium, Periodic Principal Example

Year	$A = A_{prior} - B_{prior}$ Outstanding Principal	B Principal Payments	$C = A \times tcr$ Premium Revenue Recognized	$D = D_{prior} - C$ Unearned Premium Revenue
				\$ 10,000
1	\$ 100,000	\$ 5,000	\$ 1,754	\$ 8,246
2	\$ 95,000	\$ 5,000	\$ 1,667	\$ 6,579
3	\$ 90,000	\$ 10,000	\$ 1,579	\$ 5,000
4	\$ 80,000	\$ 10,000	\$ 1,404	\$ 3,596
5	\$ 70,000	\$ 15,000	\$ 1,228	\$ 2,368
6	\$ 55,000	\$ 15,000	\$ 965	\$ 1,404
7	\$ 40,000	\$ 15,000	\$ 702	\$ 702
8	\$ 25,000	\$ 15,000	\$ 439	\$ 263
9	\$ 10,000	\$ 5,000	\$ 175	\$ 88
10	\$ 5,000	\$ 5,000	\$ 88	\$ 0
Total	\$ 570,000	\$ 100,000	\$ 10,000	

“The Constant Rate” (tcr)
 $0.01754386 = 10,000/570,000$

Premium Recognition and Measurement (cont.)

Single Premium, End of Period Principal Example

Year	Insured Accreted Principal Amounts Outstanding	Principal Payments	Premium Revenue Recognized	Unearned Premium Revenue
				\$ 10,000
1	\$ 61,400	\$ 0	\$ 795	\$ 9,205
2	\$ 64,500	\$ 0	\$ 835	\$ 8,370
3	\$ 67,700	\$ 0	\$ 877	\$ 7,493
4	\$ 71,100	\$ 0	\$ 921	\$ 6,573
5	\$ 74,600	\$ 0	\$ 966	\$ 5,607
6	\$ 78,400	\$ 0	\$ 1,015	\$ 4,591
7	\$ 82,300	\$ 0	\$ 1,066	\$ 3,526
8	\$ 86,400	\$ 0	\$ 1,119	\$ 2,407
9	\$ 90,700	\$ 0	\$ 1,174	\$ 1,233
10	\$ 95,200	\$ 100,000	\$ 1,233	\$ 0
Total	\$ 772,300	\$ 100,000	\$ 10,000	

“The Constant Rate” (tcr)
 $0.012948 = 10,000 / 772,300$

Claim Liability Recognition and Measurement

- Recognize when FGI expects claim loss will exceed UPR
- Claim liability can not be negative
- Calculated by policy, then aggregated (no off-set)
- Use discounted expected net cash outflows
 - Discount using current risk-free rate over remaining period
 - Expected claim payments to policyholder net of recoveries
 - Before R/I
 - Probability-weighted cash flows that reflect the likelihood of all possible outcomes
 - Assumptions consistent with risk management activities and operational decisions
 - Loss assumptions and discount rate revised each reporting period

Claim Liability Recognition and Measurement (cont.)

- Example – Claim Liability Measurement for One Policy
- $\text{Claim Liability}_t = \text{Max}[0, \text{NPV}_t (\text{expected net cash outflows}) - \text{UPR}_t]$

$\text{NPV}_t (\text{expected net cash outflows}) = \29M

Discounted Possible Net Cash Outflows ^(a)	Probability	Probability-Weighted Net Cash Outflows
\$ 70,000,000	5%	\$ 3,500,000
50,000,000	15%	7,500,000
40,000,000	20%	8,000,000
20,000,000	45%	9,000,000
10,000,000	10%	1,000,000
---	5%	---
Present value of expected net cash outflows		\$ 29,000,000

(a) Discounted Possible Net Cash Outflows includes different probabilities of realization related to potential recoveries. The discount factor is the current risk-free rate.

- $\text{UPR}_t = \$1.2\text{M}$
- $\text{Claim Liability}_t = \$27.8\text{M} = \$29\text{M} - \1.2M

FAS 163 Disclosures

- Enable F/S user to understand the factors affecting the present and future recognition and measurement of FGI contracts
- Disclose annually, and interimly if significant changes
- Risk-free rate
- Schedule of expected premiums to be collected
- Significant calculation changes
 - Discount rate, timing, default likelihood, etc.
- Risk management activities to track and monitor deteriorating insured financial obligations
- Policies for avoiding and mitigating claim liabilities
- Financial obligations by category
 - Number of contracts
 - Contract period
 - Claim liability
 - Recoveries
 - Discount
 - Reinsurance recoverables
 - UPR

FAS 163 Disclosures (cont.)

- Credit Deterioration Categorization
 - Categorization of obligations into groups based on credit deterioration
 - Example Surveillance Categories
 - Category A
 - Currently performing obligations with credit deterioration since inception
 - Category B
 - Potentially non-performing obligations that may require mitigation
 - Category C
 - Nonperforming obligations that are being mitigated, but default is imminent
 - Category D
 - Obligations that have defaulted
 - Default – Non-timely payment of insured contractual payments by the issuer

Impact

B/S IMPACT OF FAS 163 TRANSITION CUMULATIVE EFFECT ADJUSTMENTS 12/31/08 TO 1/1/09 (\$ MILLIONS)

Company	UPR	LR	RE
Assured Guaranty	\$826	\$(25)	\$19
AMBAC	4,822	440	(382)
FSA	32*	31	(63)
MBIA	2,381	(174)	83
Radian	293	(8)	(38)
Total	\$8,356	\$263	\$(380)

* Approximately

Source: Company March 31, 2009 SEC 10Q Filings

Impact (cont.)

RELATIVE B/S IMPACT OF FAS 163 CUMULATIVE EFFECT ADJUSTMENTS 12/31/08 TO 1/1/09 AMBAC AND ASSURED (\$ MILLIONS)				
	Before FAS 163		After FAS 163	
Item	12/31/2008	FAS 163 Adj.	1/1/2009	% Change
DAC	\$496	\$94	\$590	19%
PrePd R/I Premium	312	930	1,241	298%
R/I Recoverable on Ceded Loss	164	99	263	60%
Premium Receivable	45	5,315 ¹	5,360	11,908%
Ceded Premium Payable	34	670	704	1,997%
UPR	3,616	5,650	9,266	156%
LR	2,473	415	2,888	17%

¹ Recording of future installment premiums

Source: Company March 31, 2009 SEC 10Q Filings

Impact (cont.)

Actuarial Opportunities

- Premium Measurement
 - Prepay assumptions should be revisited each reporting period
 - Prepay assumptions vary with conditions
 - Economic (interest rates)
 - Policy (Cash for Clunkers)
 - Defaults
- Claim Liability Measurement
 - Probability-weighted cash flows reflecting all possible outcomes
 - Assumptions consistent with risk management activities and operational decisions
 - Loss assumptions and discount rate revised each reporting period

Impact (cont.)

Statutory

- SSAP No. 60 – Financial Guaranty Insurance
- Issue Paper No. 136 – Accounting for Financial Guarantee Contracts
- Statutory Accounting Principles Working Group
 - Proposed increased disclosure requirements consistent with FAS 163, where applicable
 - UPR
 - Claim liability
 - Surveillance risk management
 - Obligations with credit deterioration
 - Recommends revisions to SSAP No. 60
 - “It is projected that enhanced disclosures will be adopted for 2009 reporting”

Closing

- FGI unique, ambiguity in FGI financial reporting
- FAS 163 clarifies and creates consistency, as well as expands disclosures for FGI GAAP financial reporting
- SSAP No. 60 considering increased disclosure for 2009 reporting
- Increased demand for actuarial support