

# **How to Calculate FAS 114 (ASC 310-10-35) Reserves**

# About Sagemworks

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- Lending, Credit Risk and Portfolio Risk Solutions
- More than 1,100 financial institution clients
- Founded in 1998

- Thought leader for institutions and examiners
- Regularly featured in national and trade media

# Agenda

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- Estimation of the ALLL
- Classification of loans – FAS 5 (ASC 450-20) & FAS 114 (ASC 310-10-35)
- Three valuation methods for impaired loans
- Common challenges with impairment
- When to move a loan from FAS 114 back to FAS 5 status
- Questions

**“The Allowance for Loan and Lease Losses (ALLL) is one of the most important estimations in a financial institution...”**

# Estimation of the ALLL

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- Loan losses will happen
- ALLL level adequate to absorb estimated credit losses
  - » Overstated vs. understated
- Source of confusion: Classification of loans

**“Every national bank must have a program to establish and regularly review the adequacy of its allowance...”**

# Classification of Loans

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- FAS 5 (ASC 450-20) = Non-impaired
- FAS 114 (ASC 310-10-35) = Impaired

“Calculations should be based on a comprehensive, well documented, and consistently applied methodology . . .”

# Classification of Loans: FAS 5

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- FAS 5 (ASC 450-20) pool = Non-impaired
  - » Classified as FAS 5 if they are not otherwise impaired
  - » Homogenous pools
  - » Historical data
  - » Qualitative and environmental factors
  - » Examples

“Segment loans into pools with similar characteristics, such as risk classification, type of loan, industry, etc. . . .”

# Classification of Loans: FAS 114

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- FAS 114 (ASC 310-10-35) = Impaired
  - » When is a loan considered impaired?
  - » Evaluated on individual basis
  - » Three valuation methods
  - » Often includes:
    - Substandard loans
    - TDR loans
    - Nonaccrual loans
    - Loans > 90 days past due

“Under FAS 114, a loan is impaired when it is probable that the bank will be unable to collect all amounts due. . .”

# Impaired vs. Impairment

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- Impaired loans
- Calculated impairment
- You can have an impaired loan but no calculated impairment reserve
- Example

	Customer Obligation	FV of Collateral	Charge-offs	Book (GL) Balance	Reserve Required
Impaired w/ calculated "impairment" (reserve)	\$ 1,000,000.00	\$ 750,000.00		\$ 1,000,000.00	\$ 250,000.00
Impaired w/ NO calculated "impairment" (reserve)	\$ 1,000,000.00	\$ 750,000.00	\$250,000.00	\$ 750,000.00	\$ -



# 3 Valuation Methods for FAS 114

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1. Fair Market Value of Collateral
2. Present Value of Future Cash Flows
3. Loan Pricing

“The allowance is a valuation reserve maintained to cover losses that are probable and estimable. . .”

# Fair Market Value of Collateral

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- Most widely used method
- Collateral dependent loans
  - » “A loan is collateral dependent if repayment of the loan is expected to be provided solely by the underlying collateral.”
    - Interagency Policy Statement on the ALLL
- Need current appraisal values and subject dates
- Specific impairment

**“Collateral dependent – the only source of repayment expected is the underlying collateral and no other cash flows...”**

# Fair Market Value of Collateral

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“FAS 114 requires that the measure of impairment be based on the fair value of the collateral..”

$$\text{Fair Market Value} = \text{Collateral Value} - \text{Discounts} - \text{Selling Costs}$$

Appraised collateral value minus discounts and/or liquidation costs = Fair Value/Valuation Amount

<b>Fair Market Value</b>	<b>&gt;</b>	<b>Recorded Investment</b>	<b>Required Reserve</b>
\$500,000		\$400,000	\$0

The valuation amount exceeds the Total Recorded Investment, therefore no reserve is required.

# Fair Market Value of Collateral

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<b>Fair Market Value</b>	<b>&gt;</b>	<b>Recorded Investment</b>	<b>Required Reserve</b>
\$500,000		\$600,000	\$100,000

Total Recorded Investment exceeds the valuation amount. Therefore, the difference between them is the reserve amount.

# Fair Market Value of Collateral

“FAS 114 requires that the measure of impairment be based on the fair value of the collateral...”

Current Balance	Accrued Interest	Net Deferred Fees &	Unamortized Premium / Discount	Total Recorded Investment
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### SELLING COSTS WORKSHEET

Please use the worksheet below to fill in the detailed information on the selling costs associated with this piece of collateral. When you have finished, click the Save and Return to Collateral button and the total will be filled in on the valuation worksheet.

Appraisal	Current Value of Collateral: <b>\$728,000.00</b>	Val Date												
\$ 91	<table border="1"> <thead> <tr> <th>Description</th> <th>Percentage</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> Collateral Liquidation Discount</td> <td>23.94%</td> <td>\$ 174,283.20</td> </tr> <tr> <td><input type="checkbox"/> 2012 Property Taxes</td> <td>0.00%</td> <td>\$ 1,909.00</td> </tr> <tr> <td><b>Total:</b></td> <td></td> <td><b>\$ 176,192.20</b></td> </tr> </tbody> </table>	Description	Percentage	Amount	<input type="checkbox"/> Collateral Liquidation Discount	23.94%	\$ 174,283.20	<input type="checkbox"/> 2012 Property Taxes	0.00%	\$ 1,909.00	<b>Total:</b>		<b>\$ 176,192.20</b>	:012
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The valuation amount exceeds the total recorded investment; therefore no reserve is required.

# Fair Market Value of Collateral

“FAS 114 requires that the measure of impairment be based on the fair value of the collateral...”

		Current Balance	Accrued Interest	Net Deferred Fees & Costs	Unamortized Premium / Discount	Total Recorded Investment		
		\$ 496,186.51	\$ 1,904.07	\$ 0.00	\$ 0.00	\$ 498,090.58		
Appraisal Value	Appraisal Adjustment	Current Value	Prior Liens	Equity	Selling Costs	Fair Value	Appraisal Date	
\$ 610,000.00	20.00%	\$ 488,000.00	\$0.00	\$488,000.00	\$176,192.20	\$ 311,807.80	01/03/2012	
		Total Recorded Investment	Valuation Amount	Reserve Amount				
		\$ 498,090.58	\$ 311,807.80	\$ 186,282.78				

The Total Recorded Investment exceeds the valuation amount. Therefore, the difference between them is the reserve amount.

# Fair Market Value of Collateral

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“In general, any portion of the recorded investment in a collateral-dependent loan (including any capitalized accrued interest, net deferred loan fees or costs, and unamortized premium or discount) in excess of the fair value of the collateral that can be identified as uncollectible, and is therefore deemed a confirmed loss, should be promptly charged off against the ALLL.”

-Interagency Policy Statement on the ALLL

“FAS 114 requires that the measure of impairment be based on the fair value of the collateral. . .”

# Fair Market Value of Collateral

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## DOCUMENTATION – SUBSTANTIATION!

- How was fair value determined? (E.g., Appraisals, valuation assumptions, and calculations)
- Supporting rationale for adjustments to appraised values, if any
- Determinations of costs to sell, if applicable
- Appraisal quality and the expertise and independence of the appraiser

**“collateral dependent – the only source of repayment expected is the underlying collateral and no other cash flows. . .”**



# Present Value of Future Cash Flows Method

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- Used when there is an expectation of cash payments (TDRs, etc.)
- Cash flows should be the institution's best estimate based on reasonable and supportable assumptions and projections.
- Consider the likelihood of the possible outcomes
- Discount rate = “Effective”, originally contracted interest rate
- Month-to-month payment schedule for analysis
  - “.. discounting the expected future cash flows from the present value using the loan’s effective interest rate. . .”

# Present Value of Future Cash Flows Method

Current Interest Rate: 1.50%

Current Balance:	\$ 900,000.00
Accrued Interest:	\$ 0.00
Net Deferred Loan Fees or Costs:	\$ 0.00
Unamortized Premium or Discount:	\$ 0.00
Total Recorded Investment:	\$ 900,000.00
Impairment Date:	5/22/2012
Loan Type:	Fixed Payment
Effective Interest Rate:	6.000%
Remaining Term in Months:	10
Expected Monthly Payment:	\$ 75,000.00

Payment Date	Expected Payment	Present Value
3/31/2013	\$ 75,000.00	\$ 74,621.71
4/30/2013	\$ 75,000.00	\$ 74,245.33
5/31/2013	\$ 75,000.00	\$ 73,870.84
6/30/2013	\$ 75,000.00	\$ 73,498.25
7/31/2013	\$ 75,000.00	\$ 73,127.53
8/31/2013	\$ 75,000.00	\$ 72,758.69
9/30/2013	\$ 75,000.00	\$ 72,391.70
10/31/2013	\$ 75,000.00	\$ 72,026.56
11/30/2013	\$ 75,000.00	\$ 71,663.27
12/31/2013	\$ 75,000.00	\$ 71,301.81

Results 1 - 10 of 10

Total Recorded Investment:	\$ 900,000.00
Valuation Amount:	\$ 729,505.69
Reserve Amount:	\$ 170,494.31

# Present Value of Future Cash Flows Method

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<u>Total Recorded Investment:</u>	\$	900,000.00
<u>Valuation Amount:</u>	\$	729,505.69
<u>Reserve Amount:</u>	\$	170,494.31

Calculated Reserve: \$170,494.31

<u>Total Recorded Investment:</u>	\$	600,000.00
<u>Valuation Amount:</u>	\$	729,505.69
<u>Reserve Amount:</u>	\$	0.00

No Calculated Reserve

# Loan Pricing Method

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- Rarely used
- How is the value derived?
- Primary challenge – defending and documenting the amount, source and date of the observable market price

# Common Challenges with Impairment

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- Determining the most appropriate valuation method to be used
- What to include in Total Recorded Investment
- PV FCF can be somewhat subjective
- Examiners wary of excessive optimism
- Documentation is a must
- Switching valuation methods – documenting/defending the change
- When is it appropriate to move back to FAS 5 (ASC 450-20)?

# Moving a Loan Back to FAS 5

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- Smaller balance loans?
- Impaired loans with zero calculated impairment?
- Nonaccruals that return to performing status?
- TDRs?
- What if I evaluate all my substandard loans individually at first?

# Additional Resources & Contact Info

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Additional resources:

- » Whitepapers, archived webinars and more: [sageworks.com](http://sageworks.com)
- » LinkedIn: ALLL Forum for Bankers
- » [ALLL.com](http://ALLL.com)