

# Mortgage Servicing Rights

RSM McGladrey, Inc.

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# Mortgage Servicing Rights

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# Background

## Mortgage Servicing Rights

- Servicing rights arise when loans are sold into the secondary market.
- The secondary market buyers are the Government sponsored enterprises (GSEs) – Fannie Mae, Freddie Mac and the FHLBanks.



# Accounting

## Mortgage Servicing Rights

- Servicing is inherent in all financial assets; it becomes a distinct asset or liability only when contractually separated from the underlying assets by sale or securitization of the assets with servicing retained, or separate purchase or assumption of the servicing. *SFAS 140 paragraph 61.*
- Servicing is recognized in accordance with *SFAS 140 paragraph 63*, as follows on next slide:



# Accounting

## Recognition of Mortgage Servicing Rights

- Report servicing assets separately from servicing liabilities.
- Initially measure servicing assets at their allocated previous carrying amount, based on relative fair value.
- Initially measure servicing liabilities at fair value.
- Account for servicing fees that exceed the contractually specified amount as an interest only strip.
- Amortize in proportion and over the time period of estimated net servicing income.



# Accounting

## Example Transaction

- Company A originates a \$150,000 loans at 6.00% and sells it servicing retained to one of the GSEs at a pass-through rate of 5.75% Sale is at par and the contractually specified servicing rate is .25%.
- Estimated fair values are as follows:
  - Cash proceeds - \$150,000
  - Servicing asset - \$1,200



# Accounting

## Sample Journal Entries - Simplified

JE 1	Loans	\$150,000	
	Cash		\$150,000
	Record loan funding		
JE 2	Cash	\$150,000	
	Loans		\$150,000
	Record loan sale		
JE 3	Servicing Asset	\$1,200	
	Gain on Sale		\$1,200
	Record loan sale		

Technically, the sale should be recorded at relative fair value as follows:



# Accounting

## Allocation of Relative Fair Value

<b>Allocation</b>	<b>Value</b>	<b>Fair Value</b>	<b>Amount</b>
Loans Sold	\$ 150,000	99.2%	\$ 148,810
Servicing Asset	1,200	0.8%	1,190
	<u>\$ 151,200</u>	<u>100.0%</u>	<u>\$ 150,000</u>

### **Gain on Sale**

Net Proceeds	\$ 150,000
Carrying Amount of Loans	<u>(148,810)</u>
Gain on Sale	<u>\$ 1,190</u>





# Accounting

## Sample Journal Entries - Relative Fair Value

JE 1	Loans	\$150,000
	Cash	\$150,000
Record loan funding		

JE 2	Cash	\$150,000
	Loans	\$148,810
	Gain on Sale	\$1,190
Record loan sale		

JE 3	Servicing Asset	\$1,190
	Loans	\$1,190
Record loan sale		



# Accounting

## Simplified Servicing Income Statement - Month 1 - Cash Basis

Servicing Income	\$ 31.25	$\$150,000 \cdot .0025/12$
Ancillary Income	1.04	$\$12.50/12$
Value of Escrows	2.58	$\$1000 \cdot .0309/12$
Servicing Costs	(4.17)	$\$50/12$
	<u>\$ 30.70</u>	

# Valuation

## Mortgage Servicing

- Value in accordance with the Implementation Guide
- Benefits are expected to exceed adequate compensation.
- Adequate compensation is determined by the marketplace and is based on the contractually specified servicing fees and other benefits demanded in the marketplace to perform the servicing.
- The fair value arising from the benefits is ideally based on quoted market values. If quoted market values are unavailable, the value can be estimated using a discounted cash flow model.



# Valuation

## Major valuation components

- Servicing fee percentage – varies by investor and type of loan
- Ancillary income
- Expected loan life – prepayment
- Discount rate
- Costs to service – market costs
- Delinquency rate and foreclosure losses – recourse versus non-recourse



# Valuation

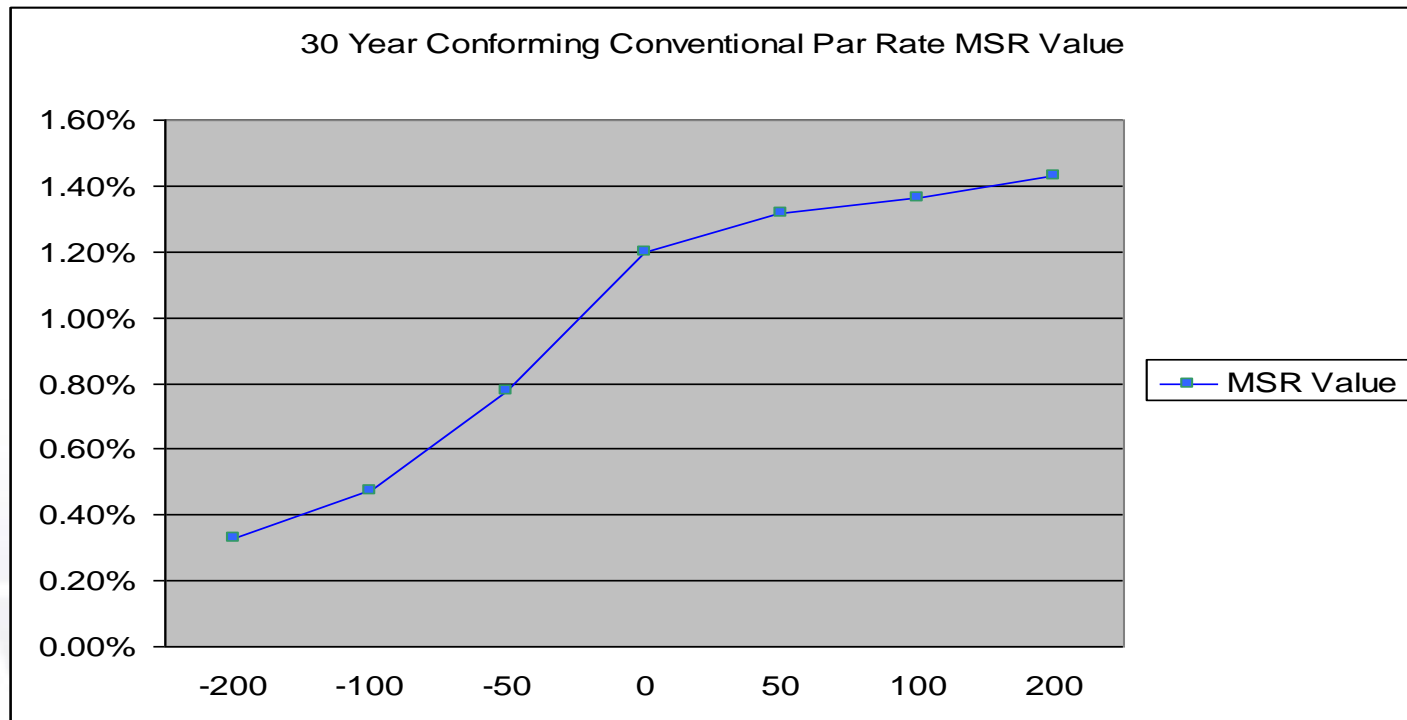
## Valuation of Conforming Conventional

	Value	Change	% Change
Base	1.20		
Prepayments increase 30%	1.05	-0.15	-12.5%
Servicing costs increase 30%	1.16	-0.04	-3.3%
Delinquencies increase 30%	1.19	-0.01	-0.8%
Discount rate increases 30%	1.11	-0.09	-7.5%



# Valuation

## MSR Valuation and Negative Convexity



# Reporting

## Amortization Methodologies

- Level yield
- Sum of the years digits
- Straight line with actual write-offs



# Reporting

## Income and Amortization Entries

Cash	\$31.25	
Servicing Income		\$31.25
Servicing Fee Amortization	\$27.78	SYD 8 year life - month 1
Mortgage Servicing Asset		\$27.78



# Reporting

## Simplified Servicing Income Statement - Month 1

Servicing Income	\$31.25
Amortization Expense	(27.78)
Ancillary Income	1.04
Value of Escrows	2.58
Servicing Costs	(4.17)
	<hr/>
	<u>\$ 2.92</u>

# Impairment Testing

## Evaluate and measure impairment by:

- Stratifying servicing assets based on one or more predominant risk characteristics.
- Recognize impairment through a valuation allowance for an individual stratum.
- Adjust the valuation allowance based on fair value – however LOCOM.



# Impairment Testing

## Predominant Risk Characteristics:

- Interest Rate
- Type of Loan
- Loan Size
- Date of Origination
- Term
- Geographic Location



# Impairment Testing

- Impairment is best measured at the loan level and is reported at the predominant risk characteristic stratum.
- There is a difference between temporary impairment, which is accounted for through an allowance and “other than temporary”, which requires a direct write-off.



# Impairment Testing

## Sample Bank - \$265.0 MM Servicing Portfolio Valuation

		Principal Balance	WAC	WAM	Service Fee	T&I Total	Prepayment PSA	Age	Fair Value %	Fair Value \$	Book Value \$	Fair Value - Book Value	Bal. Sheet Impact
30 & 25 year	less than 5.125%	1,598,077	4.973%	351	0.25%	1,726	188	9	1.228%	19,617	17,922	1,694	-
	5.125% - 7.125%	125,203,980	5.872%	348	0.25%	127,736	387	10	0.840%	1,051,192	1,088,805	(37,613)	(37,613)
	greater than 7.125%	3,401,916	7.496%	309	0.25%	5,315	671	51	0.415%	14,131	18,876	(4,746)	(4,746)
	Total 30 year	130,203,973	5.904%	347	0.25%	134,778	392	11	0.834%	1,084,939	1,125,603	(40,664)	(42,359)
20 year	less than 5.00%	1,278,080	4.875%	233	0.25%	1,330	188	7	1.097%	14,023	12,530	1,494	-
	5.00% - 6.50%	20,065,692	5.613%	230	0.25%	22,597	298	10	0.897%	179,893	177,235	2,658	-
	greater than 6.50%	842,365	6.815%	207	0.25%	277	658	31	0.392%	3,298	4,689	(1,391)	(1,391)
	Total 20 year	22,186,137	5.616%	229	0.25%	24,205	305	11	0.889%	197,214	194,454	2,760	(1,391)
15 year	less than 4.50%	1,585,506	4.375%	173	0.25%	1,108	192	7	0.934%	14,801	13,610	1,191	-
	4.50% - 6.50%	72,053,883	5.213%	168	0.25%	72,868	300	11	0.781%	562,441	576,566	(14,126)	(14,126)
	greater than 6.50%	2,298,817	6.992%	116	0.25%	4,281	439	64	0.409%	9,403	11,800	(2,397)	(2,397)
	Total 15 year	75,938,207	5.249%	166	0.25%	78,258	302	13	0.773%	586,645	601,976	(15,331)	(16,522)
10 year & Balloons	less than 4.125%	1,140,076	3.964%	77	0.25%	1,886	216	7	0.907%	10,345	9,537	807	-
	4.125% - 6.125%	34,947,979	4.838%	86	0.25%	32,578	310	10	0.705%	246,414	253,897	(7,483)	(7,483)
	greater than 6.125%	583,628	6.348%	66	0.25%	510	607	23	0.410%	2,393	2,739	(346)	(346)
	Total 10 year & bal.	36,671,684	4.835%	86	0.25%	34,974	312	10	0.707%	259,152	266,173	(7,021)	(7,828)
Grand Total		265,000,000	5.544%	249	0.25%	272,214	348	11	0.803%	2,127,950	2,188,206	(60,256)	(68,101)



# Impairment Testing

## FASB Servicing Rights Project

- Companies can choose fair value of LOCOM
- Changes in fair value flow through earnings
- Initially recognize at fair value versus relative fair value
- Expanded disclosure for LOCOM including roll forward, servicing fees earned, description of valuation techniques and sensitivity analysis



# Required Repurchases and Fraud

Investors may generally require sellers to repurchase loans if:

- Final loan documents were not delivered on time
- The loan is not investor “eligible”
- The mortgagor fails to make their first payment
- The loan becomes severely delinquent (60 days within 6 months or 90 days within a year)
- Material breaches in the representations and warranties were made
- Evidence of fraud is discovered pertaining to the origination or sale of the loan



# Required Repurchases and Fraud

## Avoiding Fraud

Have your clients redouble their quality control efforts:

- Increase the percentage of loans reviewed prior to close.
- Order a higher percentage of review appraisals and cull approved appraiser lists.
- Use contract underwriters in order to transfer the repurchase risk.
- Cull approved broker and correspondent lists
- Use fraud detection technology





# Required Repurchases and Fraud

## Identifying Potential Repurchases

- Review recent internal quality control reports.
- Obtain and review recent required repurchases.
- Obtain and review recent investor “report cards”.



# Auditing

## Mortgage Servicing Rights

Three primary considerations:

- GAAP
- Investor requirements
- Regulatory requirements



# Auditing

## Investor Requirements

- Federal National Mortgage Association – FNMA – Fannie Mae
- Federal Home Loan Mortgage Corporation – FHLMC – Freddie Mac
- Government National Mortgage Association – GNMA – Ginnie Mae
- Private Investors – GMAC RFC, Countrywide, and others

# Auditing

## Fannie Mae

Requirements are set forth in Seller/Servicer Contract and Seller/Servicer Guides and include:

- Specified net worth
- Evidence of insurance
- Review of specified servicing procedures
- Evidence of Fannie Mae stock ownership
- Certification regarding document custodian



# Auditing

## Freddie Mac

Requirements are set forth in Seller/Servicer Contract and Seller/Servicer Guides and include:

- Required net worth
- Insurance
- Quality control
- Custodial accounts
- Certification regarding document custodian



# Auditing

## Ginnie Mae Requirements

Requirements for non-supervised lenders are set forth in Ginnie Mae 5500.3 Rev. 1 and include:

- Auditor qualification requirements
- Audit scope and approach
- Matters requiring immediate attention
- Planning the audit
- Consideration of internal controls
- Quality control reviews
- Corrective action plans
- Fair housing and non-discrimination



# Auditing

## Ginnie Mae MBS

There are additional requirements for issuers of GNMA MBS including:

- Report on internal controls
- Compliance with specific requirements
- Adjusted net worth calculation
- Insurance requirement



# Auditing

## Private Investors

Investors may require audit report based on the Uniform Single Attestation Program (USAP) for Mortgage Bankers developed by the Mortgage Bankers Association of America.





# Auditing

## Substantive Tests for Mortgage Servicing Rights

- Review the assumptions used in the valuation process for reasonableness and compare to actual results.
- Pay particular attention to the assumptions regarding prepayments.
- Evaluate the adequacy of the liability for recourse obligations.
- Determine the approval process required to change valuation assumptions.
- Review the sensitivity or interest rate shock analyses.



# Regulatory Requirements

## Inter-Agency Advisory Mortgage Banking - February 2003

- Need to comply with rules on interest rate risk
- Need to consider how mortgage banking affects strategic, business and asset / liability plans
- Establish asset / capital limits for mortgage banking



# Regulatory Requirements

## Recommended Policies and Procedures per the Advisory:

- Use of a quality control program to monitor underwriting and documentation practices
- Periodic reconciliation of cash receipts and payments applied to the servicing system
- Periodic reconciliation of the custodial accounts
- Periodic reconciliation of servicing fees received to the amount recorded in the GL



# Regulatory Requirements

## Inter-Agency Advisory - Mortgage Servicing Rights

- Requires comprehensive documentation of valuation process
- Valuation must be based on reasonable and supportable assumptions
- Compare assumptions to actual results
- Major changes to valuation assumptions must be approved
- Use appropriate amortization
- Recognize impairment timely



# MPF Program

## Federal Home Loan Banks

- Federal Home Loan Banks are Government-sponsored enterprises regulated by the Federal Housing Finance Board.
- The FHLBanks are capitalized through the capital stock investments of their members, which include banks, credit unions, thrifts, and insurance companies.
- There are more than 8,000 member institutions and the FHLBanks had total assets of \$935 billion at 12/31/04.
- The FHLBanks owned \$114 billion of mortgage loans and \$113 billion of mortgage backed securities at 12/31/04.



# MPF Program

## MPF Credit Enhancement Fee

- Paid to member for assuming credit risk on mortgage defaults
- Determined by the quality of the loans at the pool level and the MPF program selected
- Fee paid monthly over the life of the loans

# MPF Program

## Credit Enhancement Obligation

- Credit quality is determined at the loan level
- S & P's LEVELS model assigns risk score
- Weighted average credit enhancement at the pool level defines maximum credit risk exposure



# MPF Program

## Loan Loss Absorption

- Home Owner's Equity
- Primary Mortgage Insurance
- First Loss Account
- Credit Enhancement Obligation
- Home Loan Bank





# MPF Program

## Credit Enhancement Obligation Variables

- Cumulative Prepayment Rate (CPR)
- Cumulative Default Rate (CDR)
- Severity of Actual Losses

# MPF Program

## Credit Enhancement Obligation

PSA	Annual Losses After First Loss Account					
	0.00%	0.02%	0.04%	0.07%	0.15%	0.25%
150	0.51%	0.41%	0.32%	0.18%	-0.20%	-0.67%
200	0.48%	0.39%	0.30%	0.17%	-0.19%	-0.63%
250	0.41%	0.33%	0.26%	0.14%	-0.16%	-0.54%
300	0.37%	0.30%	0.23%	0.13%	-0.15%	-0.49%
500	0.26%	0.21%	0.17%	0.09%	-0.10%	-0.35%
700	0.21%	0.17%	0.13%	0.07%	-0.08%	-0.27%



# MPF Program

## Accounting Implications

- FAS 140 requires that the Credit Enhancement Fees Receivable be recorded as an asset at the time of sale at its fair value. The receivable is to be subsequently reported at its fair market value under FAS 115 – *Accounting for Certain Investments in Debt and Equity Securities*.
- The guarantee should be recorded as a Recourse Obligation Liability at the time of sale under FAS 140. Further guidance is provided by FASB Interpretation 45 *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others (FIN 45)*.



# MPF Program

## Regulatory Issues

- The Credit Enhancement Fees Receivable and Guarantee Liability are similar to, and therefore subject to, many of the standards contained in the December 1999 *Inter-Agency Guidance on Asset Securitization Activities*.
- The key assumptions used to value the asset and liability include prepayment rates, default rates, loss severity factors and discount rates.
- Like MSR's, the Guidance requires comprehensive documentation of the valuation process; that the valuation be based on reasonable and supportable assumptions; and that assumptions be compared to actual results.



# Mortgage Servicing Rights

## Background on Wilary Winn LLC

- Wilary Winn provides independent, fee-based advice to financial intermediaries, including banks, credit unions, finance companies, and mortgage bankers.
- Our services include assessments and valuation of complex financial assets, including mortgage servicing rights, as well as the development and implementation of interest rate risk management programs.

# Mortgage Servicing Rights

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