

Meeting with Redwood Trust

On May 10, 2011, Federal Housing Finance Agency (FHFA) staff met with representatives of Redwood Trust to discuss the proposed rule on credit risk retention. A representative from Wells Fargo accompanied the representatives from Redwood Trust and was present at the meeting. The representatives of Redwood Trust generally expressed a point of view that the risk retention and premium capture calculations in the credit risk retention rule should be based on fair values and not on par values as currently proposed. They provided FHFA staff with the attached hand-out.

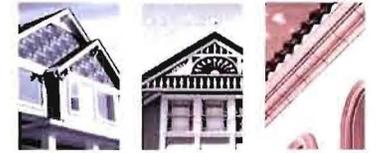


Thoughts on Proposed Credit Risk Retention Rules

May 2011



REDWOOD TRUST



Our goal is to offer comments that
facilitate the creation of a safe, efficient,
robust private residential securitization market

Topics



- Measurement methodology
- Excess spread capture
- Impact on sponsor of holding different forms of risk retention
- Second liens
- Securitization structure tutorial (appendix)

Measurement Methodology



The calculations for premium capture and risk retention need a consistent measurement approach. There are three possibilities – all have issues

- **Worst – Cost Basis of Loans**
 - Virtually impossible to track and verify
 - Subject to significant manipulation (i.e., allocation of overhead, hedging costs)

- **Better – Par or Face Value of Securities Issued**
 - Simple, but may not be a valid expression of the value of securities issued (subs have a value less than par)

OR

 - May not reflect value of the underlying loans (which may have been acquired at a premium or discount)

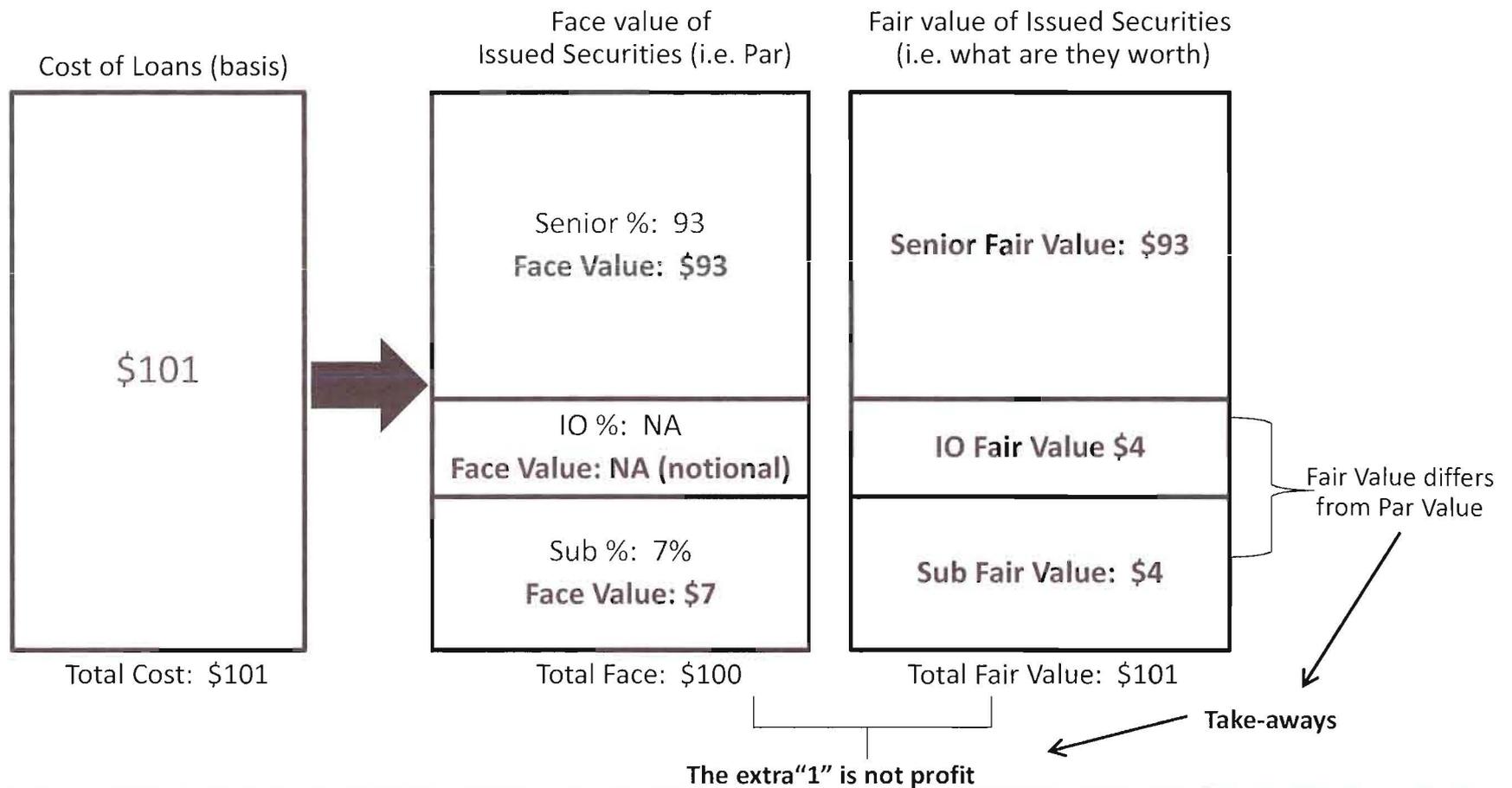
- **Best – Fair Value of Securities Issued**
 - Most accurate measurement of the overall deal economics
 - The valuation of IOs and subs can be subjective. Controls are necessary over fair value process

Measurement Methodology

Par Value vs. Fair Value



- Assume a sponsor acquires loans at premium (par, plus 1 point or 101). A sponsor may pay a premium if the underlying loans carry an interest rate that is higher than currently prevailing interest rates. The sponsor then securitizes these loans. The diagram below shows the difference between Par Value and Fair Value of the securities issued.



Measurement Methodology

Fair Value



Recommendation:

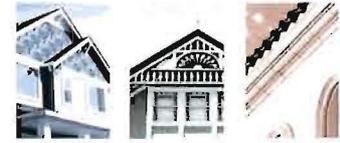
- **The risk retention and premium capture calculations should be based on fair values. We know the mention of fair value will raise regulatory eyebrows. And, we readily admit there needs to be tight controls to prevent manipulation.**

- **Fair value process**
 - A third party valuation firm should establish the fair value of any senior, IO, or subordinate securities sold to an affiliate. While the valuation process needs to be more fully vetted – potential experts could be underwriters, Wall Street firms, or a valuation firm?

 - Independent auditors prepare agreed upon procedures letter to verify the accuracy of the fair value and risk retention (“RR”) process

 - Issuer to disclose in prospectus supplement the fair value calculation and forms of RR

Excess Spread Capture



- **We agree with the NPR Concept:**
 1. Makes sure excess spread needed for future credit support does not leave the deal too early
 2. Make sure that net, net, net – the issuer has a real 5% of risk retention at stake

Excess Spread Capture – Prevent Early Release



Recommendation:

- **Treat structures that use principal only as credit support differently than those that use both principal and interest as credit support (see Appendix)**
- **Maintain current definition of Premium Capture for structures that use excess interest as well as principal as credit support**
 - The OC/Excess spread structure used for Subprime
- **Allow IO to be structured as a senior cash flow in structures which do not use interest for credit support**
 - The Senior/Sub Structure used for prime mortgages
 - To prevent “stuffing” too much excess spread into the IO - require minimum coupons on the subordinate classes equal to the net coupon on the mortgages (gross coupon – servicing fee = net coupon on mortgages)
- **Therefore: eliminates the premium capture account on senior/sub structures**

Excess Spread Capture – Sponsor Retains a Real 5%

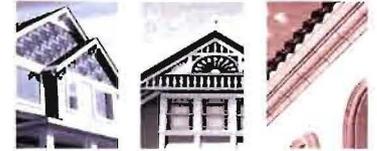


Concept:

- **Generally speaking, a sponsor profit incentive is a good thing provided investors are protected and interests are aligned**
 - Fosters competition and lower borrower rate
 - No profit incentive = no market

- **In the calculation of RR the sponsor should retain 5% of the fair value of all securities issued**
 - The measurement point is the time of securitization
 - Gains or losses occurring from origination to securitization should not be considered
 - Such gains or losses may come from changes in interest rates, hedging, changes in credit, or other factors

Impact of Different Methods of Risk Retention



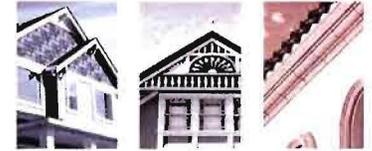
■ Assumptions:

- \$500 million pool consisting of 1000 identical loans of \$500,000
- Senior/sub split 90%/10%
- Credit losses equal to 3% or \$15,000,000
- Risk retention 5%

■ Impact of Losses on Sponsors:

- Horizontal – \$15,000,000 (100% x 15,000,000)
- Vertical – \$750,000 (5% x 15,000,000)
- L-Shaped – \$12,564,103 (100% x 2.5% x 500,000,000) + (2.56% x 2,500,000)
- Representative sample – a one in twenty lottery shot (could be zero)

Impact of Different Methods of Risk Retention



Using horizontal risk retention provided the highest level of alignment of interest when a senior / sub structure. The NPR is overly penal in locking out all 5% of the subs for five years.

Recommendation:

Allow subordinate classes of senior sub structures to begin receiving portions of prepayments, only:

- after a lock out period,
- and only if quality tests are met

The subordinate classes would never be allowed to receive more than their pro rata share of principal and interest

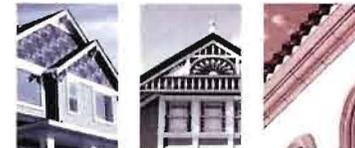
Second Liens



- **Why ignored**
 - Second lien holders wield disproportional power
 - Prevents borrowers from getting loan workouts including modifications and short sales
 - Significantly impacts the credit risk to a superior lien holder without their permission or notice

- **Recommendation:**
 - QRM LTV and CLTV limits should exist for the life of the loan
 - First lien holders must be informed of second lien prior to placement
 - Require immediate impairment of second lien if first lien is delinquent
 - Junior liens must take losses prior to senior lien

RESEARCH REPORT
RESEARCH REPORT



Appendix:

Why structure matters for securitization

Why does securitization market exist



Brings borrowers, lenders and private investors together:

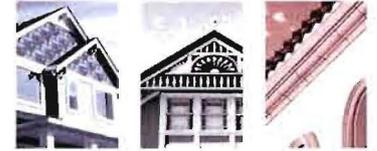
- **For Borrowers: results in lower borrowing rates**
 - Profit incentive creates competition which results in lower rates
 - Variety of products available to meet borrowers' needs

- **For Lenders: provides liquidity and outlet for loan production**
 - Liquid market creates permanent funding solution
 - Allows for increased lending

- **For Investors: creates investments tailored to specific risk appetites**
 - Risk of pool can be allocated across different classes of bonds



Why are there different securitization structures?

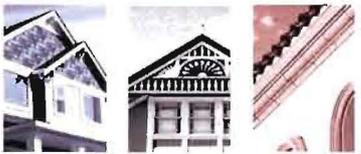


- **Structures are tailored to the specific risks of the underlying loans**
 - Not all borrowers have the same risk profile
 - Not all loans have the same risk of loss and risk of prepayment

- **Cash flows therefore behave differently depending on the type of loan**
 - Prime loans have less risk of loss, but high risk of prepayment
 - Subprime loans have higher risk of loss but lower risk of prepayment

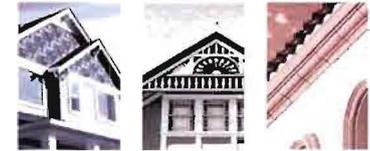
- **The structure must efficiently allocate and price these risks**
 - In order to result in most competitive mortgage rate to borrower
 - While protecting investors

Prime and non-prime have a different risk profile



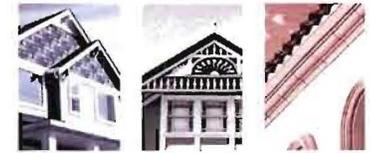
	Prime	Non-Prime
Mortgage Rate	Low	High
Credit Risk	Low	High
Prepayment Risk	High	Low

What are the two basic types of structures?



	Senior / Sub	Over-collateralized (O/C)
Collateral type	Predominantly prime	Predominantly non-prime
Enhancement type	Subordinated bonds	Subordinated bonds and excess interest
Why?	Prime borrowers pay lower interest rates because they are less risky borrowers	Non - prime borrowers pay higher interest rates because they are more risky borrowers
So?	AAA investors (regardless of the borrower type) demand similar yields so if a borrower pays more interest, that interest isn't needed to be remitted to an investor	
And?	Since non-prime borrowers can't refinance as readily as a prime borrower in times of lowering interest rates the supply of the extra interest is considered more predictable	
Therefore	Prime structure gets little benefit from excess interest because there isn't very much and a prime borrower can refinance much more readily (convexity)	Given the interest is more predictable, can be used for credit enhancement
And	AAA IO is more beneficial than using as credit support	Credit support is more beneficial than creating a AAA IO

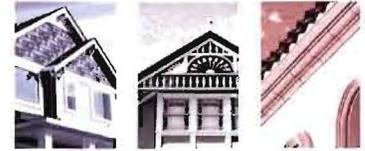
How does the NPR impact these structures ?



- **Restricts the selling of a AAA IO**
 - Forces either retention, subordination or cash collateralizing
 - Forced retention reduces proceeds
 - Subordination provides little benefit to structure
 - Cash collateralizing a deal is extremely unlikely
 - All of the above results in less securitization proceeds

- **Impact of less securitization proceeds:**
 - Issuers will not go to market with a deal where they lose money
 - Profitability requires higher rates from prime borrowers

Why does subordinating the IO raise prime mortgage rates?



- **The senior IO has a different risk profile than a subordinate IO**
 - The senior IO is not subject to credit risk, only prepayment risk
 - The subordinate IO is subject to both first loss and prepayment risk

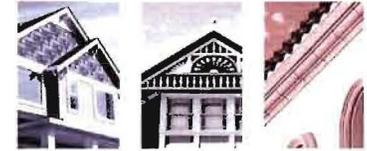
- **Investors will pay more for a senior IO than a subordinate IO**

- **The lower price on the sub-IO translates into lower securitization proceeds**
 - We estimate an approximate loss of 1.5%-2.0% in price

- **Less proceeds means a lower price for the loans**

- **A lower price on the loans means that the interest rate on the loan must increase in order to compensate and get back to break-even**
 - We estimate 50-75 basis points of increase prime mortgage rate

Prime Pool – Senior / Sub Structure



Typical Prime senior/sub structure with AAA IO

Gross Mortgage Rate: 5.50%
 Servicing: 0.25%
 Net Rate to Securitization: 5.25%

Security	Bond Face	% of Deal	Price	Proceeds	Coupon	Market Yield
AAA	\$950,000,000	95%	100.00%	\$950,000,000	4.5%	4.5%
IO - Senior	Notional	*	3.30	\$23,500,000	0.8%	14.0%
Inv Grade Subs	\$20,000,000	2%	80.00%	\$16,000,000	5.3%	7.0%
Non Inv Grade	\$30,000,000	3%	60.00%	\$18,000,000	5.3%	14.0%

Sources and Uses of Funds	
Gross proceeds raised from securitization:	\$1,007,500,000
Securitization Expenses:	0.75% -\$7,500,000
Net proceeds raised from securitization:	\$1,000,000,000
Cost of purchasing the loans (par price for \$1 billion loans):	\$1,000,000,000

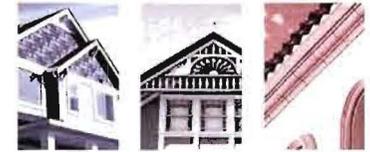
The securitization math becomes uneconomic due to the decrease in value of the IO

Security	Bond Face	% of Deal	Price	Proceeds	Coupon	Market Yield
AAA	\$950,000,000	95%	100.00%	\$950,000,000	4.5%	4.5%
IO - Sub	Notional	*	1.65	\$11,750,000	0.8%	18.0%
Inv Grade Subs	\$20,000,000	2%	80.00%	\$16,000,000	5.3%	7.0%
Non Inv Grade	\$30,000,000	3%	60.00%	\$18,000,000	5.3%	14.0%

Sources and Uses of Funds	
Gross proceeds raised from securitization:	\$995,750,000
Securitization Expenses:	0.0075 -\$7,500,000
Net proceeds raised from securitization:	\$988,250,000
Cost of purchasing the loans (par price for \$1 billion loans):	\$1,000,000,000

Loss of \$12 million would require a 6.00% mortgage coupon to offset

Prime Pool - NPR Math



Cash flow to the IO needs to increase via a high mortgage rate

Gross Mortgage Rate: 6.25%
 Servicing: 0.25%
 Net Rate to Securitization: 6.00%

Security	Bond Face	% of Deal	Price	Proceeds	Coupon	Market Yield
AAA	\$950,000,000	95%	100.00%	\$950,000,000	4.5%	4.5%
Inv Grade Subs	\$20,000,000	2%	0.80	\$16,000,000	6.0%	7.0%
Non Inv Grade	\$30,000,000	3%	60.00%	\$18,000,000	6.0%	14.0%
IO	Notional	*	164.91%	\$23,500,000	1.5%	18.0%

Sources and Uses of Funds	
Gross proceeds raised from securitization:	\$1,007,500,000
Securitization Expenses: 0.0075	-\$7,500,000
Net proceeds raised from securitization:	\$1,000,000,000
Cost of purchasing the loans (par price for \$1 billion loans):	\$1,000,000,000

