

MEMORANDUM

TO: File No. S7-14-11

FROM: Arthur Sandel
Special Counsel
Office of Structured Finance
Division of Corporation Finance
U.S. Securities and Exchange Commission

RE: Meeting with representatives of CRE Finance Council

DATE: November 26, 2013

On November 21, 2013, Arthur Sandel and David Beaning of the Division of Corporation Finance and Sean Wilkoff of the Division of Economic and Risk Analysis participated in a meeting at the offices of the Federal Reserve Board with the following representatives of CRE Finance Council (“CREFC”): Stephen Renna, Martin Schuh and Christina Zausner of CREFC; Paul Vanderslice of Citigroup Global Markets (by telephone); Joshua Mason of BlackStone Real Estate Advisors L.P.; Nelson Hioe of Raith Capital Partners; Scott Sinder of Steptoe & Johnson LLP; Thomas Nealon of LNR Partners, LLC; Adam Hayden of New York Life Real Estate Investors; and Rene Theriault of Goldman, Sachs & Co.

The following staff of other agencies also participated: Donald Gabbai, April Snyder, David Alexander, Matthew Suntag and Sean Healey of the Federal Reserve Board; and Adam Ashcraft and Steve Sloan of the Federal Reserve Bank of New York (by telephone).

The participants discussed topics related to the Commission’s August 28, 2013 joint proposed rules regarding credit risk retention. A briefing package submitted in connection with the meeting is attached to this memo.

Attachment

Recommendations Related to Risk Retention Re-Proposal

CRE Finance Council

November 2013



CRE Finance Council®
The Voice of Commercial Real Estate Finance

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CMBS 2.0

- Provides a competitive alternative to balance sheet lending and to lesser regulated financings
- Fills certain market gaps
 - Diversified funding approach to stabilized second and third-tier properties
 - Unique and larger properties (SBSC)
- Industry participants have made significant advancements in transparency and standardization since crisis
- CMBS maturities peaking just as risk retention would be implemented

CREFC Comment development process

- Tasked four forums (Issuers, IG Investors, B-piece Buyers, and Servicers) with initial comment development
 - Comments were based on data analysis and current industry standards
 - Where necessary, the forums deployed surveys to identify and substantiate majority positions
- Working committee of lawyers and accountants reviewed CREFC recommendations
- Policy Committee (includes leadership of all forums) synthesized recommendations
- Executive Committee approved letter
- CREFC Board of Directors apprised of the comments prior to filing

CREFC Comment Letter Objectives

- Respect cornerstones of risk retention
 - 5-percent retention
 - Using fair value for sizing of retained interest
 - 5-year hold period
- Address requirements in the re-proposal that will have materially negative consequences with regards to capital, liquidity and market structure

Primary challenges of Re-Proposal for Commercial Real Estate

- Eligible Horizontal Retained Interest (EHRI) test
- *Pari passu*
- Single Borrower Single Credit (SBSC)
- QCRE parameters

EHRI test problem: Contradicts normal market functioning

- CMBS will fail Cash Flow Projections / Principal Repayment Test throughout their lives
- B-piece bond discount is a necessary inducement → FV treatment is not viable as the basis of measure for the test
- Also, a large percentage of the underlying loans are full or partial IOs → Not useful to compare cash flows to principal

EHRI test recommendation: Cash flows to Cash flows at par

- Par basis must be substituted for FV
 - This will allow discounting for lower-quality bonds, as per normal market practice, a necessary inducement for investors
- The test must measure cash flow-to-cash flow (or, “apples-to-apples”)
 - This will accomplish regulatory goal: ensuring that B-piece buyers are not paid out disproportionately
- Price paid for the B-piece will be transparent to other investors

Pari Passu problem: Confusing to / impossible for Investors

- 5 percent of FV represents roughly 6 – 8 percent of par
- To comply, B-piece buyers will have to buy as high up into the stack as A-
- Current B-piece capacity will have to double, or even triple, to support risk retention

Pari Passu recommendation: Senior-Sub structure supports risk-targeting

- CREFC IG Investor Forum broadly supported the recommendation for a senior-subordinate structure
- IG Investors want to continue to have access to the lower IG-rated tranches, yet, many cannot absorb non-prime and unrated bonds
- Marketplace needs their participation to grow B-piece capacity to meet risk retention requirements
- IG Investors would be given deal documentation at same point as other B-piece investors, thus facilitating thorough due diligence

SBSC problem: RR not additive to structure and likely migration of top quality borrowers

- SBSC represents roughly 15% of CMBS market
- SBSC deals are different:
 - Strong borrowers and properties
 - Exceptional transparency and access to borrower
 - AAA subordination substantive and mezzanine debt also part of structure
 - Historically outperformed corporate debt on basis of ratings transitions and loss severity
- Risk retention not additive to the SBSC market – no need for B-piece to perform well; already very transparent
- If subject to risk retention, SBSC market not competitive
 - Borrowers could agent their own deals, leaving investors without the protections of an underwriter

QCRE problem: Will lead to negative selection within the pools

- Better-quality borrowers and properties command more advantageous terms / conditions
- Data analysis strongly suggests that QCRE excludes higher-performing loan types
 - IOs and shorter-term loans have historically performed better than QCRE-eligible loans
 - The difference between 25- and 30-year amortization is negligible and would exclude the majority of better-quality loans
- QCRE as proposed, will exacerbate and accelerate credit cycle

QCRE recommendation: Prudently loosen parameters

- Only 2 – 8 percent of loans have been structured over time as QCRE-eligible (as per re-proposal)
- These loans performed relatively worse than some of the loans that are excluded
- Widening QCRE parameters to include IOs, shorter-term loans, loans with 30-year amortization, and no restrictions on cap rates, would move the inclusion rate to roughly 15% historically (20%+ since 2010, due to higher underwriting standards)
- CREFC IG Investors considered analysis provided by Trepp before taking a survey to establish majority support for this recommendation

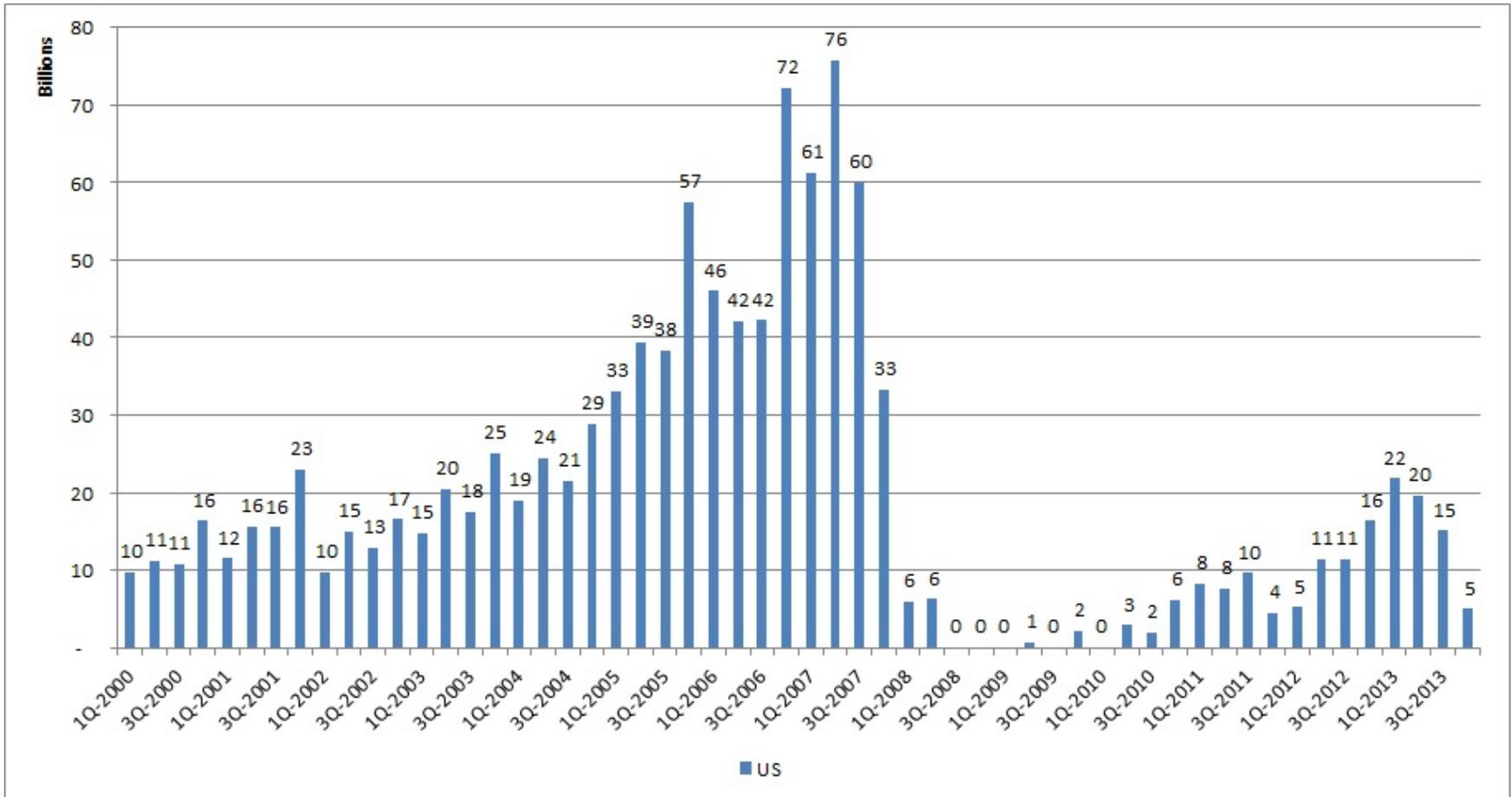
Conclusion

- CREFC members recognize that risk retention is an essential piece of the regulatory regime
- However, the implementation schedule coincides with period of material internal and external flux
 - Internal: peaking maturities
 - External: Interest rate volatility, Budget/debt talks and GDP impact
- In light of CMBS critical role and the fragility of the economic recovery, the finer aspects of risk retention must be rationalized
- Failure to do so will, in the least, lead to irrational behavior and unintended consequences

Appendices

- Appendices 1 – 5: CMBS Market Data
- Appendix 6: Results of Impact Surveys
- Appendix 7: Cash flow test model
- Appendix 8: Senior-subordinate model
- Appendices 9 – 10: SBSC data
- Appendices 11 – 15: QCRE data

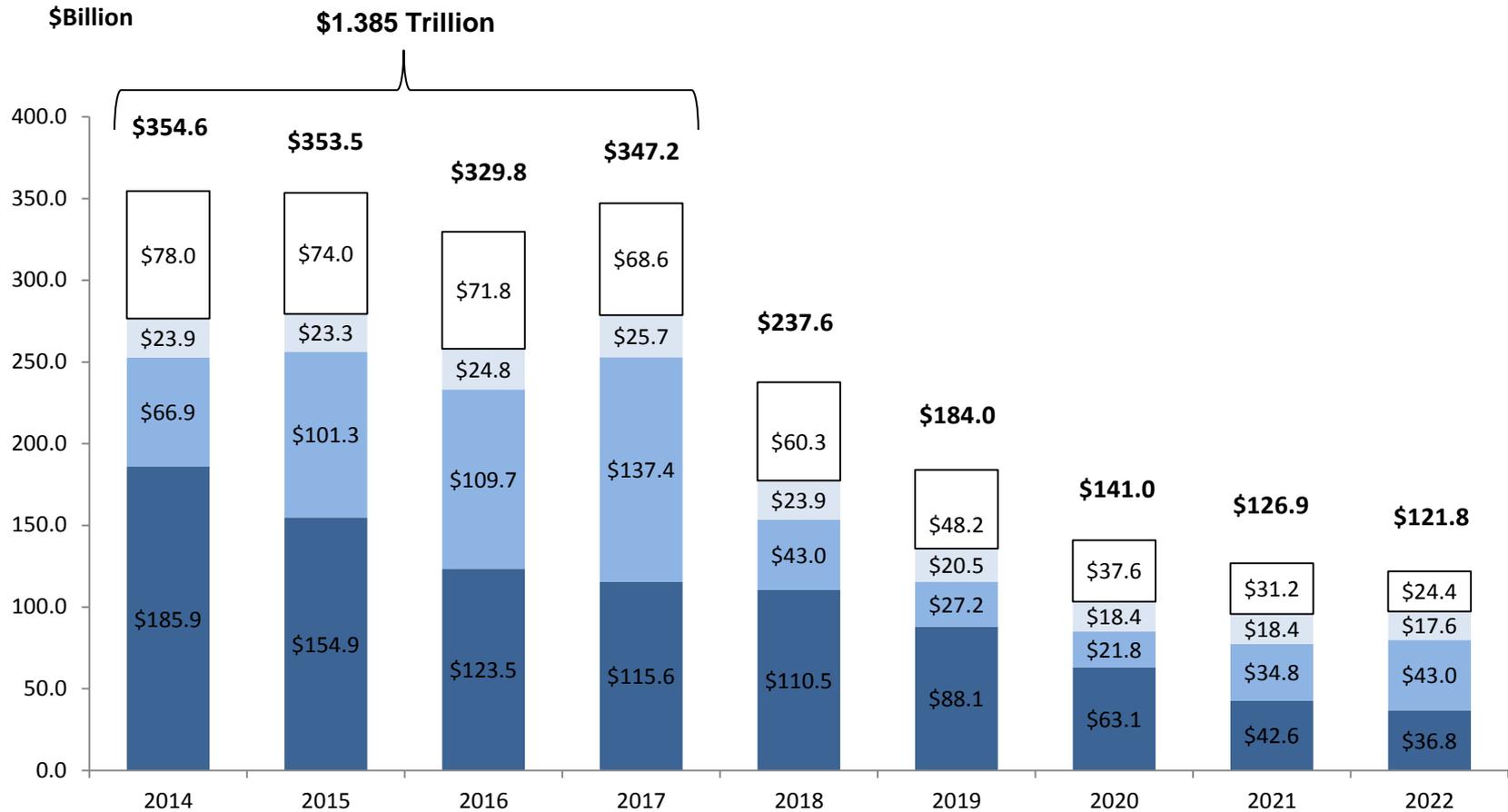
Appendix 1: US CMBS Issuance



Source: Morningstar

Appendix 2: CRE Debt Maturities

CRE Debt Maturities by Lender Type - Totals



Source: Trepp, LLC, 1Q13 Update

■ Banks

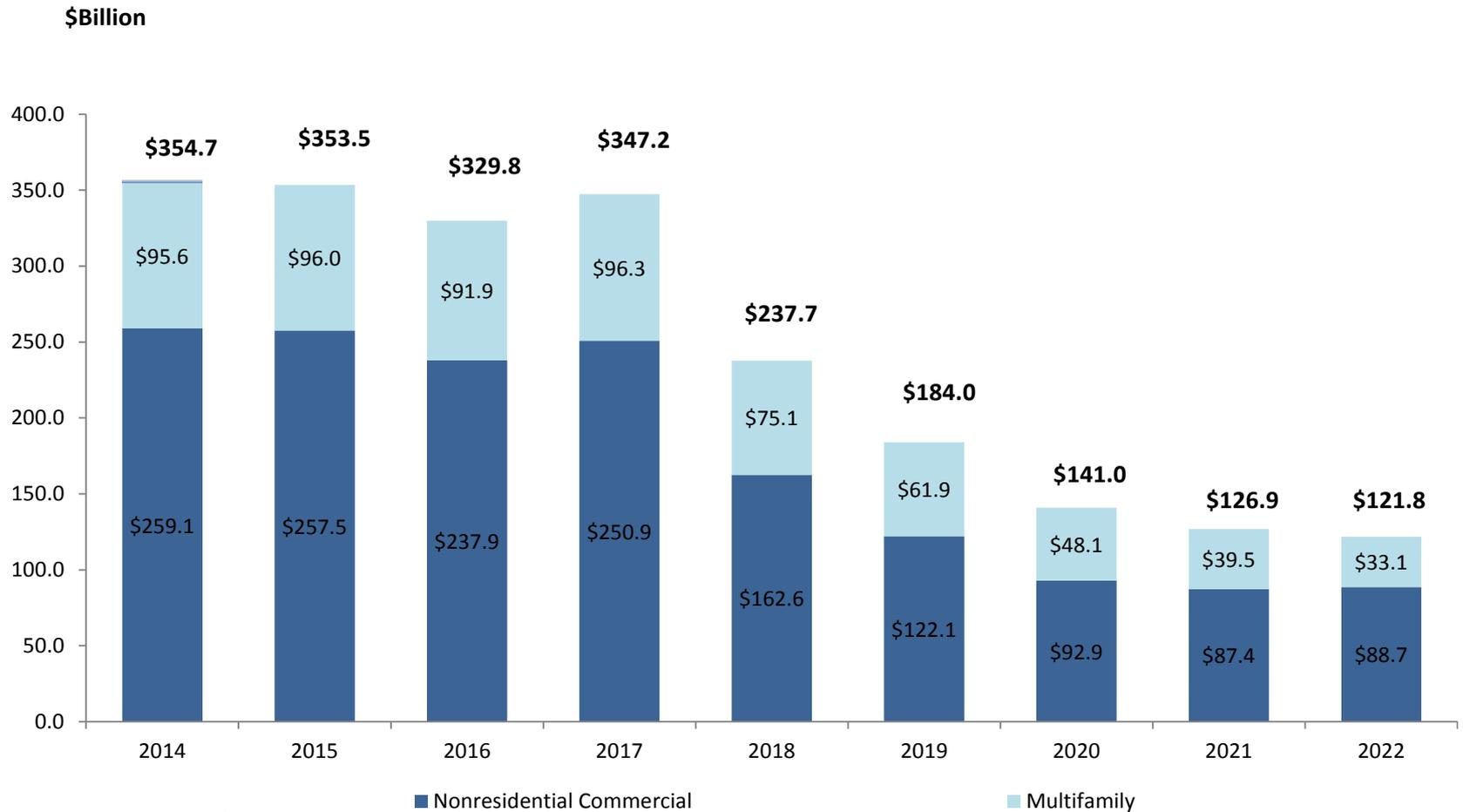
■ CMBS

■ Life Co.s

□ Other

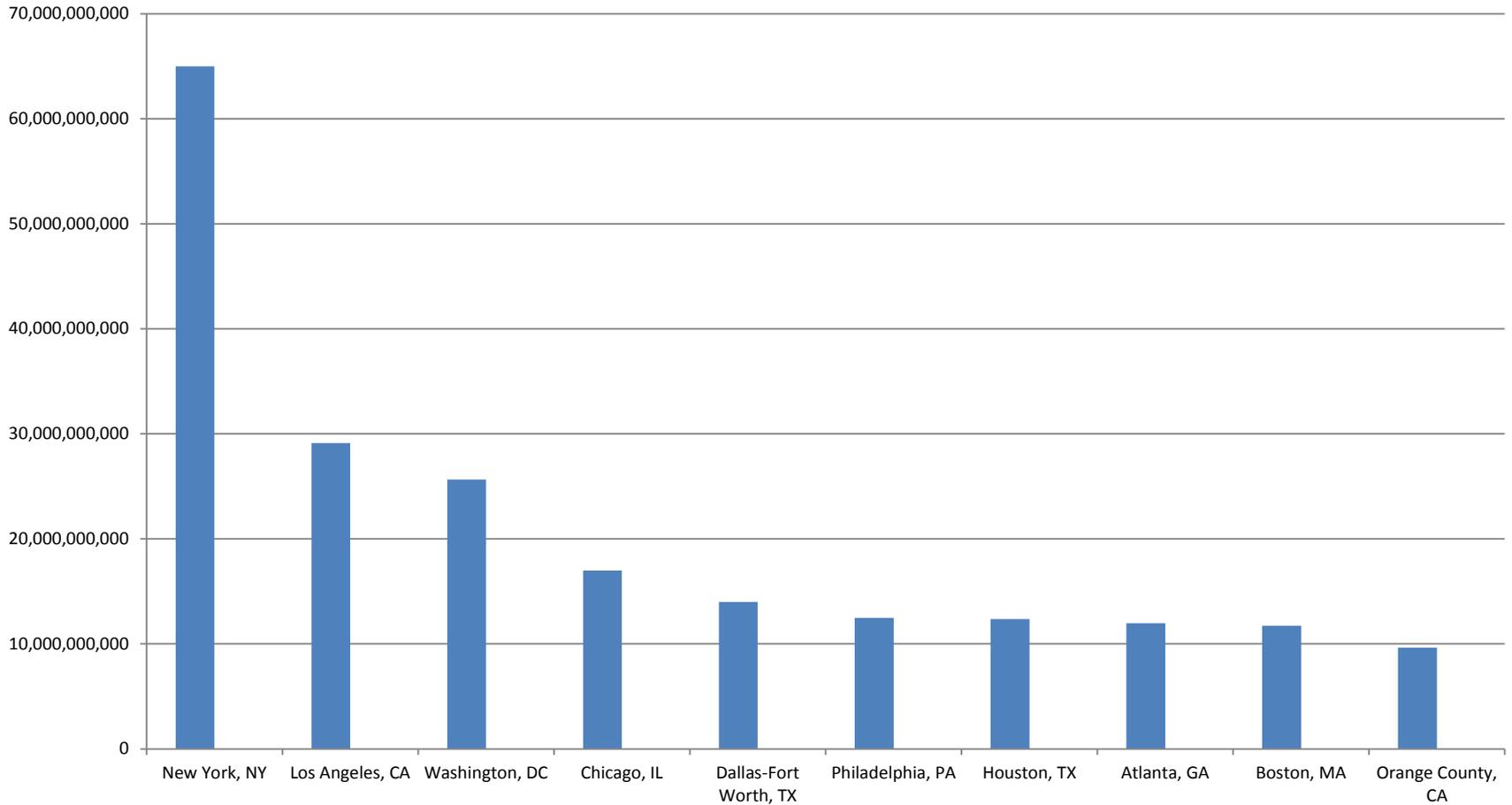
Appendix 3: CRE Debt Maturities

CRE Debt Maturities – Commercial vs. Multifamily



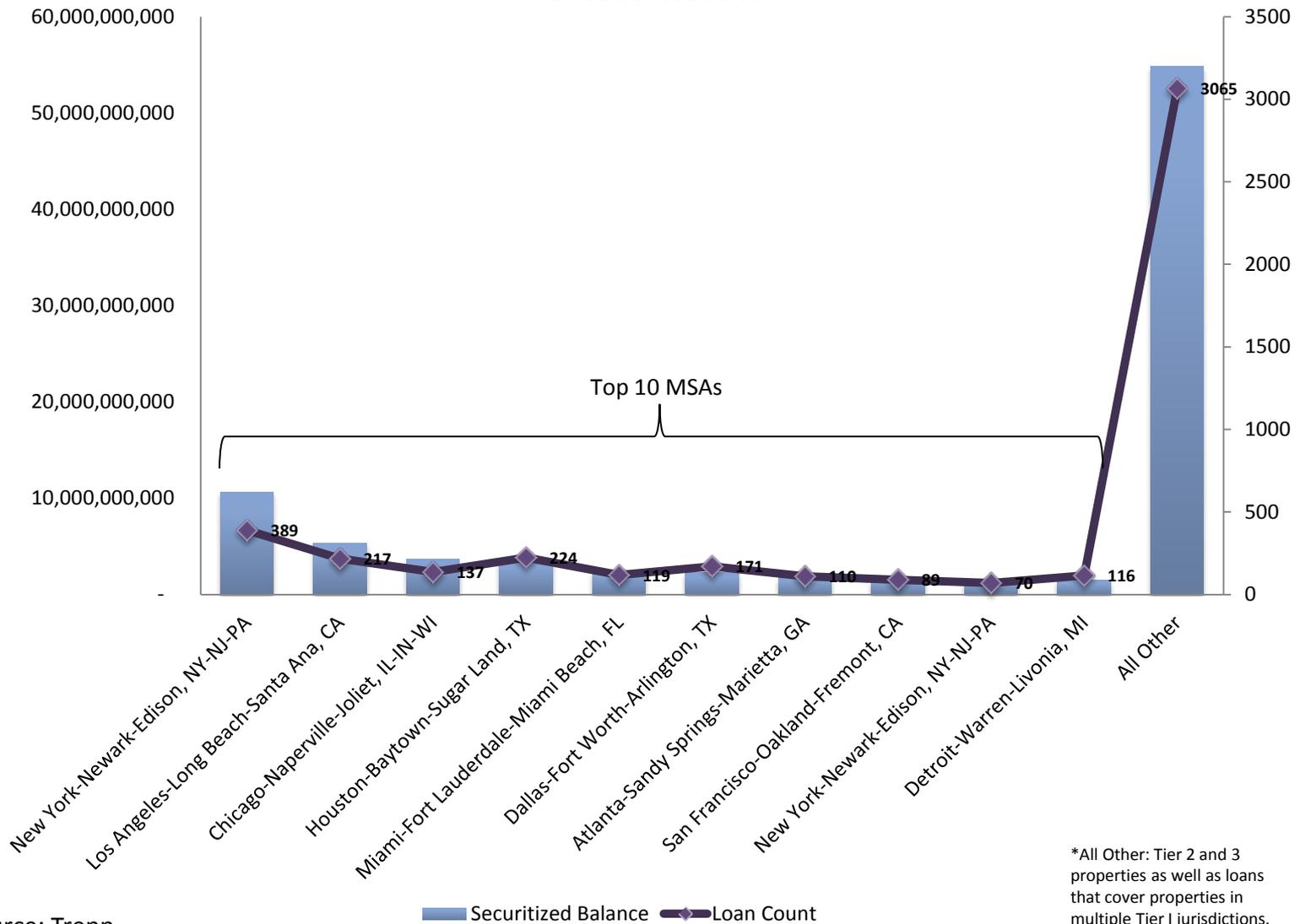
Source: Trepp, LLC, 1Q13 Update

Appendix 4: Outstanding CMBS Loans to Top 10 MSAs



Source: Morningstar

Appendix 5: Distribution of Outstanding CMBS Loans across Top Tier and Other MSAs



Appendix 6: Results of Impact Survey

CRE Finance Council Issuers Risk Retention Impact Survey Conducted from November 11, 2013 to November 19, 2013

Question #1: What type of participant are you?				
Bank issuer	11	100.00%	Total Responses:	11
Non-bank issuer	0	0.00%	Total Skipped:	1
Question #2: What is your company's expected volume of CMBS issuance in 2013?				
Up to \$1 billion	0	0.00%	Total Responses:	11
\$1 – 2 b billion	1	9.09%	Total Skipped:	1
\$2 - \$3 billion	1	9.09%		
\$3 - \$4 billion	2	18.18%		
\$4 - \$5 billion	1	9.09%		
\$5+ billion	6	54.55%		
Question #3: What affect would risk retention as re-proposed have on your company's future CMBS loan volume?				
Increase	0	0.00%	Total Responses:	12
Decrease	10	83.33%	Total Skipped:	0
Neutral	2	16.67%		
Question #4A: If you answered "decrease" for Q3, by how much?				
0 – 10%	0	0.00%	Total Responses:	10
10 – 20%	3	30.00%	Total Skipped:	0
20 – 30%	3	30.00%		
30 – 40%	2	20.00%		
40 – 50%	1	10.00%		
50 – 60%	0	0.00%		
60 – 70%	1	10.00%		
70 – 80%	0	0.00%		
80 – 90%	0	0.00%		
90 – 100%	0	0.00%		

Appendix 6: Results of Impact Survey (Cont'd)

Question #4B: If you answered "increase" for Q3, by how much?			
0 – 10%	0		Total Responses: 0
10 – 20%	0		Total Skipped: 0
20 – 30%	0		
30 – 40%	0		
40 – 50%	0		
50 – 60%	0		
60 – 70%	0		
70 – 80%	0		
80 – 90%	0		
90 – 100%	0		
Question #5: If applicable, how will the Risk Retention Re-Proposal impact your Single Asset Single Borrower volume?			
Increase	0	0.00%	Total Responses: 12
Decrease	12	100.00%	Total Skipped: 0
Neutral	0	0.00%	
Question #6A: If you answered "decrease" for Q3, by how much?			
0 – 10%	2	18.18%	Total Responses: 11
10 – 20%	0	0.00%	Total Skipped: 1
20 – 30%	2	18.18%	
30 – 40%	2	18.18%	
40 – 50%	1	9.09%	
50 – 60%	1	9.09%	
60 – 70%	0	0.00%	
70 – 80%	0	0.00%	
80 – 90%	1	9.09%	
90 – 100%	2	18.18%	

Appendix 6: Results of Impact Survey (Cont'd)

Question #6B: If you answered "increase" for Q3, by how much?				
0 – 10%	0			Total Responses: 0
10 – 20%	0			Total Skipped: 0
20 – 30%	0			
30 – 40%	0			
40 – 50%	0			
50 – 60%	0			
60 – 70%	0			
70 – 80%	0			
80 – 90%	0			
90 – 100%	0			
Question #7: If you had to, would you be able to hold some percentage of the vertical stack?				
Yes	0	0.00%		Total Responses: 8
No	4	50.00%		Total Skipped: 4
Maybe	4	50.00%		
Question #8: If you had to, would you be able to hold some percentage of the horizontal retained interest?				
Yes	0	0.00%		Total Responses: 8
No	7	87.50%		Total Skipped: 4
Maybe	1	12.50%		
Question #9: What do you believe is the optimal annual CMBS volume, balancing credit metrics and investor demand?				
\$0 - \$25 billion	0	0.00%		Total Responses: 9
\$25 - \$50 billion	0	0.00%		Total Skipped: 3
\$50 - \$75 billion	0	0.00%		
\$75 - \$100 billion	2	22.22%		
\$100 - \$125 billion	5	55.56%		
\$125+ billion	2	22.22%		

Appendix 6: Results of Impact Survey (Cont'd)

Question #10: What would be the estimated impact to borrower costs?							
0 - 25 bps	0	0.00%	<table border="1"> <tr> <td>Total Responses:</td> <td>9</td> </tr> <tr> <td>Total Skipped:</td> <td>3</td> </tr> </table>	Total Responses:	9	Total Skipped:	3
Total Responses:	9						
Total Skipped:	3						
25 - 50 bps	6	66.67%					
50 - 75 bps	3	33.33%					
75 - 100 bps	0	0.00%					
100+ bps	0	0.00%					
Question #11: For the below aspects of the risk retention re-proposal, please rate their impact on availability of capital.							
Aspect of Risk Retention Re-Proposal	# of Responses	Rating (1 - 5)					
5% at fair value	9	4.78	Skipped 3				
5-year hold	9	4.33	Skipped 3				
Pari passu	9	4.78	Skipped 3				
Cash Flow Projections/Principal Repayment Test	9	4.44	Skipped 3				
Restrictions on sale after 5-year hold	9	4.11	Skipped 3				
Lack of exemption for SASB	9	4.89	Skipped 3				
Restrictive QCRE definitions	9	4.78	Skipped 3				
5% quorum for special servicer removal	9	4.00	Skipped 3				
Lack of guidance for clarifications and exemptions	9	3.89	Skipped 3				

Appendix 7: Closing Date Cash Flow vs Principal Repayment Test

Conclusion: It is imperative that par, not fair value, be used as the valuation treatment CMBS in order for the Alternative regulatory test to apply within in the context of current economics and market practices. If fair valuation is maintained as part of the requirement, most, if not all, CMBS deals will fail the test until maturity.

Note: For the purposes of simplicity, the below assumes no losses to the pool. Losses would further challenge the deal, making it increasingly difficult to pass the Alternative test, especially if treated under fair value. This bolsters the case that the Alternative test is viable only in a par valuation environment.

		Year	PPMTs	IPMTs	EB	CF	TOT. PRIN PMT	HRI Loss-Adjusted Cash Flows				CF	CREFC Test				
								IPMTs	Losses	PPMTs	EB		HRI: % of CF as % of UPB	Rest of Pool: % of CF as % of UPB	HRI % < Rest of Pool %?		
Pool Balance	\$1,250,000,000																
WAC	5.25%																
WAM	10	0			\$1,250,000,000												
WARA	30	1	\$18,021,167	\$65,625,000	\$1,231,978,833	\$83,646,167	\$18,021,167	\$4,145,684	\$0	\$0	\$159,973,803	(\$64,776,309)	\$4,145,684	2.6%	7.4%	OK	
Discount Rate on Pool	4.75%	2	\$18,967,278	\$64,678,889	\$1,213,011,555	\$83,646,167	\$18,967,278	\$4,145,684	\$0	\$0	\$159,973,803	\$4,145,684	\$4,145,684	2.6%	7.5%	OK	
Fair Value of Pool	\$1,295,526,185	3	\$19,963,060	\$63,683,107	\$1,193,048,495	\$83,646,167	\$19,963,060	\$4,145,684	\$0	\$0	\$159,973,803	\$4,145,684	\$4,145,684	2.6%	7.7%	OK	
Fair Value % Principal	103.6%	4	\$21,011,121	\$62,635,046	\$1,172,037,374	\$83,646,167	\$21,011,121	\$4,145,684	\$0	\$0	\$159,973,803	\$4,145,684	\$4,145,684	2.6%	7.9%	OK	
		5	\$22,114,205	\$61,531,962	\$1,149,923,169	\$83,646,167	\$22,114,205	\$4,145,684	\$0	\$0	\$159,973,803	\$4,145,684	\$4,145,684	2.6%	8.0%	OK	
Ex Post CDR Assumption	0.00%	6	\$23,275,201	\$60,370,966	\$1,126,647,968	\$83,646,167	\$23,275,201	\$4,145,684	\$0	\$0	\$159,973,803	\$4,145,684	\$4,145,684	2.6%	8.2%	OK	
Severity Assumption	45.0%	7	\$24,497,149	\$59,149,018	\$1,102,150,820	\$83,646,167	\$24,497,149	\$4,145,684	\$0	\$0	\$159,973,803	\$4,145,684	\$4,145,684	2.6%	8.4%	OK	
Note: Assumes no liquidation lag		8	\$25,783,249	\$57,862,918	\$1,076,367,571	\$83,646,167	\$25,783,249	\$4,145,684	\$0	\$0	\$159,973,803	\$4,145,684	\$4,145,684	2.6%	8.7%	OK	
Total Losses	0.0%	9	\$27,136,869	\$56,509,297	\$1,049,230,702	\$83,646,167	\$27,136,869	\$4,145,684	\$0	\$0	\$159,973,803	\$4,145,684	\$4,145,684	2.6%	8.9%	OK	
		10	\$1,049,230,702	\$55,084,612	\$0	\$1,104,315,313	\$1,049,230,702	\$4,145,684	\$0	\$159,973,803	\$0	\$164,119,487	\$0				
FV of HRI	\$64,776,309	11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
Discount Rate on HRI	14.00%	12	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
Current Yield on HRI	6.40%	13	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
HRI WAL	10	14	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
HRI Implied Principal	\$159,973,803	15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
HRI Purchase Price	\$0.405	16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
HRI Implied Coupon Rate	2.59%	17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
HRI Principal Percentage of Tot	12.8%	18	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
Loss-Adjusted IRR	14.0%	19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
		20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
		21	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
		22	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
		23	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
		24	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
		25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
		26	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
		27	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
		28	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
		29	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
		30	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				

Source: Raith Capital

Appendix 8: Senior-Sub Analysis

Conclusion: The challenge posed by the new Proposed Rule is one of capacity in the marketplace. Today, the B-Piece investor community typically purchases 6 or 7-percent of the par value of a deal at a discount that translates into a typical investment of 2.5 to 3-percent of the fair value of the deal proceeds. Under the proposal, B-Piece Investors will need to raise the capital to consume the expanded 5-percent fair value retention requirement. That level of retention will mean that bonds higher in the waterfall – bonds historically rated BBB-, BBB, and potentially even A- –will be swept into the EHRI retention position.

	Scenario 1	Scenario 2	Scenario 3
Description	Approximate levels based on recently executed transactions	Credit bonds subject to RR price at B-Piece Yield	Credit bonds subject to RR price at 50% B-Piece Spread
Par	\$100.0	\$100.0	\$100.0
Gross Profit	3.00%	3.00%	3.00%
Market Value	\$103.0	\$103.0	\$103.0
Req. Risk Retention	\$5.2	\$5.2	\$5.2
B-Piece Size	\$6.656	\$6.656	\$6.656
BBB- Size	\$5.188	\$5.188	\$5.188
A Size	\$3.687	\$3.687	\$3.687
AA Size	\$6.438	\$6.438	\$6.438
10-year Swap	2.75	2.75	2.75
B-Piece (bond equivalent yield)	18.000%	18.000%	18.000%
BBB- Spread	425	1,525	650
A Spread	275	475	275
AA Spread	185	185	185
B-Piece Coupon (%)	4.360	4.360	4.360
BBB- Coupon (%)	4.811	4.811	4.811
A Coupon (%)	4.811	4.811	4.811
AA Coupon (%)	4.811	4.811	4.811
B-Piece Px	\$0.385	\$0.385	\$0.385
BBB- Px	\$0.849	\$0.406	\$0.720
A Px	\$0.952	\$0.819	\$0.952
AA Px	\$1.020	\$1.020	\$1.020
B-Piece Fair Value	\$2.6	\$2.6	\$2.6
BBB- Fair Value	\$4.4	\$2.1	\$3.7
A Fair Value	\$3.5	\$3.0	\$3.5
AA Fair Value	\$6.6	\$6.6	\$6.6
Total Fair Value	\$17.0	\$14.3	\$16.4
% B-Piece Purchased	100.0%	100.0%	100.0%
% BBB- Purchased	58.8%	100.0%	69.3%
% A Purchased	0.0%	16.0%	0.0%
% AA Purchased	0.0%	0.0%	0.0%
Total Thickness Purchased	9.7%	12.4%	10.3%
AAA Thickness	78.031	78.031	78.031
AAA Px	\$1.000	\$1.000	\$1.000
Implied IO Price	\$0.079	\$0.107	\$0.086
Assumed IO BEY	5.000%	5.000%	5.000%
Incremental Coupon		0.354%	0.085%

Source: Raith Capital

Appendix 9: Single Asset Single Borrower Performance Data

Cumulative Loss Rates and Loss Severities

Single Asset/Borrower Deals			
Vintage	Total Sec. Bal.	Loss Amount	Cum. Loss %
1997	953,691,691	-	0.00%
1998	1,005,000,000	-	0.00%
1999	1,707,187,444	3,627	0.00%
2000	3,236,375,546	3,580,285	0.11%
2001	4,759,636,946	272,536	0.01%
2002	2,508,823,945	3,812	0.00%
2003	2,227,159,000	-	0.00%
2004	4,247,025,000	-	0.00%
2005	12,083,629,700	-	0.00%
2006	10,146,778,330	930,513	0.01%
2007	13,807,901,391	243,885,592	1.77%
2009	1,360,000,000	-	0.00%
2010	12,747,896,207	-	0.00%
2011	3,509,601,594	-	0.00%
2012	9,293,506,326	-	0.00%
2013	16,078,193,878	-	0.00%
Grand Total	99,672,406,998	248,676,364	0.25%

	Cumulative Loss Rate				
	All Time	2013 YTD (201309)	2012	2011	2010
SASB	0.25%	0.00%	0.00%	0.00%	0.53%
Conduit	2.79%	0.86%	1.18%	1.12%	0.73%

Source: Trepp

Appendix 10: Single asset Single Borrower Performance Data

SBSC and Corporate Debt Rating Transition Comparison

CMBS Single Asset/Single Borrower Lifetime Transition Matrices										
Orig Rating	Current Rating							Total	Count	Wtd Avg Duration (Yrs)
	Aaa (sf)	Aa (sf)	A (sf)	Baa (sf)	Ba (sf)	B (sf)	Caa (sf) / below			
Aaa (sf)	95%	3%	1%	0%	1%	0%	0%	100%	271	4.7
Aa (sf)	36%	53%	4%	3%	1%	2%	1%	100%	174	4.9
A (sf)	24%	14%	53%	2%	4%	1%	2%	100%	169	5.0
Baa (sf)	18%	5%	13%	56%	5%	2%	2%	100%	189	4.3

Source: Moody's Investors Service. Data as of February 2013

Total Global Corporate Debt Ratings Transitions -- Average Five-Year Letter Rating Migration Rates, 1970-2012*

From/To	Aaa	Aa	A	Baa	Ba	B	Caa	Ca-C	WR	Default
Aaa	52.027%	23.121%	5.208%	0.353%	0.307%	0.037%	0.037%	0.000%	18.817%	0.093%
Aa	2.881%	46.071%	20.953%	3.663%	0.681%	0.209%	0.057%	0.016%	25.172%	0.296%
A	0.195%	7.685%	50.245%	14.327%	2.618%	0.825%	0.171%	0.006%	23.250%	0.678%
Baa	0.180%	1.061%	12.145%	46.836%	8.641%	2.752%	0.534%	0.073%	26.159%	1.620%
Ba	0.041%	0.165%	2.040%	11.680%	26.464%	10.896%	1.395%	0.110%	39.219%	7.991%
B	0.032%	0.046%	0.265%	1.665%	6.531%	21.995%	5.079%	0.635%	44.552%	19.199%
Caa	0.000%	0.000%	0.022%	0.579%	1.685%	7.411%	9.226%	1.049%	43.724%	36.305%
Ca-C	0.000%	0.000%	0.000%	0.000%	0.000%	2.156%	1.848%	2.640%	41.663%	51.694%

Source: Moody's Investors Service

Appendix 11: QCRE Performance

QCRE Loan Analysis - Proposed Rule vs. CREFC Proposal

Trepp Public Conduit Universe

Reproposal Parameters: MF amort. 30yr All other amort. 25y. 65 LTV. 1.5 DSCR (1.25 MF, 1.7 hospitality), 10+ yr Loan Term, No IO

Vintage	Total Count	Total Sec. Bal.	Qualified Count	% By Count	Qualified Sec. Bal.	% By Balance	All				Qualified			
							Ever 90+	Ever 90+ %	Loss Amount	Cum. Loss %	Ever 90+	Ever 90+ %	Cum. Loss	Cum. Loss %
1997	2,996	17,109,211,368	293	9.78%	1,109,357,933	6.48%	2,522,504,977	14.74%	565,545,998	3.31%	147,318,677	13.28%	21,928,085	1.98%
1998	8,435	46,206,359,955	880	10.43%	3,961,926,191	8.57%	4,896,008,145	10.60%	1,235,322,981	2.67%	152,952,107	3.86%	37,008,821	0.93%
1999	6,898	35,253,064,849	678	9.83%	2,609,046,966	7.40%	4,933,655,004	13.99%	1,114,021,272	3.16%	106,135,350	4.07%	17,015,561	0.65%
2000	3,865	22,241,634,274	401	10.38%	1,608,700,981	7.23%	4,160,180,740	18.70%	1,021,550,677	4.59%	107,085,633	6.66%	15,402,380	0.96%
2001	4,326	30,478,177,066	435	10.06%	2,037,174,211	6.68%	5,705,600,954	18.72%	1,352,776,368	4.44%	116,187,944	5.70%	25,702,275	1.26%
2002	4,100	33,091,693,298	443	10.80%	2,347,035,811	7.09%	4,581,375,638	13.84%	1,003,954,484	3.03%	114,795,023	4.89%	6,567,663	0.28%
2003	5,885	55,843,173,315	751	12.76%	3,703,460,954	6.63%	6,335,107,926	11.34%	939,448,184	1.68%	165,224,202	4.46%	27,665,123	0.75%
2004	6,694	79,389,101,101	564	8.43%	2,938,183,491	3.70%	9,483,808,177	11.95%	1,508,610,940	1.90%	82,167,203	2.80%	18,005,523	0.61%
2005	10,695	143,562,326,568	796	7.44%	4,321,088,482	3.01%	23,820,749,182	16.59%	4,019,031,941	2.80%	174,390,700	4.04%	57,288,855	1.33%
2006	11,921	162,824,533,258	525	4.40%	2,838,353,605	1.74%	33,475,622,956	20.56%	6,259,882,627	3.84%	78,216,664	2.76%	14,757,286	0.52%
2007	11,876	191,791,869,757	267	2.25%	1,449,046,164	0.76%	50,974,521,156	26.58%	6,269,466,456	3.27%	66,573,184	4.59%	6,959,651	0.48%
2008	819	10,707,465,072	13	1.59%	45,033,361	0.42%	2,313,358,236	21.61%	572,372,282	5.35%	5,356,623	11.89%	-	0.00%
2010	219	5,384,767,165	14	6.39%	567,113,511	10.53%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
2011	980	24,747,173,352	40	4.08%	302,502,681	1.22%	28,707,602	0.12%	-	0.00%	-	0.00%	-	0.00%
2012	1,735	32,164,603,817	153	8.82%	1,682,818,203	5.23%	2,435,549	0.01%	-	0.00%	-	0.00%	-	0.00%
2013	2,041	37,633,927,633	187	9.16%	2,044,021,128	5.43%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Grand Total	83,485	928,429,081,848	6,440	7.71%	33,564,863,674	3.62%	153,233,636,243	16.50%	25,861,984,209	2.79%	1,316,403,310	3.92%	248,301,223	0.74%

Trepp Public Conduit Universe

CRE Finance Council Proposal : 30 yr AM; no maturity term; 1.5 DSCR (1.25 for multifamily; 1.7 for hospitality); 65 LTV (IO Loans LTV <=50)

Vintage	Total Count	Total Sec. Bal.	Qualified Count	% By Count	Qualified Sec. Bal.	% By Balance	All				Qualified			
							Ever 90+	Ever 90+ %	Loss Amount	Cum. Loss %	Ever 90+	Ever 90+ %	Loss Amount	Cum. Loss %
1997	2,996	17,109,211,368	365	12.18%	1,728,875,121	10.10%	2,522,504,977	14.74%	565,545,998	3.31%	169,207,804	9.79%	23,752,913	1.37%
1998	8,435	46,206,359,955	1,141	13.53%	7,320,245,854	15.84%	4,896,008,145	10.60%	1,235,322,981	2.67%	247,654,618	3.38%	53,005,898	0.72%
1999	6,898	35,253,064,849	970	14.06%	4,746,470,321	13.46%	4,933,655,004	13.99%	1,114,021,272	3.16%	225,528,160	4.75%	31,462,425	0.66%
2000	3,865	22,241,634,274	623	16.12%	3,594,660,183	16.16%	4,160,180,740	18.70%	1,021,550,677	4.59%	208,876,525	5.81%	39,326,987	1.09%
2001	4,326	30,478,177,066	712	16.46%	6,075,803,458	19.93%	5,705,600,954	18.72%	1,352,776,368	4.44%	398,431,455	6.56%	45,860,010	0.75%
2002	4,100	33,091,693,298	773	18.85%	7,085,994,969	21.41%	4,581,375,638	13.84%	1,003,954,484	3.03%	630,894,684	8.90%	186,357,139	2.63%
2003	5,885	55,843,173,315	1,356	23.04%	15,674,888,916	28.07%	6,335,107,926	11.34%	939,448,184	1.68%	847,871,956	5.41%	91,447,599	0.58%
2004	6,694	79,389,101,101	1,244	18.58%	17,927,783,610	22.58%	9,483,808,177	11.95%	1,508,610,940	1.90%	1,336,861,882	7.46%	88,227,083	0.49%
2005	10,695	143,562,326,568	1,694	15.84%	22,000,462,723	15.32%	23,820,749,182	16.59%	4,019,031,941	2.80%	1,249,188,794	5.68%	96,681,192	0.44%
2006	11,921	162,824,533,258	1,384	11.61%	18,317,383,907	11.25%	33,475,622,956	20.56%	6,259,882,627	3.84%	1,038,413,275	5.67%	83,173,445	0.45%
2007	11,876	191,791,869,757	1,040	8.76%	13,412,659,019	6.99%	50,974,521,156	26.58%	6,269,466,456	3.27%	806,297,590	6.01%	50,324,606	0.38%
2008	819	10,707,465,072	57	6.96%	413,581,522	3.86%	2,313,358,236	21.61%	572,372,282	5.35%	156,041,190	37.73%	29,807,123	7.21%
2010	219	5,384,767,165	94	42.92%	2,901,375,590	53.88%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
2011	980	24,747,173,352	254	25.92%	6,710,276,224	27.12%	28,707,602	0.12%	-	0.00%	-	0.00%	-	0.00%
2012	1,735	32,164,603,817	456	26.28%	6,760,476,941	21.02%	2,435,549	0.01%	-	0.00%	-	0.00%	-	0.00%
2013	2,041	37,633,927,633	586	28.71%	9,934,609,113	26.40%	-	0.00%	-	0.00%	-	0.00%	-	0.00%
Grand Total	83,485	928,429,081,848	12,749	15.27%	144,605,547,471	15.58%	153,233,636,243	16.50%	25,861,984,209	2.79%	7,315,267,934	5.06%	819,426,419	0.57%

Appendix 12: QCRE Performance

Loan Performance by Term

Trepp Public Conduit Universe: All Loan Performance by Loan Term			
Vintage	5 - yr. Cum. Loss %	7 - yr. Cum. Loss %	10+ - yr. Cum. Loss %
1997	0.66%	1.72%	3.52%
1998	4.80%	1.59%	2.70%
1999	2.51%	1.92%	3.23%
2000	1.96%	1.93%	4.75%
2001	0.32%	0.94%	4.80%
2002	0.77%	1.19%	3.32%
2003	1.24%	1.12%	1.83%
2004	1.32%	2.04%	1.99%
2005	2.65%	2.60%	2.86%
2006	4.52%	3.06%	3.79%
2007	3.95%	2.16%	3.22%
2008	1.20%	6.09%	5.78%
2010	0.00%	0.00%	0.00%
2011	0.00%	0.00%	0.00%
2012	0.00%	0.00%	0.00%
2013	0.00%	0.00%	0.00%
Grand Total	2.61%	2.07%	2.87%

Appendix 13: QCRE Performance

Interest-Only Loan Performance

Trepp Public Conduit Universe: All IO Loans			
Vintage	Total Count	Total Sec. Bal.	Cum. Loss %
1997	46	534,329,092	0.74%
1998	112	2,884,794,990	0.83%
1999	122	2,553,497,312	1.97%
2000	133	1,761,049,270	1.14%
2001	216	3,164,922,998	2.32%
2002	220	3,278,040,729	1.18%
2003	615	14,386,572,012	1.03%
2004	1,468	37,022,087,464	0.94%
2005	4,481	94,986,573,794	2.45%
2006	6,389	122,776,731,711	3.47%
2007	7,858	166,019,657,689	3.04%
2008	518	8,640,371,879	5.28%
2010	32	713,433,633	0.00%
2011	163	6,085,919,572	0.00%
2012	320	10,988,969,236	0.00%
2013	494	17,985,875,618	0.00%
Grand Total	23,187	493,782,827,000	2.59%

Appendix 14: QCRE Performance

25-year Amortizing Loans versus 30-year Amortizing Loans

Conclusion: At 0.81% of cumulative losses since 1997 (see next page), 30-year amortizing loans that conform to CRE Finance Council QCRE recommendations outperform 25-year loans historically 1.82% of cumulative losses during the same period (this page).

All <= 25 Year Amortization Term Loans				Suggestion 1 %				Suggestion 2 %			
Vintage	Total Sec. Bal.	Loss Amount	Cum. Loss %	Qualified	Qualified	Loss	Loss %	Qualified	Qualified	Loss	Loss %
1997	8,031,172,821	424,186,128	5.28%	1,117,063,289	13.91%	21,928,085	1.96%	1,944,130,157	24.21%	41,915,823	2.16%
1998	18,448,998,618	635,794,417	3.45%	3,681,121,281	19.95%	39,675,214	1.08%	4,999,144,847	27.10%	73,987,469	1.48%
1999	10,867,761,999	319,881,689	2.94%	2,316,202,035	21.31%	19,763,760	0.85%	3,166,713,955	29.14%	45,037,931	1.42%
2000	5,074,731,779	172,468,517	3.40%	1,659,732,740	32.71%	14,630,943	0.88%	2,259,634,026	44.53%	40,566,103	1.80%
2001	7,954,532,014	280,660,544	3.53%	2,127,627,826	26.75%	24,354,819	1.14%	3,028,494,743	38.07%	41,187,771	1.36%
2002	7,093,168,919	113,776,078	1.60%	2,233,673,780	31.49%	12,928,555	0.58%	2,999,181,158	42.28%	18,852,872	0.63%
2003	15,744,889,565	147,155,112	0.93%	5,586,291,166	35.48%	21,221,020	0.38%	6,404,676,693	40.68%	24,643,000	0.38%
2004	23,338,447,178	299,978,456	1.29%	5,738,831,841	24.59%	36,962,181	0.64%	6,468,366,011	27.72%	39,166,168	0.61%
2005	55,129,436,599	732,600,280	1.33%	12,492,082,557	22.66%	59,196,850	0.47%	13,431,132,777	24.36%	73,970,128	0.55%
2006	62,980,044,248	1,268,316,439	2.01%	10,788,330,459	17.13%	16,655,886	0.15%	11,607,867,855	18.43%	47,864,033	0.41%
2007	116,409,179,969	2,119,069,538	1.82%	9,588,296,301	8.24%	17,548,086	0.18%	10,475,943,062	9.00%	37,594,785	0.36%
2008	3,639,078,492	68,612,175	1.89%	276,661,797	7.60%	923,330	0.33%	456,797,862	12.55%	923,330	0.20%
2010	1,517,173,193	-	0.00%	814,589,822	53.69%	-	0.00%	996,911,969	65.71%	-	0.00%
2011	5,053,361,321	-	0.00%	1,584,093,695	31.35%	-	0.00%	2,437,067,825	48.23%	-	0.00%
2012	9,052,727,647	-	0.00%	2,439,608,940	26.95%	-	0.00%	3,481,698,478	38.46%	-	0.00%
2013	11,337,589,526	-	0.00%	4,079,968,265	35.99%	-	0.00%	4,917,162,236	43.37%	-	0.00%
Grand Total	361,672,293,890	6,582,499,372	1.82%	66,524,175,793	18.39%	285,788,727	0.43%	79,074,923,654	21.86%	485,709,411	0.61%

Note:

Suggestion #1: 30 yr AM; no maturity term; 1.5 DSCR (1.25 for multifamily; 1.7 for hospitality); 65 LTV (IO Loans LTV <=50)

Suggestion #2: 30 yr AM; no maturity term; 1.35 DSCR (1.25 for multifamily; 1.5 for hospitality); 65 LTV (IO Loans LTV <=50)

Appendix 14: QCRE Performance

25-year Amortizing Loans versus 30-year Amortizing Loans

Conclusion: At 0.81% of cumulative losses since 1997 (see next page), 30-year amortizing loans that conform to CRE Finance Council QCRE recommendations outperform 25-year loans historically 1.82% of cumulative losses during the same period (this page).

Vintage	All > 25 Year Amortization Term Loans			Suggestion 1 %				Suggestion 2 %			
	Total Sec. Bal.	Loss Amount	Cum. Loss %	Qualified	Qualified	Loss	Loss %	Qualified	Qualified	Loss	Loss %
1997	9,078,038,547	141,359,870	1.56%	611,811,832	6.74%	1,824,828	0.30%	949,629,178	10.46%	6,837,908	0.72%
1998	27,757,361,336	599,528,563	2.16%	3,639,124,573	13.11%	13,330,684	0.37%	4,346,433,935	15.66%	16,602,607	0.38%
1999	24,385,302,850	794,139,584	3.26%	2,430,268,286	9.97%	11,698,665	0.48%	3,271,569,170	13.42%	18,606,031	0.57%
2000	17,166,902,495	849,082,160	4.95%	1,934,927,443	11.27%	24,696,044	1.28%	2,607,231,596	15.19%	40,390,276	1.55%
2001	22,523,645,052	1,072,115,824	4.76%	3,948,175,632	17.53%	21,505,191	0.54%	4,610,806,594	20.47%	49,049,913	1.06%
2002	25,998,524,379	890,178,406	3.42%	4,852,321,189	18.66%	173,428,584	3.57%	5,391,041,181	20.74%	201,353,556	3.73%
2003	40,098,283,750	792,293,072	1.98%	10,088,597,750	25.16%	70,226,579	0.70%	10,619,533,100	26.48%	74,837,935	0.70%
2004	56,050,653,923	1,208,632,483	2.16%	12,188,951,769	21.75%	51,264,902	0.42%	12,729,747,165	22.71%	51,477,037	0.40%
2005	88,432,889,969	3,286,431,661	3.72%	9,508,380,166	10.75%	37,484,343	0.39%	11,209,477,635	12.68%	116,248,975	1.04%
2006	99,844,489,010	4,991,566,188	5.00%	7,529,053,448	7.54%	66,517,559	0.88%	9,371,364,599	9.39%	89,766,508	0.96%
2007	75,382,689,788	4,150,396,918	5.51%	3,824,362,718	5.07%	32,776,520	0.86%	4,722,337,909	6.26%	58,709,684	1.24%
2008	7,068,386,580	503,760,107	7.13%	136,919,725	1.94%	28,883,793	21.10%	263,875,300	3.73%	31,816,610	12.06%
2010	3,867,593,972	-	0.00%	2,086,785,768	53.96%	-	0.00%	2,368,585,574	61.24%	-	0.00%
2011	19,693,812,032	-	0.00%	5,126,182,528	26.03%	-	0.00%	7,500,988,109	38.09%	-	0.00%
2012	23,111,876,170	-	0.00%	4,320,868,001	18.70%	-	0.00%	6,043,048,062	26.15%	-	0.00%
2013	26,296,338,106	-	0.00%	5,854,640,848	22.26%	-	0.00%	6,815,780,631	25.92%	-	0.00%
Grand Total	566,756,787,958	19,279,484,837	3.40%	78,081,371,677	13.78%	533,637,692	0.68%	92,821,449,737	16.38%	755,697,041	0.81%

Note:

Suggestion #1: 30 yr AM; no maturity term; 1.5 DSCR (1.25 for multifamily; 1.7 for hospitality); 65 LTV (IO Loans LTV <=50)

Suggestion #2: 30 yr AM; no maturity term; 1.35 DSCR (1.25 for multifamily; 1.5 for hospitality); 65 LTV (IO Loans LTV <=50)

Appendix 15: QCRE Performance Performance of Major vs. All Markets

Index	Peak to Trough	Peak to Current	Percentage Peak-to-Trough Loss Recovered	Peak Month	Trough Month
Apartment - Major	-23.6%	11.8%	150.2%	Dec-07	Dec-09
Apartment	-38.9%	-0.5%	98.8%	Dec-07	Dec-09
Office CBD - Major	-46.9%	-4.9%	89.5%	Dec-07	Sep-09
Office CBD	-49.6%	-6.6%	86.8%	Dec-07	Sep-09
Major Markets (All-Property)	-38.1%	-5.7%	85.1%	Dec-07	Nov-09
Apartment - Non-Major	-47.3%	-8.8%	81.5%	Sep-07	Dec-09
National All-Property	-40.2%	-14.9%	62.8%	Dec-07	Dec-09
Office	-46.0%	-18.1%	60.7%	Dec-07	Nov-09
Retail - Major	-38.3%	-15.7%	59.1%	Sep-07	Jun-10
Core Commercial	-40.6%	-19.9%	51.0%	Nov-07	Dec-09
Office CBD - Non-Major	-50.4%	-25.9%	48.6%	Dec-07	Sep-09
Non-Major Markets (All-Property)	-42.1%	-22.5%	46.6%	Oct-07	Dec-09
Office Suburban - Major	-46.4%	-25.7%	44.6%	Dec-07	Jun-10
Retail	-42.4%	-23.5%	44.6%	Aug-07	Sep-10
Industrial - Major	-34.1%	-20.3%	40.4%	Dec-07	Mar-10
Retail - Non-Major	-43.9%	-29.5%	32.9%	Sep-07	Sep-10
Office Suburban	-44.7%	-30.4%	32.1%	Oct-07	Jul-10
Industrial	-33.1%	-25.9%	21.6%	Jan-08	Jan-10
Office Suburban - Non-Major	-43.5%	-36.0%	17.2%	Dec-07	Dec-09
Industrial - Non-Major	-33.8%	-32.1%	5.0%	Mar-08	Dec-10

Source: Morgan Stanley & Moody's RCA