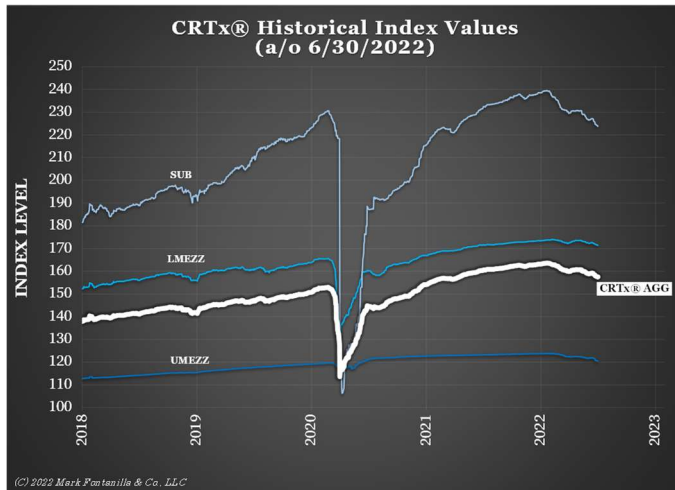


CRT_x®

Credit Risk Transfer Return Tracking Index

www.markfontanilla.com/crtx-index

CRT_x® Index Rebalancing Update 06/30/2022



Sector Musings..

Is it cheap enough now...?

With the latest new-issue pricings and wider secondary levels, benchmark GSE CRT has now seen some of the largest coupon spreads across the capital structure. At the top of the stack, the most recent July-settle CAS 2022-R07 M1 priced at SOFR+295, the highest M1 margin for the program ever. Likewise, the latest STACR 2022-DNA5 M1B printed at +450, the highest M1-designated class margin of that program's history (even wider than the first ever deal in GSE CRT history, the STACR 2013-DN1's unrated M1 at +340!). In the middle, recent M2 margins still haven't quite eclipsed the all-time highs (the original STACR 2013-DN1 unrated M2 came at +715), but in the B1/B2 stack, the latest respective CAS/STACR pricings have. There are certainly structural/CE variations that play into comparisons, but nominally, is paper cheap enough now?

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Return Roundup Page 3

The CRT_x® Aggregate lost 0.98% MoM in June, and finished Q2 down 1.57%. A range of headwinds...drove widespread bond and stock market losses. Collectively, the CRT complex still manages to be the "least worst"...supply technicals were better in June...

Index Rebalancing Metrics Page 3

The CRT_x® Aggregate Index's July basket UPB shrinks modestly MoM to \$54.3B, down 0.7% from June's all-time high. Index market value falls to \$52.7B, now comprised of 305 securities from 117 deals, including the latest June CAS and STACR closings... Benchmark GSE CRT float as of June month-end...contracted -0.73%/\$-401MM MoM...

Latest Deal Performance Page 4

Mortgage credit performance trends persevered in the June statements as the story keeps going for now: DQs declined, writedowns/shortfalls stayed low, speeds dropped, and structures held stable/slightly improved...

Relative Value Thoughts Page 5

With CRT, and most other markets, seeing red, prices/spreads have certainly suffered. Credit fundamentals are still stable though, even as housing activity cools some. Technicals modestly improved MoM, but supply is still a weight on the market. Overall, the same previous entry points remain for the courageous, but now things are even cheaper...

Additional Tables/Metrics Pages 6-12

- CRT_x® Index Suite Total Return Performance: Month-End Matrix
- CRT_x® Index Basket History: Select Metrics
- CRT_x® RNI™ Index Basket History: Select Metrics
- Latest Deal Performance Metrics: CAS
- Latest Deal Performance Metrics: STACR

06/30/2022 Index Rebalancing Update *(continued)***CRTx® Aggregate Index**

Jun 2022 CRTx® AGG Tot Ret	-98 bps
Index Month-End Closing Value	157.45
Price Attribution	-139 bps
Paydown Attribution	+2 bps
Cpn Accr&Pmt Attribution	+39 bps
Writedown+Int Shortfall Attribution	-0.12 bps
Excess Return	-104 bps
Volatility (Annualized)	1.41%
UPB Paydown %	4.70%
QTD Total Return	-1.57%
YTD Total Return	-3.51%

CRTx® AGG Rebalancing For Jul 2022*As of 6/30/2022***July 2022 Aggregate Basket (w/MoM Δ):**

• Beg. UPB (\$B):	\$54.31	-0.7%
• Beg. Market Value (\$B):	\$52.72	-2.2%
• Constituents:	305	+8
• WAvg Constituent Value:	97.09	-1.46 pts
• WAvg Constituent Coupon:	5.21%	+55 bps

Index (+) Entries* & (-) Exits**(+) STACR 2022-DNA4 M1A-M1B-M2-B1-B2****(+) CAS 2022-R05 2M1-2M2-2B1-2B2**

(-) STACR: 2014-HQ1 M3, 2021-DNA1 M1,
2021-DNA5 M1 (paid off)

* 4.10% of Beg. Index Market Value

CRTx® Mkt Val Breakdown: 7/2022 Basket

Deal Yr	Aggregate	UMEZZ	LMEZZ	SUB
All	100%	19.7%	38.1%	42.2%
2022	29.6%	15.4%	6.9%	7.3%
2021	22.2%	4.3%	7.5%	10.4%
2020	10.9%	0.0%	3.2%	7.7%
2019	6.8%	0.0%	1.3%	5.5%
2018	8.1%	0.0%	4.0%	4.1%
2017	10.0%	0.0%	5.9%	4.1%
2016	6.0%	0.0%	4.2%	1.8%
2015	3.1%	0.0%	1.8%	1.3%
<=2014	3.3%	0.0%	3.3%	0.0%

CRTx® RNI™ (Rolling New Issues) Agg. Index

Jun 2022 CRTx® RNI™ AGG Tot Ret	-184 bps
Index Month-End Closing Value	165.2
Price Attribution	-220 bps
Paydown Attribution	+1 bps
Cpn Accr&Pmt Attribution	+35 bps
Writedown+Int Shortfall Attribution	+0 bps
Excess Return	-190 bps
Volatility (Annualized)	2.66%
UPB Paydown %	0.70%
QTD Total Return	-3.02%
YTD Total Return	-7.26%

CRTx® RNI™ AGG Rebalancing For Jul 2022*As of 6/30/2022***July 2022 Aggregate Basket (w/MoM Δ):**

• Beg. UPB (\$B):	\$24.88	+6.4%
• Beg. Market Value (\$B):	\$23.48	+4.7%
• Constituents:	85	+5
• WAvg Constituent Value:	94.36	-1.53 pts
• WAvg Constituent Coupon:	4.49%	+49 bps

Index (+) Entries* & (-) Exits**(+) STACR 2022-DNA4 M1A-M1B-M2-B1-B2****(+) CAS 2022-R05 2M1-2M2-2B1-2B2****(-) STACR 2021-DNA5 M1 (paid off)**

* 9.20% of Beg. Index Market Value

CRTx® RNI™ Mkt Val Breakdown: 7/2022 Basket

Deal Yr	Aggregate	UMEZZ	LMEZZ	SUB
All	100%	42.8%	25.0%	32.2%
2022	66.4%	34.6%	15.5%	16.3%
2021	33.6%	8.1%	9.5%	15.9%
2020	0.0%	0.0%	0.0%	0.0%
2019	0.0%	0.0%	0.0%	0.0%
2018	0.0%	0.0%	0.0%	0.0%
2017	0.0%	0.0%	0.0%	0.0%
2016	0.0%	0.0%	0.0%	0.0%
2015	0.0%	0.0%	0.0%	0.0%
<=2014	0.0%	0.0%	0.0%	0.0%

06/30/2022 Index Rebalancing Update (continued)

Return Roundup

The CRTx® Aggregate lost 0.98% MoM in June, and finished Q2 down 1.57%. A range of headwinds, including ongoing inflation/recession fears, a bear flattening curve, wider credit spreads, and subdued liquidity drove widespread bond and stock market losses. Collectively, the CRT complex still manages to be the “least worst”, edging out other major sectors so far this year, albeit from the negative side. The AGG has posted a -3.51% return YTD (the recent-issue based CRTx® RNI™ AGG sits at -7.26% YTD), outpacing IG/HY and rates. On a brighter note, supply technicals were better in June as FHLMC’s tender settlement relieved some of the pressure, with FNMA’s tender on deck.

Intra-Complex Highlights

June’s MoM CRTx® AGG Index loss contributions were seen across the complex:

06/30/2022	M/E RETURN ATTRIBUTION							Index Total Return
CRTx®	Price Return	Cpn Accrual Return	CPN Pmt Return	Pay-down Return	Write-down Return	Int Shortfall Return		
AGG	-1.39%	-0.04%	0.43%	0.02%	-0.0008%	-0.0004%		-0.98%
UMEZZ	-1.20%	-0.03%	0.23%	0.02%	0.0000%	0.0000%		-0.98%
LMEZZ	-0.97%	-0.03%	0.35%	0.04%	0.0000%	0.0000%		-0.62%
SUB	-1.89%	-0.05%	0.60%	0.00%	-0.0018%	-0.0010%		-1.34%

- UMEZZ (M1s) lost 0.98% for the month, as supply and IG money alternatives continue weigh on the top part of the capital structure.
- LMEZZ (mostly M2s) were mixed as favorable supply technicals/tender premiums boosted performance for seasoned paper (FHLMC June tender offer securities posted a blended +0.99% MoM total return), while newer issues diverged significantly.
- SUBs (B1/B2/Bs) posted a -1.31% MoM total return in June, and have lost 6.21% YTD to lag the complex, but are faring better than HY and equities.
- **Newer issues continue to underperform vs. seasoned with the CRTx® RNI™ AGG returning -1.84% in June vs. the broad-market CRTx® AGG’s -0.98%**
 - Q2/YTD the CRTx® RNI™ AGG is off -3.02%/-7.26%, respectively.

Index Rebalancing Metrics

The CRTx® Aggregate Index’s July basket UPB shrinks modestly MoM to \$54.3B, down 0.7% from June’s all-time high. Index market value falls to \$52.7B, now comprised of 305 securities from 117 deals, including the latest June CAS and STACR closings.

Index Composition

The most recent FNMA and FHLMC LLTV deals add ~\$2.2B (4.1% of the AGG) and 9 new constituents, while FHLMC’s June tender took out ~\$1.9B in 2018/2019 M2 paper.

Continued market pressure pushed the WAvg constituent market value down 1.5 points to \$97.09. The Fed’s 3rd hike of the year drove LIBOR/SOFR resets up a blended 55 bps to 5.21%.

CRTx® AGG composition (July 2022 basket):

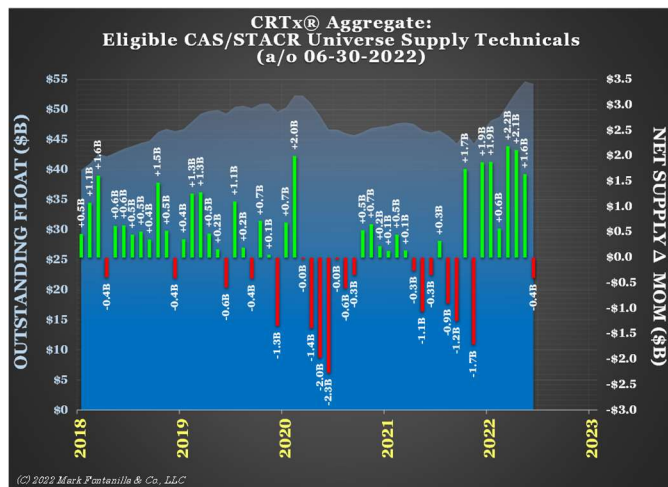
- 19.7%↑ (vs 17.4% in Jun) - UMEZZ (M1/old M2s)
- 38.1%↓ (vs 41.2% in Jun) - LMEZZ (M2/old M3s)
- 42.2%↑ (vs 41.5% in Jun) - SUBs (B/B1/B2s)

Select Benchmark GSE CRT New Issue Pricing Margins:							
Period	Close Dt.	Deal	Index	Pricing Margin			
				M1	M2	B1	B2
Mid-COVID	06/17/22	STACR 22-DNA5	SOFR	A 295 B 450	675	750	1,290
	06/10/22	CAS 22-R06	SOFR	275	385	635	1,060
	05/13/22	STACR 22-DNA4	SOFR	A 220 B 335	525	625	1,025
	05/11/22	CAS 22-R05	SOFR	190	300	450	700
	04/18/22	STACR 22-DNA3	SOFR	A 200 B 290	435	565	975
	04/08/22	CAS 22-R04	SOFR	200	310	525	950
	03/30/22	CAS 22-R03	SOFR	210	350	625	985
	03/18/22	STACR 22-HQA1	SOFR	A 210 B 350	525	700	1,100
	02/11/22	STACR 22-DNA2	SOFR	A 130 B 240	375	475	850
	02/09/22	CAS 22-R02	SOFR	120	300	450	765
	01/21/22	STACR 22-DNA1	SOFR	A 100 B 185	250	340	710
	01/20/22	CAS 22-R01	SOFR	100	190	315	600
	12/29/21	CAS 21-R03	SOFR	85	165	275	550
	12/10/21	STACR 21-HQA4	SOFR	95	235	375	700
	12/01/21	CAS 21-R02	SOFR	90	200	330	620
	11/12/21	STACR 21-DNA7	SOFR	85	180	365	780
	10/29/21	STACR 21-DNA6	SOFR	80	150	340	750
	10/27/21	CAS 21-R01	SOFR	75	155	310	600
	09/30/21	STACR 21-HQA3	SOFR	85	210	335	625
	07/23/21	STACR 21-DNA5	SOFR	65	165	305	550
	06/25/21	STACR 21-HQA2	SOFR	70	205	315	545
	04/23/21	STACR 21-DNA3	SOFR	75	210	350	625
	03/09/21	STACR 21-DNA2	SOFR	80	230	340	600
	02/23/21	STACR 21-HQA1	SOFR	70	225	300	500
	01/29/21	STACR 21-DNA1	SOFR	65	180	265	475

06/30/2022 Index Rebalancing Update (continued)

Sector Supply

Benchmark GSE CRT float as of June month-end (eligible for inclusion in the CRTx® AGG) contracted -0.73%/\$-401MM MoM to \$54.3B in UPB as the latest FHLMC tender retirements helped more than offset incrementally lower monthly issuance and slower CPRs. FNMA's own soon-to-be-settled tender will take more seasoned supply out in July.



June's -\$0.4B net supply loss was the first decline in 7 months, however technicals diverged intra-complex based on capital structure as FHLMC's latest \$1.9B in STACR tender retirements, plus the \$0.69B in normal June paydowns, exceeded the ~\$2.2B in CAS/STACR June gross issuance:

- **June 2022 Index-eligible net supply breakdown:**
 - **UMEZZ** **+1.140 B (+12.01% MoM)**
 - The net supply growth rate of UMEZZ continues to outpace the rest of the CRT stack as new issue remains top-heavy.
 - **LMEZZ** **-1.858 B (- 8.36% MoM)**
 - Relatively smaller new-issue M2 sizings, along with more frequent tender retirements and seasoned paydowns, provide a supportive technical for the middle of the capital structure.
 - **SUB** **+0.317 B (+ 1.38% MoM)**
 - SUB float (B1/B2/Bs) continues to methodically grow and is now the largest proportion of outstandings.

CRTx® AGG (eligible universe as of 6/30/22)

BENCHMARK GSE CRT SUPPLY TECHNICALS (\$MM)									
Month End	Float ₁	Gross Supply ₂	Pay-downs ₁	Write-downs ₁	Tenders ₁	Net Supply ₁	% Δ MoM		
2018-Jan	39,939.51	900.00	434.89	.40	.00	+464.71	+1.18%		
2018-Feb	41,017.07	1,494.06	416.25	.25	.00	+1,077.56	+2.70%		
2018-Mar	42,628.56	1,992.02	380.11	.42	.00	+1,611.49	+3.93%		
2018-Apr	42,241.57	.00	386.48	.51	.00	-386.99	-0.91%		
2018-May	42,864.97	1,050.03	426.17	.45	.00	+623.40	+1.48%		
2018-Jun	43,499.75	1,050.00	414.55	.67	.00	+634.78	+1.48%		
2018-Jul	43,951.18	939.46	487.56	.47	.00	+451.43	+1.04%		
2018-Aug	44,461.53	982.68	471.84	.49	.00	+510.35	+1.16%		
2018-Sep	44,818.31	820.00	463.05	.18	.00	+356.78	+0.80%		
2018-Oct	46,292.11	1,918.19	443.93	.46	.00	+1,473.80	+3.29%		
2018-Nov	46,818.17	921.89	395.46	.36	.00	+526.06	+1.14%		
2018-Dec	46,413.76	.00	404.16	.25	.00	-404.41	-0.86%		
2019-Jan	46,772.85	714.00	354.36	.55	.00	+359.09	+0.77%		
2019-Feb	48,032.92	1,600.30	339.91	.32	.00	+1,260.07	+2.69%		
2019-Mar	49,316.49	1,610.43	326.50	.36	.00	+1,283.57	+2.67%		
2019-Apr	49,790.89	857.33	382.45	.48	.00	+474.40	+0.96%		
2019-May	49,953.47	615.00	451.76	.67	.00	+162.58	+0.33%		
2019-Jun	49,366.80	.00	585.65	1.02	.00	-586.67	-1.17%		
2019-Jul	50,468.73	1,786.82	684.96	-.08	.00	+1,101.93	+2.23%		
2019-Aug	50,665.72	993.16	795.69	.48	.00	+196.99	+0.39%		
2019-Sep	50,254.38	626.00	1,036.70	.64	.00	-411.34	-0.81%		
2019-Oct	50,975.91	1,882.85	1,160.69	.63	.00	+721.53	+1.44%		
2019-Nov	51,029.16	1,430.31	1,376.63	.42	.00	+53.25	+0.10%		
2019-Dec	49,686.84	.00	1,341.71	.61	.00	-1,342.32	-2.63%		
2020-Jan	50,375.85	1,827.24	1,137.97	.27	.00	+689.01	+1.39%		
2020-Feb	52,372.79	3,041.29	1,043.58	.78	.00	+1,996.94	+3.96%		
2020-Mar	52,342.28	1,006.00	1,035.91	.60	.00	-30.51	-0.06%		
2020-Apr	50,951.32	.00	1,390.53	.43	.00	-1,390.96	-2.66%		
2020-May	48,983.31	.00	1,967.51	.50	.00	-1,968.01	-3.86%		
2020-Jun	46,718.91	.00	2,263.91	.49	.00	-2,264.40	-4.62%		
2020-Jul	46,681.77	1,941.00	1,977.70	.44	.00	-37.14	-0.08%		
2020-Aug	46,076.35	1,088.00	1,693.03	.39	.00	-605.42	-1.30%		
2020-Sep	45,735.37	680.00	1,020.66	.31	.00	-340.98	-0.74%		
2020-Oct	46,269.82	1,086.00	551.37	.18	.00	+534.45	+1.17%		
2020-Nov	46,924.62	1,080.00	425.03	.16	.00	+654.80	+1.42%		
2020-Dec	47,148.36	790.00	565.97	.30	.00	+223.74	+0.48%		
2021-Jan	47,277.42	970.00	840.51	.43	.00	+129.06	+0.27%		
2021-Feb	47,729.91	1,386.00	933.14	.38	.00	+452.49	+0.96%		
2021-Mar	47,872.55	1,188.00	1,045.16	.20	.00	+142.64	+0.30%		
2021-Apr	47,615.04	950.00	1,207.50	.02	.00	-257.51	-0.54%		
2021-May	46,556.67	.00	1,058.11	.25	.00	-1,058.37	-2.22%		
2021-Jun	46,213.56	550.00	892.87	.23	.00	-343.11	-0.74%		
2021-Jul	46,542.26	1,186.00	857.10	.20	.00	+328.70	+0.71%		
2021-Aug	45,645.02	.00	896.92	.32	.00	-897.24	-1.93%		
2021-Sep	44,395.83	1,071.00	977.13	.08	1,342.98	-1,249.19	-2.74%		
2021-Oct	46,136.81	2,686.01	944.99	.04	.00	+1,740.98	+3.92%		
2021-Nov	44,428.70	1,276.00	893.50	.37	2,090.24	-1,708.11	-3.70%		
2021-Dec	46,303.37	2,855.84	978.99	2.18	.00	+1,874.67	+4.22%		
2022-Jan	48,187.25	2,859.26	974.26	1.13	.00	+1,883.88	+4.07%		
2022-Feb	48,758.20	3,159.89	879.88	.58	1,708.47	+570.95	+1.18%		
2022-Mar	50,947.78	3,057.61	867.66	.37	.00	+2,189.58	+4.49%		
2022-Apr	53,065.96	2,984.38	865.97	.24	.00	+2,118.18	+4.16%		
2022-May	54,707.01	2,471.03	829.79	.19	.00	+1,641.05	+3.09%		
2022-Jun	54,305.82	2,176.38	689.16	.38	1,888.03	-401.19	-0.73%		

1-Current Face

2-Original face issued based on CAS/STACR deal closing dates

Sources: FNMA, FHLMC, MFC&Co

Latest Deal Performance

Mortgage credit performance trends persevered in the June statements as the story keeps going for now: DQs declined, writedowns/shortfalls stayed low, speeds dropped, and structures held stable/slightly improved.

06/30/2022 Index Rebalancing Update *(continued)***Latest Deal Performance** *(continued)***Credit**

- Pre-COVID total DQ %s declined moderately, with 180+ bucket DQ #s/\$s dropping by high single-digits% MoM on average, staying on trend.
- CRTx® 1st Loss Sub-Index (1st loss Bs) writedowns/int. shortfalls for June:
 - **-3.7 bps hit to 1st Loss Sub-Index:**
 - **-7.0 bps to Fxd. Sev. Sub-Index component** (vs. -10 bps in May)
 - **-3.4 bps to ACT LOSS Sub-Index component** (vs. -1.3 bps in May)

Paydowns

- **STACR factor speeds incrementally slowed again in June, with seasoned reference pools now in the low-teens to low-20s CPR area.**
 - **MTD CRTx® AGG return attribution from paydowns/retirements: +2.0 bps** *(assisted by STACR tender premiums)*
- **The CRTx® AGG's 4.70% June paydown+tender retirement percentage was considerably higher vs. May's paydown-only 1.55% MoM:**

June Index Paydowns/Tenders **\$2,577M**

- UMEZZ (Mostly M1s): \$199M
- LMEZZ (M2s/old M3s): \$2,358M
 - *Tender retirements* \$1,888M
 - *Paydowns* \$470M
- SUB (Bs/B1s/B2s): \$ 19M

Structure

- Class C/Es held stable to slightly improved MoM (slower speeds have tempered de-levering).
- June LIBOR resets +62bps, SOFR resets +34bps. **YTD, LIBOR & SOFR resets are now up 153bps & 88bps, respectively.**
- **20 pre-COVID reference pool groups continued to fail their DQ Test in June, down 2 vs. the 22 failing in May.**
- One new deal toggled its C/E test and temporarily locked out in June.

Relative Value Thoughts**Ideas**

With CRT, and most other markets, seeing red, prices/spreads have certainly suffered. Credit fundamentals are still stable though, even as housing activity cools some. Technicals modestly improved MoM, but supply is still a weight on the market. Overall, the same previous entry points remain for the courageous, but now things are even cheaper:

❖ **Newest Issues:**

- M1/M1A/M1Bs:
 - Carry/yield per unit-spread duration favorable (now ~30bps carry/mth at a 2-3yr avg life, most at a discount) vs. longer duration rating-equivalent IG.
 - Rising resets=coupon upside.
- M2s:
 - Overall net supply continues to trend negative.
 - Carry (now ~40+bps carry/month, most at a discount) in context with IG at shorter durations.
- B1/B2s:
 - Blended carry, to the 5yr issuer call, cheaper (now at ~70+bps carry/mth at a discount) vs. HY blend.
 - U.S. mortgage credit vs. commercial credit.

❖ **Seasoned (Pre-2018 M2/M3s & B/B1/B2s):**

- Like fine wine, still not the easiest to find in size, but has aged well vs. newer issue:
 - Significant HPA, large CEs (3x or more than original CEs), big coupons, and relatively shorter durations.
 - For now, widening LIBOR/SOFR basis provides coupon advantage (June saw a +28bps LIBOR reset pickup vs. SOFR).
 - Possible tender activity for M2/M3s remains (although this will eventually wane).

CRTx® Index Suite Total Return Performance: Month-End Matrix 06/30/2022

CRTx® (Credit Risk Transfer Return Tracking Index) Return Summary								
		RETURNS						
		Index Level	Period			Annualized		As of Date
			MTD	QTD	YTD	1-YR	3-YR	
Aggregate		157.45	-0.98%	-1.57%	-3.51%	-1.85%	2.33%	6/30/22
	Upper Mezzanine	120.53	-0.98%	-1.54%	-2.58%	-2.17%	0.81%	6/30/22
	Lower Mezzanine	171.44	-0.62%	-0.65%	-1.16%	-0.04%	2.17%	6/30/22
	Subordinate	223.80	-1.34%	-2.54%	-6.21%	-3.54%	2.13%	6/30/22
	Upper/Lower Mezz.	151.73	-0.72%	-0.88%	-1.48%	-0.40%	2.17%	6/30/22
	Lower Mezz./Sub.	178.19	-0.98%	-1.59%	-3.61%	-1.91%	2.15%	6/30/22
	CAS	155.91	-0.83%	-0.88%	-2.03%	-0.26%	2.68%	6/30/22
	STACR	156.26	-1.08%	-2.03%	-4.47%	-2.90%	2.14%	6/30/22
	LLTV	156.37	-0.92%	-1.54%	-3.63%	-2.03%	2.15%	6/30/22
	HLTV	140.86	-1.10%	-1.63%	-3.29%	-1.52%	2.59%	6/30/22
Upper Mezzanine	2022	96.49	-1.36%	-1.76%	-3.51%	-	-	6/30/22
	2021	99.57	0.15%	-0.63%	-1.11%	-0.68%	-	6/30/22
	2020	103.01	0.12%	0.29%	0.49%	0.88%	-	6/30/22
	2019		-	-	-	-	-	6/30/22
	2018	109.56	0.28%	0.62%	0.91%	1.44%	1.80%	6/30/22
	2017		-	-	-	-	-	6/30/22
	2016		-	-	-	-	-	6/30/22
	2015		-	-	-	-	-	6/30/22
	<=2014		-	-	-	-	-	6/30/22
Lower Mezzanine	2022	92.88	-2.50%	-3.61%	-7.12%	-	-	6/30/22
	2021	97.82	-1.33%	-2.33%	-5.41%	-4.71%	-	6/30/22
	2020	100.89	-0.35%	-0.21%	-0.11%	0.48%	-	6/30/22
	2019	114.17	0.65%	1.01%	1.08%	2.01%	3.13%	6/30/22
	2018	115.64	-0.01%	0.28%	0.08%	1.41%	3.12%	6/30/22
	2017	131.50	0.04%	0.57%	0.65%	1.94%	2.90%	6/30/22
	2016	151.28	0.19%	0.47%	2.01%	2.99%	2.90%	6/30/22
	2015	140.22	0.30%	0.48%	1.58%	2.92%	2.48%	6/30/22
	<=2014	167.88	-0.82%	0.55%	-0.01%	1.98%	2.70%	6/30/22
Subordinate	2022	91.04	-2.11%	-3.71%	-8.96%	-	-	6/30/22
	2021	92.69	-2.80%	-5.84%	-13.49%	-10.80%	-	6/30/22
	2020	92.90	-0.73%	-0.79%	-3.96%	-1.26%	-	6/30/22
	2019	129.72	-0.36%	-0.83%	-1.45%	0.25%	5.00%	6/30/22
	2018	123.38	-0.63%	-1.13%	-3.20%	-0.43%	3.75%	6/30/22
	2017	155.28	-0.90%	-0.79%	-1.66%	1.76%	2.94%	6/30/22
	2016	200.25	0.45%	0.71%	1.37%	4.51%	3.34%	6/30/22
	2015	209.73	0.78%	-1.19%	0.41%	3.71%	1.67%	6/30/22
	<=2014							6/30/22

CRTx® Index Suite Total Return Performance: Month-End Matrix 06/30/2022 (Continued)

CRTx® RNI™ (Rolling New Issues*) Return Summary							
RETURNS							
	Index Level	Period			Annualized		As of Date
		MTD	QTD	YTD	1-YR	3-YR	
Aggregate	165.20	-1.84%	-3.02%	-7.26%	-5.40%	2.15%	6/30/22
Upper Mezzanine	121.14	-1.01%	-1.61%	-2.70%	-2.29%	0.66%	6/30/22
Lower Mezzanine	180.81	-1.91%	-2.89%	-5.88%	-5.26%	1.29%	6/30/22
Subordinate	228.18	-2.77%	-4.75%	-11.51%	-8.44%	1.88%	6/30/22
LLTV	163.71	-1.86%	-3.03%	-7.82%	-5.87%	1.94%	6/30/22
HLTV	149.08	-1.80%	-2.98%	-5.94%	-4.34%	2.77%	6/30/22

* Most recently issued securities within a "rolling" 12-month window

CRTx® (Credit Risk Transfer Return Tracking Index) Return Summary							
RETURNS							
	Index Level	Period			Annualized		As of Date
		MTD	QTD	YTD	1-YR	3-YR	
Special Sub-Indexes:							
Fxd Severity - Type I*	Custom Client Access Only	-0.80%	0.63%	-0.29%	1.77%	3.26%	6/30/22
Fxd Severity - Type II*		-0.25%	0.44%	0.87%	3.20%	2.47%	6/30/22
Actual Loss		-1.00%	-1.67%	-3.69%	-2.08%	2.41%	6/30/22
CAS Fxd Severity - Type I*		-1.25%	0.50%	-1.00%	1.07%	2.61%	6/30/22
STACR Fxd Severity - Type I*		-0.46%	0.73%	0.25%	2.30%	3.81%	6/30/22
CAS Fxd Severity - Type II*		-0.60%	0.36%	0.54%	2.21%	2.37%	6/30/22
STACR Fxd Severity - Type II*		0.59%	0.65%	1.67%	5.39%	2.70%	6/30/22
CAS Act. Loss		-0.82%	-0.97%	-2.18%	-0.41%	2.78%	6/30/22
STACR Act. Loss		-1.11%	-2.12%	-4.65%	-3.14%	2.22%	6/30/22

* Type I - No Credit Event Relief Provisions For Natural Disaster/Casualty Events

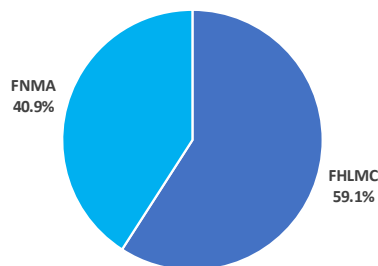
Type II - Some Credit Event Relief Provisions For Natural Disaster/Casualty Events

* CRTx® Aggregate Index and Sub Index Constituency

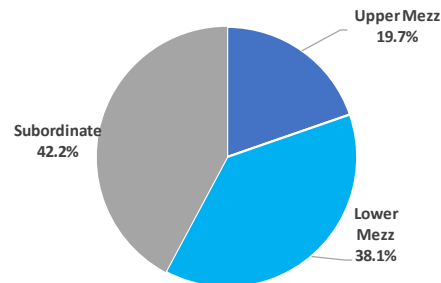
Aggregate	Upper Mezzanine	Lower Mezzanine	Subordinate	LLTV	HLTV
All Index-Eligible FNMA CAS shelf and FHLMC STACR shelf At-Issuance Classes	<u>FNMA CAS Shelf:</u> M1 Classes	<u>FNMA CAS Shelf:</u> M2 Classes	<u>FNMA CAS Shelf:</u> All B Classes	All Index-Eligible FNMA CAS shelf and FHLMC STACR shelf At-Issuance Classes from deals referencing Low Loan to Value (LLTV) loans	All Index-Eligible FNMA CAS shelf and FHLMC STACR shelf At-Issuance Classes from deals referencing High Loan to Value (HLTV) loans
	<u>FHLMC STACR Shelf:</u> M1 Classes (in M1/M2 structures) M1/M2 Classes (in M1/M2/M3 structures)	<u>FHLMC STACR Shelf:</u> M2 Classes (in M1/M2 structures) M3 Classes (in M1/M2/M3 structures)	<u>FHLMC STACR Shelf:</u> All B Classes		
	Vintage Sub Index constituency determined by deal/security closing year (except 2013/2014 which are grouped as "2014").				
RNI™ (Rolling New Issues) versions of the standard CRTx® Aggregate and Sub-Indexes have dynamic constituent baskets made up exclusively of the most recently issued securities within a "rolling" 12-month look-back window.					

CRTx® Index Basket History: Select Metrics As of 06/30/2022 Rebalancing

Sponsor % of CRTx® Mkt Val For 07/2022



Sub Index % of CRTx® Mkt Val For 07/2022

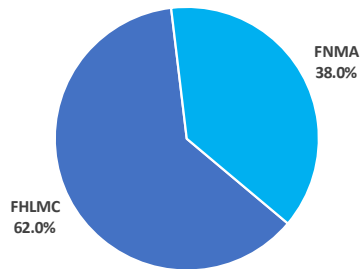


CRTx® AGG

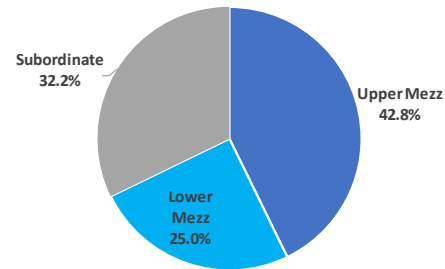
MONTH END CLOSINGS			BEGINNING MONTH BASKET					
Calculation		Month to Date Total Return	# of Constituents	Beg Month UPB	W Avg Adj Beg Month		WTD Avg	
					Beg Month Total \$	Security Mkt Value	Current Coupon	WTD Avg Cpn Margin
Month	INDEX VALUE				Market Value			
Aug-2019	147.57	-0.22%	216	50,468,731,712	53,381,992,659	105.77	5.76	349
Sep-2019	148.53	0.65%	219	50,665,720,866	53,218,677,450	105.04	5.63	349
Oct-2019	149.04	0.34%	222	50,254,380,617	52,920,221,300	105.31	5.53	351
Nov-2019	149.76	0.48%	228	50,975,909,280	53,606,190,708	105.16	5.33	351
Dec-2019	150.73	0.65%	233	51,029,160,871	53,690,414,024	105.22	5.23	352
Jan-2020	152.55	1.21%	228	49,686,844,416	52,466,578,192	105.60	5.35	356
Feb-2020	152.31	-0.16%	232	50,375,851,983	53,580,028,930	106.36	5.20	354
Mar-2020	113.64	-25.39%	240	52,372,791,379	55,277,944,042	105.55	5.11	348
Apr-2020	123.83	8.97%	234	52,342,281,038	40,769,683,770	77.89	4.45	351
May-2020	132.53	7.03%	229	50,951,320,646	42,820,320,693	84.04	4.03	355
Jun-2020	144.50	9.04%	218	48,983,309,963	43,695,592,838	89.21	3.77	360
Jul-2020	143.94	-0.39%	214	46,718,914,995	45,227,362,482	96.81	3.83	365
Aug-2020	146.37	1.69%	217	46,681,772,649	44,843,108,762	96.06	3.87	370
Sep-2020	147.99	1.11%	217	46,076,349,850	44,862,684,449	97.37	3.92	374
Oct-2020	148.99	0.68%	220	45,735,370,315	44,865,412,741	98.10	3.90	375
Nov-2020	151.26	1.52%	224	46,269,817,211	45,566,172,083	98.48	3.93	378
Dec-2020	154.14	1.91%	228	46,924,624,650	46,772,793,230	99.68	3.93	378
Jan-2021	155.99	1.20%	230	47,148,362,895	47,722,154,982	101.22	3.92	377
Feb-2021	156.91	0.59%	232	47,277,423,099	48,281,726,799	102.12	3.90	377
Mar-2021	156.58	-0.21%	235	47,729,907,668	48,857,887,219	102.36	3.87	376
Apr-2021	158.53	1.25%	236	47,872,554,649	48,747,702,476	101.83	3.87	378
May-2021	159.34	0.51%	238	47,615,037,767	48,936,401,435	102.78	3.89	380
Jun-2021	160.42	0.68%	235	46,556,670,751	47,976,744,707	103.05	3.90	382
Jul-2021	160.88	0.29%	239	46,213,562,998	47,807,083,563	103.45	3.91	383
Aug-2021	161.28	0.25%	242	46,542,264,071	48,139,580,923	103.43	3.91	383
Sep-2021	162.16	0.55%	240	45,645,024,894	47,210,049,253	103.43	3.93	385
Oct-2021	162.45	0.18%	243	44,395,832,151	46,008,939,674	103.63	3.93	385
Nov-2021	162.69	0.15%	250	46,136,808,535	47,705,750,833	103.40	3.92	384
Dec-2021	163.17	0.30%	253	44,428,702,439	45,850,865,730	103.20	3.97	389
Jan-2022	163.27	0.06%	264	46,303,372,955	47,721,518,712	103.06	3.92	383
Feb-2022	161.64	-1.00%	272	48,187,246,457	49,476,212,584	102.68	3.86	378
Mar-2022	159.97	-1.04%	280	48,758,202,585	49,320,610,808	101.15	3.93	380
Apr-2022	160.67	0.44%	285	50,947,780,611	50,882,869,681	99.87	4.14	386
May-2022	159.01	-1.03%	291	53,065,956,573	53,054,131,960	99.98	4.34	386
Jun-2022	157.45	-0.98%	297	54,707,014,476	53,912,547,204	98.55	4.66	388
Jul-2022			305	54,305,816,176	52,723,290,518	97.09	5.21	399

CRTx® RNI™ Index Basket History: Select Metrics As of 06/30/2022 Rebalancing

Sponsor % of CRTx® RNI™ Mkt Val For 07/2022



Sub Index % of CRTx® RNI™ Mkt Val For 07/2022



CRTx® RNI™ AGG

CRTx® RNI™ AGG									
MONTH END CLOSINGS			BEGINNING MONTH BASKET						
Calculation Month		INDEX VALUE	Month to Date Total Return	# of		W Avg Adj Beg Month		WTD Avg	
				Constituents	Beg Month UPB	Beg Month Total \$ Market Value	Security Mkt Value	Current Coupon	WTD Avg Cpn Margin
Aug-2019	157.60	0.49%	52	11,648,252,778	11,964,569,893	102.72	5.02	275	
Sep-2019	158.58	0.62%	52	11,555,452,802	11,866,682,740	102.69	4.90	275	
Oct-2019	158.98	0.25%	52	11,145,361,078	11,471,457,452	102.93	4.81	278	
Nov-2019	159.70	0.45%	49	10,957,162,877	11,213,504,874	102.34	4.55	273	
Dec-2019	161.24	0.96%	53	11,183,706,619	11,434,402,160	102.24	4.43	272	
Jan-2020	163.27	1.26%	52	10,810,525,676	11,128,255,837	102.94	4.58	279	
Feb-2020	163.04	-0.14%	54	11,750,620,247	12,144,811,071	103.36	4.32	266	
Mar-2020	123.73	-24.11%	57	13,219,029,124	13,479,658,957	101.97	4.09	246	
Apr-2020	120.70	-2.45%	55	12,793,770,386	9,865,262,294	77.11	3.43	249	
May-2020	134.53	11.46%	51	11,841,276,956	8,721,408,098	73.65	3.01	252	
Jun-2020	151.62	12.71%	46	10,917,819,539	8,842,509,887	80.99	2.69	253	
Jul-2020	153.41	1.17%	45	10,409,152,540	9,432,905,082	90.62	2.78	259	
Aug-2020	154.49	0.71%	46	10,724,189,826	9,890,825,093	92.23	2.99	282	
Sep-2020	157.58	2.00%	47	10,980,427,286	10,237,992,004	93.24	3.19	301	
Oct-2020	158.61	0.66%	48	11,105,630,257	10,559,393,889	95.08	3.25	310	
Nov-2020	161.83	2.03%	47	10,696,965,880	10,283,123,737	96.13	3.47	333	
Dec-2020	166.71	3.02%	46	10,736,337,604	10,542,306,038	98.19	3.53	339	
Jan-2021	168.67	1.18%	50	11,324,184,451	11,415,597,441	100.81	3.50	337	
Feb-2021	169.49	0.48%	47	10,504,416,039	10,712,665,142	101.98	3.61	350	
Mar-2021	167.93	-0.92%	39	9,048,558,462	9,296,466,342	102.74	3.84	377	
Apr-2021	170.69	1.64%	38	8,978,749,172	9,107,517,591	101.43	3.81	376	
May-2021	172.19	0.88%	41	9,588,703,205	9,840,125,130	102.62	3.79	375	
Jun-2021	174.63	1.42%	40	9,373,273,707	9,681,506,748	103.29	3.81	378	
Jul-2021	175.45	0.47%	44	9,738,420,034	10,156,250,987	104.29	3.78	374	
Aug-2021	175.78	0.19%	42	9,659,687,165	10,041,577,171	103.95	3.55	349	
Sep-2021	177.19	0.80%	39	8,836,801,107	9,156,649,664	103.62	3.40	335	
Oct-2021	177.37	0.10%	39	9,275,157,362	9,611,457,885	103.63	3.25	320	
Nov-2021	177.29	-0.05%	44	11,029,258,671	11,264,989,273	102.14	3.12	307	
Dec-2021	178.13	0.47%	44	11,364,521,191	11,523,394,460	101.40	3.14	309	
Jan-2022	176.91	-0.69%	52	13,499,939,498	13,679,507,404	101.33	3.06	301	
Feb-2022	173.35	-2.01%	57	15,396,876,140	15,433,974,963	100.24	3.01	296	
Mar-2022	170.35	-1.73%	62	17,234,456,472	16,913,526,465	98.14	3.12	307	
Apr-2022	170.82	0.28%	67	19,128,995,434	18,549,644,816	96.97	3.38	329	
May-2022	168.30	-1.48%	72	21,068,208,560	20,517,088,834	97.38	3.64	336	
Jun-2022	165.20	-1.84%	80	23,394,497,238	22,433,577,349	95.89	4.00	343	
Jul-2022			85	24,884,587,943	23,480,348,016	94.36	4.49	358	

Latest Deal Performance Metrics: June 2022 Monthly Statements - CAS

CRTx® AGG Index Constituent Performance Data (Jun-2022 Monthly Statements)																						
Deal					Loss	Pool	Form	Structure	Early Redemption Option (Yrs)	Maturity (Yrs)	Rem. Early Redemp. Option (Yrs)	Rem. Maturity (Yrs)	Delinquency Pipeline					CPR	Net			
																			Credit Event	Min CE	Net Loss	DQ
													Test	Test	Test	Test						
30d	60d	90d	120d	150d	180d+	Total DQ%	MoM % Chg	1mth	Pass	Pass	Pass	Pass										
CAS 2013-C01	FXD1	LLTV	DEBT	M1-M2	10.0	1.3	0.47	0.06	0.04	0.01	0.01	-	0.59	5%	13%	NA	YES	NA	NA			
CAS 2014-C01	FXD1	LLTV	DEBT	M1-M2	10.0	1.6	0.43	0.07	0.03	0.04	0.01	-	0.57	-3%	12%	NA	YES	NA	NA			
CAS 2014-C02	FXD1	LLTV	DEBT	1M1-1M2	10.0	1.9	0.42	0.09	0.03	0.02	0.01	-	0.57	7%	11%	NA	YES	NA	NA			
	FXD1	HLTV	DEBT	2M1-2M2	10.0	1.9	0.65	0.07	0.05	0.02	0.03	-	0.82	7%	15%	NA	YES	NA	NA			
CAS 2014-C03	FXD2	LLTV	DEBT	1M1-1M2	10.0	2.1	0.46	0.07	0.04	0.02	0.03	-	0.62	3%	13%	NA	YES	NA	NA			
	FXD2	HLTV	DEBT	2M1-2M2	10.0	2.1	0.61	0.17	0.04	0.07	0.03	-	0.92	21%	14%	NA	YES	NA	NA			
CAS 2014-C04	FXD2	LLTV	DEBT	1M1-1M2	10.0	2.4	0.57	0.12	0.07	0.04	0.04	-	0.83	4%	13%	NA	YES	NA	NA			
	FXD2	HLTV	DEBT	2M1-2M2	10.0	2.4	0.86	0.25	0.10	0.07	0.01	-	1.28	21%	16%	NA	YES	NA	NA			
CAS 2015-C01	FXD2	LLTV	DEBT	1M1-1M2	10.0	2.7	1.03	0.24	0.12	0.05	0.05	-	1.48	10%	16%	NA	YES	NA	NA			
	FXD2	HLTV	DEBT	2M1-2M2	10.0	2.7																
CAS 2015-C02	FXD2	LLTV	DEBT	1M1-1M2	10.0	2.9	1.08	0.20	0.11	0.09	0.09	-	1.57	3%	17%	NA	YES	NA	NA			
	FXD2	HLTV	DEBT	2M1-2M2	10.0	2.9																
CAS 2015-C03	FXD2	LLTV	DEBT	1M1-1M2	10.0	3.1	0.98	0.27	0.13	0.09	0.10	-	1.56	6%	18%	NA	YES	NA	NA			
	FXD2	HLTV	DEBT	2M1-2M2	10.0	3.1																
CAS 2015-C04	ACT	LLTV	DEBT	1M1-1M2	10.0	12.5	3.3	5.8	1.18	0.31	0.20	0.15	0.11	1.55	3.51	-7%	20%	NA	YES	NA	YES	
	ACT	HLTV	DEBT	2M1-2M2	10.0	12.5	3.3	5.8	1.69	0.43	0.31	0.10	0.13	2.40	5.05	-2%	23%	NA	YES	NA	YES	
CAS 2016-C01	ACT	LLTV	DEBT	1M1-1M2-1B	10.0	12.5	3.7	6.2	1.05	0.23	0.18	0.08	0.11	1.35	3.00	-4%	15%	NA	YES	NA	YES	
	ACT	HLTV	DEBT	2M1-2M2	10.0	12.5	3.7	6.2	1.66	0.25	0.15	0.18	0.16	1.73	4.12	-6%	21%	NA	YES	NA	YES	
CAS 2016-C02	ACT	LLTV	DEBT	1M1-1M2-1B	10.0	12.5	3.7	6.3	0.78	0.20	0.08	0.08	0.05	0.99	2.17	-6%	17%	NA	YES	NA	YES	
CAS 2016-C03	ACT	LLTV	DEBT	1M1-1M2-1B	10.0	12.5	3.8	6.3	0.57	0.25	0.09	0.09	0.04	1.14	2.18	-18%	19%	NA	YES	NA	YES	
	ACT	HLTV	DEBT	2M1-2M2-2B	10.0	12.5	3.8	6.3	1.17	0.36	0.13	0.15	0.11	1.60	3.51	2%	15%	NA	YES	NA	YES	
CAS 2016-C04	ACT	LLTV	DEBT	1M1-1M2-1B	10.0	12.5	4.1	6.6	1.05	0.24	0.11	0.11	0.08	1.34	2.93	-2%	17%	NA	YES	NA	YES	
CAS 2016-C05	ACT	HLTV	DEBT	2M1-2M2-2B	10.0	12.5	4.1	6.6	1.53	0.41	0.19	0.13	0.16	1.84	4.27	-2%	20%	NA	YES	NA	YES	
CAS 2016-C06	ACT	LLTV	DEBT	1M1-1M2-1B	10.0	12.5	4.3	6.8	0.91	0.24	0.16	0.14	0.09	1.34	2.89	-6%	18%	NA	YES	NA	YES	
CAS 2016-C07	ACT	HLTV	DEBT	2M1-2M2-2B	10.0	12.5	4.4	6.9	1.47	0.38	0.28	0.18	0.15	1.98	4.46	-1%	20%	NA	YES	NA	YES	
CAS 2017-C01	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	4.6	7.1	0.79	0.23	0.13	0.09	0.08	1.18	2.50	-9%	17%	NA	YES	NA	YES	
CAS 2017-C02	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	4.7	7.3	1.13	0.30	0.19	0.15	0.11	1.52	3.39	-2%	18%	NA	YES	NA	YES	
CAS 2017-C03	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	4.8	7.3	0.83	0.19	0.10	0.06	0.06	0.95	2.19	-2%	16%	NA	YES	NA	YES	
CAS 2017-C04	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	4.9	7.4	1.06	0.35	0.20	0.13	0.09	1.48	3.32	-2%	16%	NA	YES	NA	YES	
CAS 2017-C05	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	5.1	7.6	0.72	0.17	0.09	0.09	0.07	0.98	2.13	-3%	14%	NA	YES	NA	YES	
CAS 2017-C06	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	5.2	7.7	0.93	0.25	0.12	0.16	0.10	1.56	3.13	-5%	16%	NA	YES	NA	YES	
	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	5.2	7.7	1.49	0.40	0.19	0.23	0.17	2.41	4.89	-7%	20%	NA	YES	NA	YES	
CAS 2017-C07	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	5.4	7.9	1.22	0.35	0.14	0.14	0.09	1.74	3.68	1%	20%	NA	YES	NA	YES	
	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	5.4	7.9	1.63	0.51	0.26	0.24	0.20	2.71	5.54	-4%	23%	NA	YES	NA	YES	
CAS 2018-C01	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.4	5.6	8.1	1.10	0.26	0.17	0.12	0.12	1.76	3.54	-4%	20%	NA	YES	NA	YES	
CAS 2018-C02	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	5.7	8.2	1.60	0.51	0.22	0.21	0.19	2.30	5.01	-2%	22%	NA	YES	NA	YES	
CAS 2018-C03	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	5.8	8.3	1.27	0.25	0.17	0.15	0.14	1.79	3.77	-4%	20%	NA	YES	NA	YES	
CAS 2018-C04	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	6.0	8.5	1.56	0.52	0.26	0.25	0.21	2.76	5.56	-5%	21%	NA	YES	NA	YES	
CAS 2018-C05	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	6.1	8.6	1.13	0.37	0.22	0.16	0.13	1.93	3.93	-5%	19%	NA	YES	NA	YES	
CAS 2018-C06	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	6.3	8.7	1.42	0.42	0.22	0.19	0.22	2.52	4.99	-5%	24%	NA	YES	NA	YES	
	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	6.3	8.7	1.53	0.53	0.32	0.30	0.12	2.92	5.71	-5%	24%	NA	YES	NA	NO	
CAS 2018-R07	ACT	LLTV	REMIC	1M1-1M2-1B1	10.0	12.5	6.3	8.8	1.59	0.40	0.23	0.22	0.15	3.00	5.59	-6%	24%	NA	YES	NA	NO	
CAS 2019-R01	ACT	HLTV	REMIC	2M1-2M2-2B1	10.0	12.5	6.6	9.1	1.87	0.55	0.34	0.32	0.23	3.43	6.74	-3%	27%	NA	YES	NA	NO	
CAS 2019-R02	ACT	LLTV	REMIC	1M1-1M2-1B1	10.0	12.5	6.7	9.2	1.51	0.39	0.31	0.21	0.16	2.74	5.32	-3%	25%	NA	YES	NA	NO	
CAS 2019-R03	ACT	LLTV	REMIC	1M1-1M2-1B1	9.9	12.4	6.7	9.3	1.63	0.54	0.30	0.30	0.16	2.66	5.59	-4%	24%	NA	YES	NA	NO	
CAS 2019-R04	ACT	HLTV	REMIC	2M1-2M2-2B1	7.0	20.0	4.0	17.0	1.96	0.62	0.40	0.37	0.25	3.58	7.18	-2%	26%	NA	YES	NA	NO	
CAS 2019-R05	ACT	LLTV	REMIC	1M1-1M2-1B1	7.0	20.0	4.1	17.1	1.63	0.53	0.33	0.25	0.20	3.23	6.19	-1%	26%	NA	YES	NA	NO	
CAS 2019-R06	ACT	HLTV	REMIC	2M1-2M2-2B1	7.0	20.0	4.2	17.3	1.55	0.49	0.24	0.27	0.23	3.05	5.84	-4%	25%	NA	YES	NA	NO	
CAS 2019-R07	ACT	LLTV	REMIC	1M1-1M2-1B1	7.0	20.0	4.3	17.3	1.14	0.30	0.19	0.16	0.20	2.39	4.38	-8%	22%	NA	YES	NA	NO	
CAS 2020-R01	ACT	LLTV	REMIC	1M1-1M2-1B1	7.0	20.0	4.6	17.6	0.96	0.20	0.15	0.10	0.07	1.60	3.07	-4%	18%	NA	YES	NA	NO	
CAS 2020-R02	ACT	HLTV	REMIC	2M1-2M2-2B1	7.0	20.0	4.6	17.6	1.25	0.33	0.26	0.20	0.16	2.07	4.28	-4%	19%	NA	YES	NA	NO	
CAS 2021-R01	ACT	LLTV	REMIC	1M1-1M2-1B1-1B2	5.0	20.0	4.3	19.3	0.38	0.04	0.03	0.02	0.02	0.03	0.51	22%	9%	NA	YES	NA	YES	
CAS 2021-R02	ACT	HLTV	REMIC	2M1-2M2-2B1-2B2	5.0	20.0	4.4	19.4	0.45	0.12	0.07	0.05	0.04	0.04	0.78	30%	8%	NA	YES	NA	YES	
CAS 2021-R03	ACT	LLTV	REMIC	1M1-1M2-1B1-1B2	5.0	20.0	4.5	19.5	0.33	0.04	0.03	0.02	0.02	0.01	0.44	0%	9%	NA	YES	NA	YES	
CAS 2022-R01	ACT	LLTV	REMIC	1M1-1M2-1B1-1B2	4.9	19.9	4.5	19.5	0.41	0.04	0.04	0.03	0.01	0.01	0.54	24%	9%	NA	YES	NA	YES	
CAS 2022-R02	ACT	HLTV	REMIC	2M1-2M2-2B1-2B2	5.0	20.0	4.6	19.6	0.45	0.09	0.09	0.06	0.02	0.00	0.72	19%	8%	NA	YES	NA	YES	
CAS 2022-R03	ACT	LLTV	REMIC	1M1-1M2-1B1-1B2	5.0	20.0	4.7	19.8	0.37	0.03	0.02	-	-	-	0.42	53%	9%	NA	YES	NA	YES	
CAS 2022-R04	ACT	LLTV	REMIC	1M1-1M2-1B1-1B2	5.0	20.0	4.7	19.8	0.32	0.05	0.03	-	-	-	0.40	46%	8%	NA	YES	NA	YES	
CAS 2022-R05	ACT	HLTV	REMIC	2M1-2M2-2B1-2B2	5.0	20.0	4.8	19.8	0.32	0.05	-	0.00	-	0.00	0.37		6%	NA	YES	NA	YES	

Latest Deal Performance Metrics: June 2022 Monthly Statements - STACR

CRTx® AGG Index Constituent Performance Data (Jun-2022 Monthly Statements)																				Net			
Deal	Loss	Pool	Form	Structure	Early Redemption Option (Yrs)	Maturity (Yrs)	Rem. Early Redemp. Option (Yrs)	Rem. Maturity (Yrs)	Delinquency Pipeline								CPR	Credit Event Test	Min CE Test	Cum Net Loss Test	DQ Test		
									30d	60d	90d	120d	150d	180d+	Total	MoM						1mth	
															DQ%	% Chg							
STACR 2013-DN1	FXD1	LLTV	DEBT	M1-M2	10.0		1.1	0.39	0.05	0.02	0.02	0.03	-	0.51	4%	11%	YES	YES	NA	NA			
STACR 2013-DN2	FXD1	LLTV	DEBT	M1-M2	10.0		1.4	0.43	0.05	0.02	0.02	0.02	-	0.54	6%	10%	YES	YES	NA	NA			
STACR 2014-DN1	FXD1	LLTV	DEBT	M1-M2-M3	10.0		1.7	0.43	0.08	0.04	0.03	0.03	-	0.61	-8%	11%	YES	YES	NA	NA			
STACR 2014-DN2	FXD1	LLTV	DEBT	M1-M2-M3	10.1		1.8	0.58	0.10	0.05	0.03	0.02	-	0.78	-9%	12%	YES	YES	NA	NA			
STACR 2014-DN3	FXD2	LLTV	DEBT	M1-M2-M3	10.0		2.2	1.14	0.23	0.10	0.08	0.11	0.33	1.99	0%	14%	YES	YES	NA	NA			
STACR 2014-DN4	FXD2	LLTV	DEBT	M1-M2-M3	10.0		2.3	1.10	0.24	0.18	0.13	0.09	0.38	2.12	-3%	14%	YES	YES	NA	NA			
STACR 2014-HQ1	FXD2	HLTV	DEBT	M1-M2-M3	10.0		2.2																
STACR 2014-HQ2	FXD2	HLTV	DEBT	M1-M2-M3	10.0		2.2	0.64	0.19	0.06	0.06	0.04	0.20	1.19	-5%	13%	YES	YES	NA	NA			
STACR 2014-HQ3	FXD2	HLTV	DEBT	M1-M2-M3	10.0		2.3																
STACR 2015-DN1	FXD2	LLTV	DEBT	M1-M2-M3-B	10.0		2.6	1.24	0.26	0.09	0.08	0.03	0.40	2.10	7%	16%	YES	YES	NA	NA			
STACR 2015-HQ1	FXD2	HLTV	DEBT	M1-M2-M3-B	10.0		2.7	1.56	0.25	0.12	0.08	0.06	0.48	2.55	3%	17%	YES	YES	NA	NA			
STACR 2015-HQ2	FXD2	LLTV	DEBT	M1-M2-M3-B	10.0		2.9	0.60	0.17	0.06	0.05	0.03	0.18	1.09	-6%	13%	YES	YES	NA	NA			
STACR 2015-DNA1	ACT	LLTV	DEBT	M1-M2-M3-B	10.0	12.5	2.8	5.3	0.34	0.10	0.05	0.06	0.36	0.91	-12%	10%	NA	YES	YES	YES			
STACR 2015-DNA2	ACT	LLTV	DEBT	M1-M2-M3-B	10.0	12.5	3.0	5.5	1.16	0.29	0.09	0.20	1.01	2.75	-3%	14%	NA	YES	YES	YES			
STACR 2015-DNA3	ACT	LLTV	DEBT	M1-M2-M3-B	10.0	12.5	3.3	5.8	0.99	0.21	0.12	0.17	0.94	2.43	1%	14%	NA	YES	YES	YES			
STACR 2015-HQA1	ACT	HLTV	DEBT	M1-M2-M3-B	10.0	12.5	3.2	5.8	1.55	0.33	0.18	0.30	1.57	3.93	-2%	17%	NA	YES	YES	YES			
STACR 2015-HQA2	ACT	HLTV	DEBT	M1-M2-M3-B	10.0	12.5	3.4	5.9	1.48	0.28	0.20	0.28	1.63	3.87	2%	16%	NA	YES	YES	YES			
STACR 2016-DNA1	ACT	LLTV	DEBT	M1-M2-M3-B	10.0	12.5	3.6	6.1	0.85	0.15	0.10	0.15	0.87	2.12	3%	14%	NA	YES	YES	YES			
STACR 2016-DNA2	ACT	LLTV	DEBT	M1-M2-M3-B	10.0	12.5	3.8	6.3	0.95	0.22	0.15	0.19	1.20	2.71	-3%	15%	NA	YES	YES	YES			
STACR 2016-DNA3	ACT	LLTV	DEBT	M1-M2-M3-B	10.0	12.5	4.0	6.5	1.05	0.30	0.13	0.16	1.23	2.87	-5%	12%	NA	YES	YES	YES			
STACR 2016-DNA4	ACT	LLTV	DEBT	M1-M2-M3-B	10.0	12.5	4.2	6.8	1.11	0.29	0.14	0.18	1.25	2.97	0%	14%	NA	YES	YES	YES			
STACR 2016-HQA1	ACT	HLTV	DEBT	M1-M2-M3-B	10.0	12.5	3.7	6.3	1.15	0.40	0.20	0.24	1.53	3.52	-3%	14%	NA	YES	YES	YES			
STACR 2016-HQA2	ACT	HLTV	DEBT	M1-M2-M3-B	10.0	12.5	3.9	6.4	1.42	0.41	0.15	0.27	1.51	3.76	1%	15%	NA	YES	YES	YES			
STACR 2016-HQA3	ACT	HLTV	DEBT	M1-M2-M3-B	10.0	12.5	4.2	6.8	1.30	0.35	0.20	0.20	1.79	3.84	-5%	16%	NA	YES	YES	YES			
STACR 2016-HQA4	ACT	HLTV	DEBT	M1-M2-M3-B	10.0	12.5	4.3	6.8	1.63	0.40	0.18	0.41	1.90	4.52	0%	15%	NA	YES	YES	YES			
STACR 2017-DNA1	ACT	LLTV	DEBT	M1-M2-B1-B2	10.0	12.5	4.6	7.1	0.96	0.18	0.12	0.18	1.10	2.54	-2%	15%	NA	YES	YES	YES			
STACR 2017-DNA2	ACT	LLTV	DEBT	M1-M2-B1-B2	10.0	12.5	4.8	7.3	0.85	0.18	0.12	0.18	1.03	2.36	-1%	13%	NA	YES	YES	YES			
STACR 2017-DNA3	ACT	LLTV	DEBT	M1-M2-B1	10.0	12.5	5.2	7.7	0.92	0.21	0.12	0.16	1.09	2.50	-2%	12%	NA	YES	YES	YES			
STACR 2017-HQA1	ACT	HLTV	DEBT	M1-M2-B1-B2	10.5	12.5	5.2	7.2	1.26	0.37	0.17	0.29	1.56	3.65	-4%	15%	NA	YES	YES	YES			
STACR 2017-HQA2	ACT	HLTV	DEBT	M1-M2-B1	10.0	12.5	5.0	7.5	1.20	0.34	0.15	0.25	1.47	3.41	-3%	15%	NA	YES	YES	YES			
STACR 2017-HQA3	ACT	HLTV	DEBT	M1-M2-B1	10.0	12.5	5.3	7.8	1.29	0.40	0.24	0.21	0.17	1.96	4.26	-3%	16%	NA	YES	YES	YES		
STACR 2018-DNA1	ACT	LLTV	DEBT	M1-M2-B1	10.0	12.5	5.6	8.1	1.25	0.24	0.12	0.25	1.59	3.45	-4%	18%	NA	YES	YES	YES			
STACR 2018-HQA1	ACT	HLTV	DEBT	M1-M2-B1	10.0	12.5	5.8	8.3	1.71	0.51	0.27	0.26	0.20	2.27	5.22	2%	18%	NA	YES	YES	NO		
STACR 2018-DNA2	ACT	LLTV	TRUST	M1-M2-B1	10.0	12.5	6.0	8.5	1.04	0.25	0.12	0.23	1.20	2.84	-2%	16%	NA	YES	YES	YES			
STACR 2018-DNA3	ACT	LLTV	TRUST	M1-M2-B1-B2	10.0	30.0	6.3	26.3	1.16	0.22	0.15	0.13	0.14	1.69	3.49	-3%	15%	NA	YES	YES	YES		
STACR 2018-HQA2	ACT	HLTV	TRUST	M1-M2-B1-B2	9.9	30.0	6.3	26.4	1.45	0.48	0.26	0.17	0.17	2.07	4.62	-2%	17%	NA	YES	YES	YES		
STACR 2019-DNA1	ACT	LLTV	TRUST	M1-M2-B1-B2	10.0	30.0	6.6	26.6	1.49	0.37	0.20	0.15	0.19	1.97	4.37	-6%	19%	NA	YES	YES	YES		
STACR 2019-DNA2	ACT	LLTV	TRUST	M1-M2-B1-B2	10.0	30.0	6.7	26.8	1.31	0.45	0.20	0.26	2.30	4.52	-5%	19%	NA	YES	YES	YES			
STACR 2019-DNA3	ACT	LLTV	TRUST	M1-M2-B1-B2	10.0	30.0	7.1	27.1	1.28	0.30	0.24	0.34	1.75	3.91	-5%	20%	NA	YES	YES	YES			
STACR 2019-HQA1	ACT	HLTV	TRUST	M1-M2-B1-B2	9.9	30.0	6.6	26.7	1.69	0.54	0.32	0.20	0.24	2.78	5.77	-5%	20%	NA	YES	YES	NO		
STACR 2019-HQA2	ACT	HLTV	TRUST	M1-M2-B1-B2	10.0	30.0	6.8	26.8	1.94	0.69	0.34	0.45	2.94	6.36	-2%	20%	NA	YES	YES	NO			
STACR 2019-HQA3	ACT	HLTV	TRUST	M1-M2-B1-B2	10.0	30.0	7.3	27.3	1.87	0.51	0.29	0.49	2.63	5.79	-3%	20%	NA	YES	YES	NO			
STACR 2019-DNA4	ACT	LLTV	REMIC	M1-M2-B1-B2	10.0	30.9	7.3	28.2	1.18	0.22	0.18	0.37	1.63	3.58	-5%	21%	NA	YES	YES	NO			
STACR 2019-HQA4	ACT	HLTV	REMIC	M1-M2-B1-B2	10.0	30.0	7.4	27.4	1.73	0.50	0.25	0.45	2.75	5.68	-7%	19%	NA	YES	YES	NO			
STACR 2020-DNA1	ACT	LLTV	REMIC	M1-M2-B1-B2	10.0	30.0	7.6	27.6	0.95	0.21	0.15	0.15	0.12	1.41	3.00	-3%	19%	NA	YES	YES	NO		
STACR 2020-DNA2	ACT	LLTV	REMIC	M1-M2-B1-B2	10.0	30.0	7.7	27.7	0.68	0.18	0.13	0.20	0.98	2.17	-5%	15%	NA	YES	YES	YES			
STACR 2020-DNA3	ACT	LLTV	REMIC	M1-M2-B1-B2	10.0	30.0	8.0	28.0	0.54	0.10	0.08	0.12	0.54	1.38	-1%	14%	NA	YES	YES	YES			
STACR 2020-DNA4	ACT	LLTV	REMIC	M1-M2-B1-B2	10.0	30.0	8.2	28.2	0.56	0.11	0.05	0.08	0.53	1.33	-1%	15%	NA	YES	YES	YES			
STACR 2020-DNA5	ACT	LLTV	REMIC	M1-M2-B1-B2	10.0	30.0	8.3	28.3	0.47	0.08	0.06	0.08	0.31	1.00	5%	12%	NA	YES	YES	YES			
STACR 2020-DNA6	ACT	LLTV	REMIC	M1-M2-B1-B2	10.0	30.0	8.5	28.5	0.47	0.05	0.03	0.04	0.02	0.25	0.85	9%	11%	NA	YES	YES	YES		
STACR 2020-HQA1	ACT	HLTV	REMIC	M1-M2-B1-B2	10.0	30.0	7.6	27.6	1.21	0.35	0.18	0.16	0.17	2.02	4.10	-6%	19%	NA	YES	YES	NO		
STACR 2020-HQA2	ACT	HLTV	REMIC	M1-M2-B1-B2	10.0	30.0	7.7	27.8	0.99	0.26	0.19	0.28	1.46	3.18	-5%	15%	NA	YES	YES	NO			
STACR 2020-HQA3	ACT	HLTV	REMIC	M1-M2-B1-B2	10.0	30.0	8.1	28.1	0.59	0.16	0.11	0.15	0.60	1.61	-5%	14%	NA	YES	YES	YES			
STACR 2020-HQA4	ACT	HLTV	REMIC	M1-M2-B1-B2	10.0	30.0	8.3	28.3	0.66	0.12	0.10	0.08	0.08	0.58	1.62	1%	15%	NA	YES	YES	YES		
STACR 2020-HQA5	ACT	HLTV	REMIC	M1-M2-B1-B2	10.0	30.0	8.4	28.4	0.58	0.12	0.07	0.11	0.46	1.34	6%	13%	NA	YES	YES	YES			
STACR 2021-DNA1	ACT	LLTV	REMIC	M1-M2-B1-B2	10.0	30.0	8.6	28.6	0.39	0.05	0.03	0.05	0.17	0.69	10%	9%	NA	YES	YES	YES			
STACR 2021-DNA2	ACT	LLTV	REMIC	M1-M2-B1-B2	12.5		11.2	0.43	0.05	0.02	0.04	0.14	0.68	13%	9%	NA	YES	YES	YES				
STACR 2021-DNA3	ACT	LLTV	REMIC	M1-M2-B1-B2	12.5		11.3	0.32	0.04	0.04	0.05	0.09	0.54	10%	7%								

Latest Deal Performance Metrics: June 2022 Monthly Statements – STACR (continued)

CRTx® AGG Index Constituent Performance Data (Jun-2022 Monthly Statements)																						
Deal	Loss	Pool	Form	Structure	Early Redemption Option (Yrs)	Maturity (Yrs)	Rem. Early Redemp. Option (Yrs)	Rem. Maturity (Yrs)	Delinquency Pipeline								CPR	Net Credit Event Test	Min CE Test	Cum Net Loss Test	DC Test	
																Total						MoM
									30d	60d	90d	120d	150d	180d+	DQ%	% Chg						
STACR 2021-DNA7	ACT	LLTV	REMIC	M1-M2-B1-B2	5.0	20.0	4.4	19.4	0.43	0.05	0.03	0.03	0.03	0.04	0.61	20%	8%	NA	NO	YES	YES	
STACR 2021-HQA1	ACT	HLTV	REMIC	M1-M2-B1-B2		12.5		11.2	0.49	0.09	0.07	0.05	0.05	0.32	1.07	4%	8%	NA	YES	YES	YES	
STACR 2021-HQA2	ACT	HLTV	REMIC	M1-M2-B1-B2		12.5		11.5	0.39	0.07	0.05	0.10	0.19	0.80	5%	8%	NA	YES	YES	YES		
STACR 2021-HQA3	ACT	HLTV	REMIC	M1-M2-B1-B2	5.0	20.0	4.2	19.3	0.35	0.09	0.06	0.11	0.11	0.72	1%	7%	NA	YES	YES	YES		
STACR 2021-HQA4	ACT	HLTV	REMIC	M1-M2-B1-B2	5.0	20.1	4.5	19.5	0.38	0.06	0.05	0.10	0.06	0.65	20%	7%	NA	NO	YES	YES		
STACR 2022-DNA1	ACT	LLTV	REMIC	M1A-M1B-M2-B1-B2	5.0	20.0	4.6	19.6	0.41	0.07	0.03	0.06	0.02	0.59	7%	8%	NA	NO	YES	YES		
STACR 2022-DNA2	ACT	LLTV	REMIC	M1A-M1B-M2-B1-B2	5.0	20.1	4.7	19.7	0.43	0.07	0.04	0.05	-	0.59	7%	7%	NA	YES	YES	YES		
STACR 2022-DNA3	ACT	LLTV	REMIC	M1A-M1B-M2-B1-B2	5.0	20.0	4.8	19.8	0.35	0.06	0.02	0.00	-	0.43	-12%	6%	NA	NO	YES	YES		
STACR 2022-DNA4	ACT	LLTV	REMIC	M1A-M1B-M2-B1-B2	5.0	20.0	4.9	19.9	0.50	0.03	-	0.00	-	0.53		11%	NA	YES	YES	YES		
STACR 2022-HQA1	ACT	HLTV	REMIC	M1A-M1B-M2-B1-B2	5.0	20.0	4.7	19.8	0.42	0.08	0.05	0.04	-	0.59	16%	4%	NA	YES	YES	YES		

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