

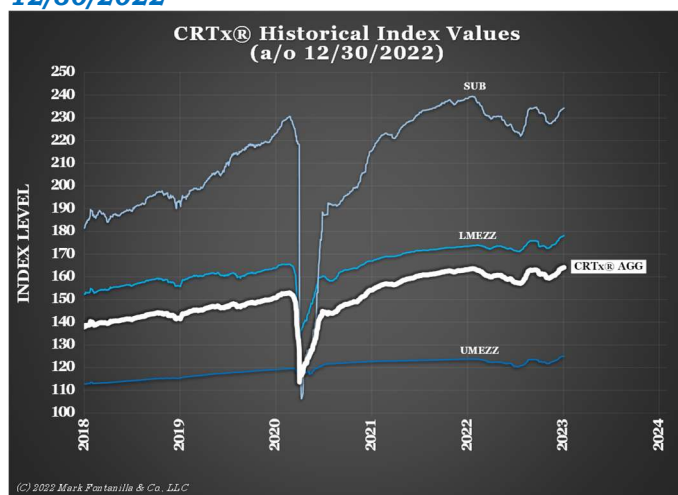
CRTx®

Credit Risk Transfer Return Tracking Index

www.markfontanilla.com/crtx-index

CRTx® Index Rebalancing Update

12/30/2022



Sector Musings

The Great About-Face Rolls On Into 2023

2022 was a tough year, with bond and stock market returns down significantly YoY, including a sell-off in the past few closing weeks, just to add insult to injury. The hallmark of the year was the speed and magnitude of the Fed's rate policy reversal away from zero in response to extraordinary inflation, and the ensuing market repercussions. It seemed like years of net accommodative monetary policy, massive artificial market support, and rising valuations was unwinding in an instant. The myriad of beginning-of-year vs. end-of-year U-turns included:

- Much higher vs. lower rates
- Much higher vs. lower volatility
- Much higher vs. lower prices
- Much higher vs. lower spreads
- Much lower vs. higher CPRs
- Much higher vs. lower mortgage durations
- Much lower vs. higher HPA rates
- And the list goes on and on....

But, as the old adage goes, "there's always next year" and now that 2023 is upon us, sectors across the board, including CRT, get a chance to reset for the new "season". While this year starts off on more of a back foot, so far for CRT, employment has been resilient, and today's housing and mortgage credit fundamentals are of a relatively stronger ilk than previous cycles. And we've seen this before: 6%-7% mortgage rates, slow speeds, etc. Perhaps things are going back towards a historical, natural "normal", vs. what had been an artificially induced "normal" for quite some time...

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- CRTx® AGG Index Rebalancing Stats
- CRTx® RNI™ AGG Index Rebalancing Stats

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The CRTx® Aggregate turned in a strong finish to the year, gaining 2.09% MoM in December...For full-year 2022, the Index eked out a positive 0.49% total return; well below carry, but much better than the broader fixed rate benchmarks...Within the CRT complex though, annual performance was mixed as newer issues...ended in the red YTD while seasoned paper made out much better...

Index Rebalancing Metrics Page 3

The CRTx® January basket UPB drops 3.5% MoM to \$50.99B, at a total market value of \$49.6B. Constituent count drops to 322 securities from 123 deals as...no new issues enter the Jan. 2023 Index basket...Benchmark GSE CRT float contracted -\$1.84B in December...

Latest Deal Performance Page 5

The story remained the same...Pre-COVID late-stage DQs continued to shrink, while early stage DQs again ticked up MoM...Post-COVID onset DQs also edged up, but remained nominally low. Structurally, writedowns/shortfalls were once again minimal, CPRs slowed even more, and C/Es were only minutely better on average...

Relative Value Thoughts Page 5

For now, the recent trends persist as we start 2023...static cashflow yields/carry in the CRT stack are generally wider vs rating-equivalent IG/HY at shorter durations...Seasoned Pre-2018...while you can still find them...New (when it eventually picks back up) and recent issues...

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- CRTx® Index Suite Total Return Performance: Month-End Matrix
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- Latest Deal Performance Metrics: CAS
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12/30/2022 Index Rebalancing Update *(continued)***CRTx® Aggregate Index**

Dec 2022 CRTx® AGG Tot Ret	+209 bps
Index Month-End Closing Value	163.97
Price Attribution	+137 bps
Paydown Attribution	+6 bps
Cpn Accr&Pmt Attribution	+67 bps
Writedown+Int Shortfall Attribution	-0.17 bps
Excess Return	+177 bps
Volatility (Annualized)	0.99%
UPB Paydown %	3.49%
QTD Total Return	1.68%
YTD Total Return	0.49%

CRTx® AGG Rebalancing For Jan 2023*As of 12/30/2022***January 2023 Aggregate Basket (w/MoM Δ):**

• Beg. UPB (\$B):	\$50.99	-3.5%
• Beg. Market Value (\$B):	\$49.61	-2.3%
• Constituents:	322	-1
• WAvg Constituent Value:	97.29	+1.15 pts
• WAvg Constituent Coupon:	8.22%	+42 bps

Index (+) Entries* & (-) Exits**(+) None****(-) STACR 2020-HQA3 M2**** 0.00% of Beg. Index Market Value*

CRTx® Mkt Val Breakdown: 1/2023 Basket				
Deal Yr	Aggregate	UMEZZ	LMEZZ	SUB
All	100.0%	25.3%	29.4%	45.4%
2022	40.3%	21.6%	10.2%	8.6%
2021	22.6%	3.7%	7.8%	11.1%
2020	10.6%	0.0%	2.7%	7.9%
2019	6.3%	0.0%	0.5%	5.8%
2018	5.9%	0.0%	1.4%	4.5%
2017	5.8%	0.0%	1.4%	4.4%
2016	3.7%	0.0%	1.8%	1.9%
2015	2.2%	0.0%	1.0%	1.2%
<=2014	2.5%	0.0%	2.5%	0.0%

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

Dec 2022 CRTx® RNI™ AGG Tot Ret	+232 bps
Index Month-End Closing Value	172.51
Price Attribution	+167 bps
Paydown Attribution	+1 bps
Cpn Accr&Pmt Attribution	+64 bps
Writedown+Int Shortfall Attribution	+0 bps
Excess Return	+199 bps
Volatility (Annualized)	1.20%
UPB Paydown %	0.55%
QTD Total Return	2.48%
YTD Total Return	-3.15%

CRTx® RNI™ AGG Rebalancing For Jan 2023*As of 12/30/2022***January 2023 Aggregate Basket (w/MoM Δ):**

• Beg. UPB (\$B):	\$20.38	-11.8%
• Beg. Market Value (\$B):	\$20.01	-9.6%
• Constituents:	76	-12
• WAvg Constituent Value:	98.18	+2.38 pts
• WAvg Constituent Coupon:	7.84%	+55 bps

Index (+) Entries* & (-) Exits**(+) None****(-) CAS 2021-R02 2M1/2M2/2B1/2B2****(-) STACR 2021-HQA4 M1/M2/B1/B2****(-) CAS 2021-R03 1M1/1M2/1B1/1B2**** 0.00% of Beg. Index Market Value*

CRTx® RNI™ Mkt Val Breakdown: 1/2023 Basket				
Deal Yr	Aggregate	UMEZZ	LMEZZ	SUB
All	100.0%	53.5%	25.3%	21.2%
2022	100.0%	53.5%	25.3%	21.2%
2021	0.0%	0.0%	0.0%	0.0%
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%

12/30/2022 Index Rebalancing Update *(continued)***Return Roundup**

The CRTx® Aggregate turned in a strong finish to the year, gaining 2.09% MoM in December, and closed out Q4 returning 1.68% QoQ. For full-year 2022, the Index eked out a positive 0.49% total return; well below carry, but much better than the broader fixed rate benchmarks that were hit harder by significantly higher rates and extraordinary volatility. Within the CRT complex though, annual performance was mixed as newer issues, especially B tranche variants, ended in the red YTD while seasoned paper made out much better.

12/30/2022		M/E RETURN ATTRIBUTION							
CRTx®	Index Mkt Val (\$B)	Price	CPN	CPN	Pay-	Write-down			Index Total Return
			Accr.	CPN	down	Retun	Int	Shortfall	
AGG	50.795	1.37%	-0.04%	0.71%	0.06%	-0.0011%	-0.0006%		2.09%
UMEZZ	12.577	1.08%	-0.03%	0.53%	0.02%	0.0000%	0.0000%		1.60%
LMEZZ	16.025	1.40%	-0.04%	0.61%	0.17%	0.0000%	0.0000%		2.14%
SUB	22.192	1.52%	-0.05%	0.89%	0.00%	-0.0024%	-0.0013%		2.35%

12/30/2022		M/E RETURN ATTRIBUTION							
CRTx® RNI™	Index Mkt Val (\$B)	Price	CPN	CPN	Pay-	Write-down			Index Total Return
			Accr.	CPN	down	Retun	Int	Shortfall	
AGG	22.135	1.67%	-0.04%	0.68%	0.01%	0.0000%	0.0000%		2.32%
UMEZZ	11.409	1.15%	-0.03%	0.54%	0.02%	0.0000%	0.0000%		1.67%
LMEZZ	5.657	2.70%	-0.04%	0.69%	0.00%	0.0000%	0.0000%		3.35%
SUB	5.069	1.71%	-0.06%	0.97%	0.00%	0.0000%	0.0000%		2.62%

December's sector gains were broad-based across the CRT complex, resulting in the Aggregate's 2nd best monthly performance of the year. End-of-year supply technicals helped as Q4 new issue was absent, tender activity was significant, and float shrank, finishing 2022 7% down from the all-time high of \$54.7B in May. Overall, the complex, especially newer issues, rallied nicely into year end, but YoY 2022 total returns still ended below carry, with newer LMEZZ/SUBs in well in the red YTD.

Sub-Index Returns: CRTx® vs RNI™ 2022 Year End

- The UMEZZ Index (M1 variants)**

- + 1.60%/+ 1.67% MTD Dec
- + 1.94%/+ 2.06% QTD Q4
- + 0.98%/+ 1.01% YTD 2022

- The LMEZZ Index (M2s/M3s)**

- + 2.14%/+ 3.35% MTD Dec
- + 2.67%/+ 4.03% QTD Q4
- + 2.61%/- 1.84% YTD 2022

- The SUB Index (B1/B2/Bs)**

- + 2.35%/+ 2.62% MTD Dec
- + 0.80%/+ 1.88% QTD Q4
- 1.89%/- 6.69% YTD 2022

Index Rebalancing Metrics

The CRTx® January basket UPB drops 3.5% MoM to \$50.99B, at a total market value of \$49.6B. Constituent count drops to 322 securities from 123 deals as just a single class paid off, while no new issues enter the Jan. 2023 Index basket.

Index Composition

While constituent count drops by 1 for the Jan. Index basket, there was certainly a shift composition as the latest FNMA/CAS tender retired a meaningful amount of seasoned M2 paper, while December paydowns were the lowest of the year:

CRTx® AGG composition (January 2023 basket):

- 25.3% ↑ (vs 24.8% in Dec) - UMEZZ (M1/old M2s)
- 29.4% ↓ (vs 31.5% in Dec) - LMEZZ (M2/old M3s)
- 45.4% ↑ (vs 43.7% in Dec) - SUBs (B/B1/B2s)

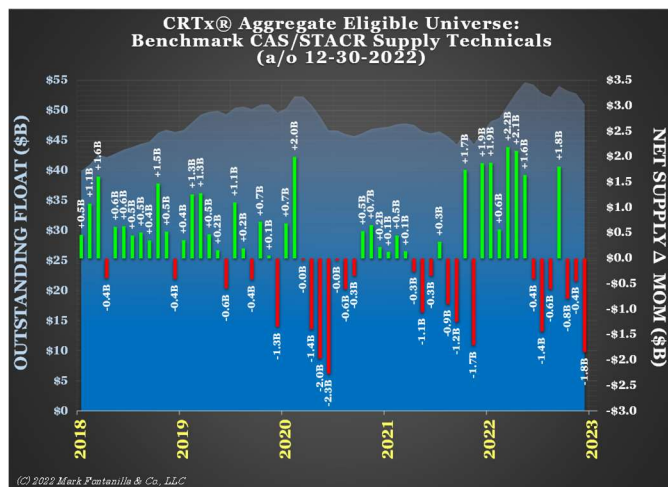
On the back of tighter supply, tender effects on composition, and a meaningful, broad-based year-end rally, the Index WAvg constituent market value improved +1.15 points MoM to \$97.29 (RNI™ AGG +2.38 points to \$98.18). The Fed's Dec. rate hike pushed LIBOR/SOFR up again, raising the Index-blended constituent coupon +42bps to 8.22% and effective carry to ~76bps to next reset.

Index cashflow average life- and duration-to-optional-redemption for the January basket shortens to a rebalanced 3.34 years and 2.64 years, respectively.

2022 GSE CRT Deal Pricing Margins (bps) & Orig. Ces									
Close		Pricing Margin / Original CE							
Date	2022 Deals	LTV	M1 or M1A/M1B	M2	B1	B2			
01/20	CAS 22-R01	L	100/2.30	190/1.45	315/0.85	600/0.25			
01/21	STACR 22-DNA1	L	100/3.00 185/2.00	250/1.25	340/0.75	710/0.25			
02/09	CAS 22-R02	H	120/2.45	300/1.55	450/0.90	765/0.35			
02/11	STACR 22-DNA2	L	130/3.40 240/2.00	375/1.25	475/0.75	850/0.25			
03/18	STACR 22-HQA1	H	210/3.75 350/2.60	525/1.25	700/0.75	1100/0.25			
03/30	CAS 22-R03	L	210/2.15	350/1.25	625/0.75	985/0.25			
04/08	CAS 22-R04	L	200/2.35	310/1.35	525/0.80	950/0.25			
04/18	STACR 22-DNA3	L	200/3.60 290/2.00	435/1.25	565/0.75	975/0.25			
05/11	CAS 22-R05	H	190/2.45	300/1.85	450/1.45	700/0.65			
05/13	STACR 22-DNA4	L	220/3.60 335/2.00	525/1.25	625/0.75	1025/0.25			
06/10	CAS 22-R06	L	275/2.50	385/1.45	635/0.85	1060/0.30			
06/17	STACR 22-DNA5	L	295/3.60 450/2.05	675/1.25	750/0.75	1290/0.25			
07/01	CAS 22-R07	L	295/2.55	465/1.60	680/1.00	1200/0.30			
07/29	STACR 22-HQA2	H	265/3.00 400/2.00	600/1.25					
08/05	CAS 22-R08	L	255/2.55	360/1.90	560/1.10				
08/12	STACR 22-HQA3	H	230/3.00 355/2.00	535/1.25					
09/16	STACR 22-DNA6	L	215/3.60 370/2.20	575/1.30					
09/28	CAS 22-R09	H	250/2.80	475/1.90	675/1.25				
09/30	STACR 22-DNA7	L	250/3.50 500/2.55	700/1.50					

12/30/2022 Index Rebalancing Update (continued)**Sector Supply**

Benchmark GSE CRT float contracted -\$1.84B in December, or -3.49%, to \$50.99B in UPB. With no new monthly supply, CPRs hitting fresh lows, and the latest FNMA/CAS tender taking a chunk of float out of the market, net supply was negative for a 3rd straight month, and has now been negative 6 out of the past 7 months to end 2022. Despite the recent declining trend, float is net higher by +10%/\$4.7B over 2021 year end.



Even with no new deals issued in Q4, 2022's record benchmark GSE CRT gross supply finishes at \$21.6B YTD, +53% more than 2021's \$14.1B, the next-highest year on record. Intra-complex, negative MoM supply changes were seen across the board, but diverged in final YTD figures:

DEC. 2022 Index-eligible NET SUPPLY breakdown:

- UMEZZ -0.166 B (- 1.30% MoM)
 - \$12.7B current float: **+\$9.6B/+10.13% YoY**
 - Proportionally bigger M1 classes/FNMA's return to market boosted M1-variant supply.
- LMEZZ -1.662 B (- 10.08% MoM)
 - \$14.8B current float: **-\$9.2B/-38.27% YoY**
 - \$9B in M2/M3 tender retirements drove tighter supply technical.
- SUB -0.015 B (- 0.06% MoM)
 - \$23.5B current float: **+\$4.3B/+22.23% YoY**
 - Issuance at the bottom of the capital structure expanded until mid-year volatility and spread widening hit.

CRTx® AGG (eligible universe as of 12/30/22)

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%		
2022-Jul	52,868.64	1,493.11	598.48	.17	2,331.64	-1,437.18	-2.65%		
2022-Aug	52,267.27	1,166.30	509.11	.14	1,258.41	-601.37	-1.14%		
2022-Sep	54,074.84	2,273.03	465.18	.28	.00	+1,807.57	+3.46%		
2022-Oct	53,282.61	.00	474.53	.27	317.43	-792.23	-1.47%		
2022-Nov	52,835.00	.00	447.47	.14	.00	-447.61	-0.84%		
2022-Dec	50,991.58	.00	315.47	.51	1,527.44	-1,843.42	-3.49%		

1-Current Face

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

Sources: FNMA, FHLMC, MF&Co

12/30/2022 Index Rebalancing Update *(continued)***Latest Deal Performance**

The story remained the same for CRT credit performance with the latest December statements. Pre-COVID late-stage DQs continued to shrink, while early stage DQs again ticked up MoM (based on STACR experience). Post-COVID onset DQs also edged up, but remained nominally low. Structurally, writedowns/shortfalls were once again minimal, CPRs slowed even more, and C/Es were only minutely better on average.

Credit

- STACR pre-COVID total DQ %s were mostly up modestly (CAS reporting lags 1 month, DQs up slightly in Dec. also), with 30d DQs edging up, while 180+ bucket DQ #s/\$s continued to shrink MoM. Newer deal total DQs also continued to creep higher, with some 2022 deals breaking above 1%.
- CRTx® 1st Loss Sub-Index (1st loss Bs) writedowns/int. shortfalls for December:
 - 5.3 bps hit to 1st Loss Sub-Index:**
 - 3.1 bps to Fxd. Sev. Sub-Index component** (vs. -2.3 bps in Nov.)

Paydowns

- The CRTx® AGG's 3.49% Dec. UPB paydown+tender retirement percentage was obviously much higher vs. November's paydown-only 0.84% level:**
 - MTD CRTx® AGG return attribution from paydowns/retirements: +5.7 bps**
- | Dec. Index Princ. Receipts | \$1,843M |
|-----------------------------------|-----------------|
| o UMEZZ (Mostly M1s): | \$166M |
| o LMEZZ (M2s/old M3s): | \$1,662M |
| ▪ <i>Paydowns</i> | <i>\$135M</i> |
| ▪ <i>Tenders</i> | <i>\$1,527M</i> |
| o SUB (Bs/B1s/B2s): | \$ 14M |
- STACR factor speeds declined again, ~1 to 2 CPR on average, with seasoned reference pool speeds currently in the 5-9 CPR area, while 2022 deals were in the 2-3 CPR range** (CAS is currently tracking similarly on a 1-month lag).

Structure

- Class C/E still building, but at a crawl MoM.
- December LIBOR resets +36bps, SOFR resets

+40bps. **To end 2022, LIBOR & SOFR resets finish up 428bps & 387bps YoY, respectively.**

- Nine pre-COVID REMIC deals are still failing their DQ tests, no change vs. November.
- Call Watch (% of original UPB remaining as of the Dec. statements):
 - STACR 2014-DN3 (11.1%)
 - STACR 2014-DN4 (11.2%)
 - STACR 2015-DN1 (11.2%)

Relative Value Thoughts

For now, the recent trends persist as we start 2023:

- Mortgage credit performance metrics are currently still benign and well-contained, but performance improvements have plateaued.
- Housing activity has certainly waned, but fundamentals are still supportive.
- Mortgage rates are still much higher versus the beginning of 2022, while CPRs have dropped to historically very low levels.
- From a macro standpoint, the inflation rate looks to be slowing, but inflated costs and recession clouds still hover.

Relative value themes also continue as static cashflow yields/carry in the CRT stack are generally wider vs rating-equivalent IG/HY, at shorter durations:

- ❖ **Seasoned Pre-2018 M2/M3s & B/B1/B2s, while you can still find them.**
 - Shorter durations to optional redemption/maturity, significant structural de-levering, and favorable fundamentals provide for good credit risk/reward option, albeit in small sizes:
 - 60%+ HPA gains, substantial CEs (3.5x+ vs. original CEs) and thicker tranches.
- ❖ **New (when it eventually picks back up) and recent issues:**
 - Current rating-equivalent yields cheaper vs. IG/HY. CRT stack options have a liquidity give, but continue to offer:
 - Floating vs. fixed benefits.
 - Housing risk vs. commercial credit risk.
 - Better convexity profile, closer to par. and big coupons (2022 in particular)
 - Historically higher starting class CEs.

CRTx® Index Suite Total Return Performance: Month-End Matrix 12/30/2022

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		163.97	2.09%	1.68%	0.49%	0.50%	2.86%	12-30-22
	Upper Mezzanine	124.94	1.60%	1.94%	0.98%	0.99%	1.60%	12-30-22
	Lower Mezzanine	177.97	2.14%	2.67%	2.61%	2.62%	2.80%	12-30-22
	Subordinate	234.10	2.35%	0.80%	-1.89%	-1.86%	1.65%	12-30-22
	Upper/Lower Mezz.	157.41	1.90%	2.35%	2.21%	2.22%	2.80%	12-30-22
	Lower Mezz./Sub.	185.77	2.26%	1.59%	0.49%	0.50%	2.66%	12-30-22
	CAS	162.99	2.25%	2.03%	2.42%	2.43%	3.43%	12-30-22
	STACR	162.26	2.00%	1.45%	-0.80%	-0.79%	2.47%	12-30-22
Upper Mezzanine	LLTV	163.64	2.18%	1.80%	0.85%	0.86%	2.87%	12-30-22
	HLTV	145.29	1.93%	1.43%	-0.24%	-0.22%	2.77%	12-30-22
	2022	100.61	1.70%	2.21%	0.61%	-	-	12-30-22
	2021	100.60	1.00%	0.47%	-0.09%	-0.09%	-	12-30-22
	2020		-	-	-	-	-	12-30-22
	2019		-	-	-	-	-	12-30-22
	2018		-	-	-	-	-	12-30-22
	2017		-	-	-	-	-	12-30-22
	2016		-	-	-	-	-	12-30-22
Lower Mezzanine	2015		-	-	-	-	-	12-30-22
	<=2014		-	-	-	-	-	12-30-22
	2022	98.43	3.37%	5.04%	-1.57%	-	-	12-30-22
	2021	100.23	2.25%	1.63%	-3.08%	-3.07%	-	12-30-22
	2020	103.86	0.90%	1.16%	2.84%	2.84%	-	12-30-22
	2019	116.12	0.60%	1.41%	2.81%	2.81%	2.98%	12-30-22
	2018	118.94	1.28%	0.51%	2.94%	2.95%	3.25%	12-30-22
	2017	135.61	1.31%	1.96%	3.79%	3.80%	3.25%	12-30-22
	2016	156.65	1.48%	1.74%	5.63%	5.65%	3.58%	12-30-22
Subordinate	2015	146.43	1.82%	2.62%	6.07%	6.08%	3.42%	12-30-22
	<=2014	174.67	1.14%	1.69%	4.03%	4.04%	3.50%	12-30-22
	2022	97.10	2.60%	1.74%	-2.90%	-	-	12-30-22
	2021	96.78	2.91%	0.36%	-9.67%	-9.66%	-	12-30-22
	2020	94.41	1.67%	-0.88%	-2.39%	-2.36%	-	12-30-22
	2019	136.95	2.83%	1.81%	4.03%	4.10%	3.82%	12-30-22
	2018	131.05	2.73%	1.12%	2.81%	2.81%	3.23%	12-30-22
	2017	163.06	1.56%	0.92%	3.27%	3.28%	3.19%	12-30-22
	2016	206.14	1.10%	1.64%	4.36%	4.39%	3.04%	12-30-22
2015	217.70	1.01%	1.68%	4.23%	4.25%	1.83%	12-30-22	
<=2014							12-30-22	

CRTx® Index Suite Total Return Performance: Month-End Matrix 12/30/2022 (continued)

CRTx® RNI™ (Rolling New Issues*) Return Summary							
RETURNS							
	Index Level	Period			Annualized		
		MTD	QTD	YTD	1-YR	3-YR	As of Date
Aggregate	172.51	2.32%	2.48%	-3.15%	-3.14%	2.32%	12-30-22
Upper Mezzanine	125.77	1.67%	2.06%	1.01%	1.02%	1.50%	12-30-22
Lower Mezzanine	188.58	3.35%	4.03%	-1.84%	-1.83%	1.92%	12-30-22
Subordinate	240.59	2.62%	1.88%	-6.69%	-6.68%	0.58%	12-30-22
LLTV	172.51	2.35%	2.66%	-2.87%	-2.86%	2.50%	12-30-22
HLTV	152.29	2.24%	2.07%	-3.91%	-3.91%	2.03%	12-30-22

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

CRTx® (Credit Risk Transfer Return Tracking Index) Return Summary							
RETURNS							
	Index Level	Period			Annualized		
		MTD	QTD	YTD	1-YR	3-YR	As of Date
Special Sub-Indexes:							
Fxd Severity - Type I*	Custom Client Access Only	0.96%	1.82%	3.77%	3.77%	3.98%	12/30/22
Fxd Severity - Type II*		1.41%	1.66%	5.32%	5.34%	3.44%	12/30/22
Actual Loss		2.13%	1.67%	0.29%	0.31%	2.89%	12/30/22
CAS Fxd Severity - Type I*		1.40%	1.93%	3.69%	3.70%	3.65%	12/30/22
STACR Fxd Severity - Type I*		0.65%	1.73%	3.84%	3.85%	4.26%	12/30/22
CAS Fxd Severity - Type II*		1.54%	1.56%	4.91%	4.91%	3.39%	12/30/22
STACR Fxd Severity - Type II*		0.91%	1.86%	6.47%	6.48%	3.64%	12/30/22
CAS Act. Loss		2.29%	2.05%	2.27%	2.28%	3.48%	12/30/22
STACR Act. Loss		2.03%	1.44%	-0.99%	-0.97%	2.49%	12/30/22

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

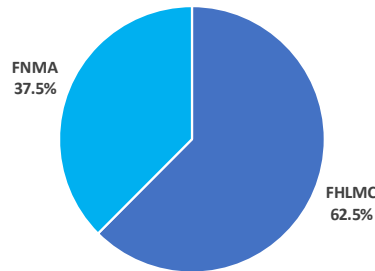
Type II - Some Credit Event Relief Provisions For Natural Disaster/Casualty Events

* CRTx® Aggregate Index and Sub Index Constituency

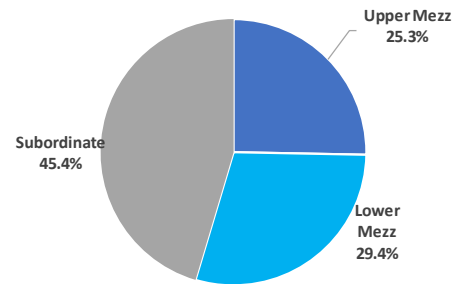
CDOs, Ego-Index and Sub-Index Constituency					
Aggregate	Upper Mezzanine	Lower Mezzanine	Subordinate	LLTV	HLTV
All Index-Eligible FNMA CAS shelf and FHLMC STACR shelf At-Issuance Classes	<u>FNMA CAS Shelf:</u> M1 Classes	<u>FNMA CAS Shelf:</u> M2 Classes	<u>FNMA CAS Shelf:</u> All B Classes	All Index-Eligible 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 12/30/2022 Rebalancing

Sponsor % of CRTx® Mkt Val For 01/2023



Sub Index % of CRTx® Mkt Val For 01/2023

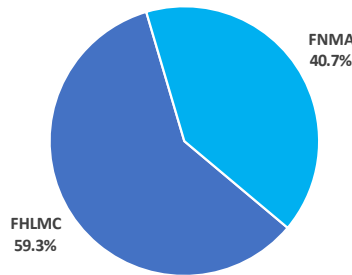


CRTx® AGG

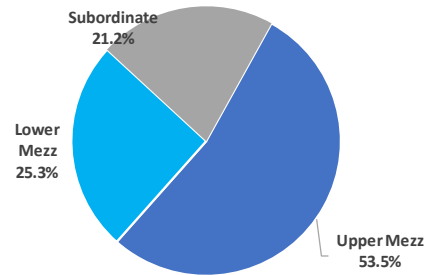
CRTx® AGG									
MONTH END CLOSINGS			BEGINNING MONTH BASKET						
Calculation		Month to Date Total Return	# of Constituents		WAVg Adj Beg Month		WTD Avg		
					Beg Month Total \$	Security Mkt Value	Current Coupon	WTD Avg Cpn Margin	
Month	INDEX VALUE			Beg Month UPB	Market Value				
Feb-2020	152.31	-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	157.87	0.27%	305	54,305,816,176	52,723,290,518	97.09	5.21		399
Aug-2022	162.94	3.21%	311	52,868,638,801	51,179,435,509	96.81	5.87		406
Sep-2022	161.27	-1.03%	316	52,267,272,868	51,923,167,525	99.34	6.34		407
Oct-2022	159.63	-1.01%	325	54,074,843,112	52,881,044,458	97.79	6.64		407
Nov-2022	160.61	0.61%	325	53,282,606,013	51,262,793,323	96.21	7.30		410
Dec-2022	163.97	2.09%	323	52,834,998,700	50,794,605,389	96.14	7.80		410
Jan-2023			322	50,991,575,501	49,607,620,170	97.29	8.22		414

CRTx® RNI™ Index Basket History: Select Metrics As of 12/30/2022 Rebalancing

Sponsor % of CRTx® RNI™ Mkt Val For 01/2023



Sub Index % of CRTx® RNI™ Mkt Val For 01/2023



CRTx® RNI™ AGG

MONTH END CLOSINGS			BEGINNING MONTH BASKET						
Calculation Month	INDEX VALUE	Month to Date Total Return	# of Constituents	Beg Month UPB	Beg Month Total \$ Market Value	W Avg Adj Beg Month Security Mkt Value	WTD Avg Current Coupon	WTD Avg Cpn Margin	
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	165.70	0.30%	85	24,884,587,943	23,480,348,016	94.36	4.49	358	
Aug-2022	171.79	3.68%	89	25,180,986,750	23,907,838,996	94.94	5.17	365	
Sep-2022	168.34	-2.01%	95	26,170,925,042	25,675,201,828	98.11	5.82	365	
Oct-2022	166.79	-0.92%	100	27,235,965,638	26,187,236,662	96.15	6.00	372	
Nov-2022	168.61	1.09%	92	24,523,836,681	23,324,904,484	95.11	6.75	376	
Dec-2022	172.51	2.32%	88	23,106,299,521	22,134,708,648	95.80	7.30	378	
Jan-2023			76	20,380,723,155	20,010,012,306	98.18	7.84	392	

Latest Deal Performance Metrics: December 2022 Monthly Statements - CAS

CRTx® AGG Index Constituent Performance Data (Dec-2022 Monthly Statements)																									
Deal					Loss	Pool	Form	Structure (paid-off)	Early Redemption Option (Yrs)	Maturity (Yrs)	Rem. Early Redemp. Option (Yrs)	Rem. Maturity (Yrs)	Delinquency Pipeline						CPR	Net					
													30d	60d	90d	120d	150d	180d+		Total DQ%	MoM % Chg	Credit Event Test	Min CE Test	Net Loss Test	DQ Test
Deal	Loss	Pool	Form	Structure (paid-off)	Early Redemption Option (Yrs)	Maturity (Yrs)	Rem. Early Redemp. Option (Yrs)	Rem. Maturity (Yrs)	30d	60d	90d	120d	150d	180d+	Total DQ%	MoM % Chg	1mth	Pass	Pass	Pass	Pass				
CAS 2013-C01	FXD1	LLTV	DEBT	1M1-1M2	10.0	10.0	0.8	0.8	0.45	0.08	0.01	0.03	0.01	-	0.59	14%	7%	NA	NO	NA	NA				
CAS 2014-C01	FXD1	LLTV	DEBT	1M1-1M2	10.0	10.0	1.1	1.1	0.42	0.06	0.02	0.03	0.02	-	0.55	10%	7%	NA	YES	NA	NA				
CAS 2014-C02	FXD1	LLTV	DEBT	1M1-1M2	10.0	10.0	1.4	1.4	0.37	0.09	0.02	0.01	0.01	-	0.51	8%	6%	NA	YES	NA	NA				
	FXD1	HLTV	DEBT	2M1-2M2	10.0	10.0	1.4	1.4	0.66	0.09	0.02	0.05	0.03	-	0.85	23%	6%	NA	YES	NA	NA				
CAS 2014-C03	FXD2	LLTV	DEBT	1M1-1M2	10.0	10.0	1.6	1.6	0.52	0.09	0.03	0.02	0.02	-	0.68	16%	6%	NA	YES	NA	NA				
	FXD2	HLTV	DEBT	2M1-2M2	10.0	10.0	1.6	1.6	0.74	0.11	0.06	0.02	0.02	-	0.95	23%	8%	NA	YES	NA	NA				
CAS 2014-C04	FXD2	LLTV	DEBT	1M1-1M2	10.0	10.0	1.9	1.9	0.69	0.12	0.06	0.03	0.04	-	0.94	29%	7%	NA	YES	NA	NA				
	FXD2	HLTV	DEBT	2M1-2M2	10.0	10.0	1.9	1.9	0.92	0.17	0.11	0.04	0.08	-	1.32	9%	8%	NA	YES	NA	NA				
CAS 2015-C01	FXD2	LLTV	DEBT	1M1-1M2	10.0	10.0	2.2	2.2	1.09	0.26	0.06	0.05	0.06	-	1.52	20%	7%	NA	YES	NA	NA				
	FXD2	HLTV	DEBT	2M1-2M2	10.0	10.0	2.2	2.2																	
CAS 2015-C02	FXD2	LLTV	DEBT	1M1-1M2	10.0	10.0	2.4	2.4	1.24	0.28	0.09	0.06	0.07	-	1.74	3%	9%	NA	YES	NA	NA				
	FXD2	HLTV	DEBT	2M1-2M2	10.0	10.0	2.4	2.4																	
CAS 2015-C03	FXD2	LLTV	DEBT	1M1-1M2	10.0	10.0	2.6	2.6	1.43	0.29	0.08	0.04	0.08	-	1.91	23%	8%	NA	YES	NA	NA				
	FXD2	HLTV	DEBT	2M1-2M2	10.0	10.0	2.6	2.6																	
CAS 2015-C04	ACT	LLTV	DEBT	1M1-1M2	10.0	12.5	2.8	5.3	1.52	0.34	0.20	0.11	0.11	0.95	3.23	5%	9%	NA	YES	NA	YES				
	ACT	HLTV	DEBT	2M1-2M2	10.0	12.5	2.8	5.3	2.06	0.60	0.35	0.17	0.18	1.44	4.80	2%	10%	NA	YES	NA	YES				
CAS 2016-C01	ACT	LLTV	DEBT	1M1-1M2-1B	10.0	12.5	3.2	5.7	1.10	0.29	0.13	0.09	0.10	0.88	2.58	-3%	8%	NA	YES	NA	YES				
	ACT	HLTV	DEBT	2M1-2M2	10.0	12.5	3.2	5.7	1.76	0.44	0.26	0.06	0.17	1.03	3.71	4%	11%	NA	YES	NA	YES				
CAS 2016-C02	ACT	LLTV	DEBT	1M1-1M2-1B	10.0	12.5	3.2	5.8	0.87	0.19	0.11	0.04	0.04	0.53	1.77	3%	8%	NA	YES	NA	YES				
	ACT	HLTV	DEBT	2M1-2M2-2B	10.0	12.5	3.3	5.8	0.96	0.17	0.20	0.08	0.04	0.72	2.16	-2%	6%	NA	YES	NA	YES				
CAS 2016-C03	ACT	LLTV	DEBT	1M1-1M2-1B	10.0	12.5	3.3	5.8	1.30	0.33	0.17	0.09	0.12	1.02	3.03	-3%	10%	NA	YES	NA	YES				
	ACT	HLTV	DEBT	2M1-2M2-2B	10.0	12.5	3.6	6.1	1.13	0.28	0.13	0.08	0.07	0.77	2.47	3%	7%	NA	YES	NA	YES				
CAS 2016-C04	ACT	LLTV	DEBT	1M1-1M2-1B	10.0	12.5	3.6	6.1	1.62	0.43	0.23	0.15	0.12	1.16	3.72	3%	9%	NA	YES	NA	YES				
CAS 2016-C05	ACT	HLTV	DEBT	2M1-2M2-2B	10.0	12.5	3.6	6.1	1.11	0.30	0.14	0.06	0.07	0.75	2.44	2%	8%	NA	YES	NA	YES				
CAS 2016-C06	ACT	LLTV	DEBT	1M1-1M2-1B	10.0	12.5	3.8	6.3	1.11	0.30	0.14	0.06	0.07	0.75	2.44	2%	8%	NA	YES	NA	YES				
CAS 2016-C07	ACT	HLTV	DEBT	2M1-2M2-2B	10.0	12.5	3.9	6.4	1.47	0.43	0.24	0.17	0.13	1.22	3.66	-2%	9%	NA	YES	NA	YES				
CAS 2017-C01	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	4.1	6.6	0.98	0.29	0.14	0.07	0.07	0.70	2.25	1%	8%	NA	YES	NA	YES				
CAS 2017-C02	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	4.2	6.8	1.38	0.37	0.16	0.12	0.08	0.90	3.01	3%	8%	NA	YES	NA	YES				
CAS 2017-C03	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	4.3	6.8	0.87	0.20	0.12	0.05	0.07	0.45	1.77	4%	8%	NA	YES	NA	YES				
CAS 2017-C04	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	4.4	6.9	1.14	0.39	0.19	0.14	0.14	0.90	2.89	-1%	9%	NA	YES	NA	YES				
CAS 2017-C05	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	4.6	7.1	0.84	0.22	0.09	0.09	0.07	0.54	1.85	2%	7%	NA	YES	NA	YES				
CAS 2017-C06	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	4.7	7.2	1.03	0.24	0.13	0.14	0.09	0.86	2.48	4%	8%	NA	YES	NA	YES				
	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	4.7	7.2	1.95	0.44	0.27	0.25	0.20	1.39	4.50	4%	9%	NA	YES	NA	YES				
CAS 2017-C07	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	4.9	7.4	1.27	0.34	0.21	0.11	0.10	1.01	3.05	2%	9%	NA	YES	NA	YES				
	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	4.9	7.4	1.90	0.65	0.29	0.20	0.22	1.67	4.92	-2%	10%	NA	YES	NA	YES				
CAS 2018-C01	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.4	5.1	7.6	1.25	0.28	0.17	0.12	0.12	0.92	2.86	-2%	9%	NA	YES	NA	YES				
CAS 2018-C02	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	5.2	7.7	1.79	0.52	0.24	0.17	0.14	1.35	4.21	2%	11%	NA	YES	NA	YES				
CAS 2018-C03	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	5.3	7.8	1.38	0.39	0.15	0.13	0.09	0.98	3.13	7%	9%	NA	YES	NA	YES				
CAS 2018-C04	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	5.5	8.0	1.90	0.68	0.35	0.21	0.16	1.64	4.93	1%	10%	NA	YES	NA	YES				
CAS 2018-C05	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	5.6	8.1	1.23	0.34	0.18	0.14	0.11	1.08	3.09	-1%	9%	NA	YES	NA	YES				
CAS 2018-C06	ACT	LLTV	DEBT	1M1-1M2-1B1	10.0	12.5	5.8	8.2	1.43	0.33	0.29	0.14	0.16	1.62	3.96	-4%	9%	NA	YES	NA	YES				
	ACT	HLTV	DEBT	2M1-2M2-2B1	10.0	12.5	5.8	8.2	2.04	0.73	0.34	0.24	0.15	1.63	5.03	1%	10%	NA	YES	NA	YES				
CAS 2018-R07	ACT	LLTV	REMIC	1M1-1M2-1B1	10.0	12.5	5.8	8.3	2.00	0.54	0.32	0.24	0.15	1.55	4.80	3%	11%	NA	YES	NA	YES				
CAS 2019-R01	ACT	HLTV	REMIC	2M1-2M2-2B1	10.0	12.5	6.1	8.6	2.38	0.68	0.43	0.27	0.26	2.09	6.11	3%	11%	NA	YES	NA	NO				
CAS 2019-R02	ACT	LLTV	REMIC	1M1-1M2-1B1	10.0	12.5	6.2	8.7	1.64	0.51	0.31	0.17	0.20	1.48	4.32	0%	10%	NA	YES	NA	YES				
CAS 2019-R03	ACT	LLTV	REMIC	1M1-1M2-1B1	9.9	12.4	6.2	8.8	1.90	0.51	0.24	0.29	0.18	1.70	4.81	4%	12%	NA	YES	NA	YES				
CAS 2019-R04	ACT	HLTV	REMIC	2M1-2M2-2B1	7.0	20.0	3.5	16.5	2.25	0.87	0.31	0.24	0.28	2.02	5.98	-1%	9%	NA	YES	NA	NO				
CAS 2019-R05	ACT	LLTV	REMIC	1M1-1M2-1B1	7.0	20.0	3.6	16.6	1.80	0.46	0.35	0.27	0.20	1.84	4.90	-2%	10%	NA	YES	NA	NO				
CAS 2019-R06	ACT	HLTV	REMIC	2M1-2M2-2B1	7.0	20.0	3.7	16.8	2.08	0.55	0.34	0.23	0.21	1.62	5.03	3%	10%	NA	YES	NA	NO				
CAS 2019-R07	ACT	LLTV	REMIC	1M1-1M2-1B1	7.0	20.0	3.8	16.8	1.45	0.35	0.23	0.17	0.10	1.05	3.35	1%	10%	NA	YES	NA	YES				
CAS 2020-R01	ACT	LLTV	REMIC	1M1-1M2-1B1	7.0	20.0	4.1	17.1	1.03	0.18	0.12	0.11	0.11	0.85	2.41	4%	8%	NA	YES	NA	YES				
CAS 2020-R02	ACT	HLTV	REMIC	2M1-2M2-2B1	7.0	20.0	4.1	17.1	1.47	0.39	0.24	0.18	0.19	1.13	3.61	3%	8%	NA	YES	NA	YES				
CAS 2021-R01	ACT	LLTV	REMIC	1M1-1M2-1B1-1B2	5.0	20.0	3.8	18.8	0.42	0.05	0.04	0.02	0.02	0.07	0.62	20%	4%	NA	YES	NA	YES				
CAS 2021-R02	ACT	HLTV	REMIC	2M1-2M2-2B1-2B2	5.0	20.0	3.9	18.9	0.59	0.14	0.09	0.06	0.05	0.18	1.11	7%	5%	NA	YES	NA	YES				
CAS 2021-R03	ACT	LLTV	REMIC	1M1-1M2-1B1-1B2	5.0	20.0	4.0	19.0	0.39	0.05	0.02	0.03	0.02	0.06	0.57	13%	4%	NA	YES	NA	YES				
CAS 2022-R01	ACT	LLTV	REMIC	1M1-1M2-1B1-1B2	4.9	19.9	4.0	19.0	0.41	0.06	0.04	0.03	0.02	0.08	0.65	10%	4%	NA	YES	NA	YES				
CAS 2022-R02	ACT	HLTV	REMIC	2M1-2M2-2B1-2B2	5.0	20.0	4.1	19.1	0.69	0.16	0.07	0.05	0.05	0.18	1.20	17%	4%	NA	YES	NA	YES				
CAS 2022-R03	ACT	LLTV	REMIC	1M1-1M2-1B1-1B2																					

Latest Deal Performance Metrics: December 2022 Monthly Statements – CAS *(continued)*

CRTx® AGG Index Constituent Performance Data (Dec-2022 Monthly Statements)																					
					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
									Deal	Loss	Pool	Form	Structure (paid-off)	Test	Test	Test	Test				
									30d	60d	90d	120d	150d	180d+	Total DQ%	MoM % Chg	1mth	Pass	Pass	Pass	Pass
CAS 2022-R06	ACT	LLTV	REMIC	1M1-1M2-1B1-1B2	5.0	20.0	4.4	19.4	0.50	0.10	0.05	0.02	0.02	0.02	0.71	16%	4%	NA	YES	NA	YES
CAS 2022-R07	ACT	LLTV	REMIC	1M1-1M2-1B1-1B2	5.0	20.0	4.5	19.5	0.65	0.10	0.05	0.04	0.04	0.02	0.89	30%	4%	NA	YES	NA	YES
CAS 2022-R08	ACT	LLTV	REMIC	1M1-1M2-1B1	5.0	20.0	4.6	19.6	0.54	0.09	0.06	0.04	0.00	0.00	0.74	48%	4%	NA	YES	NA	YES
CAS 2022-R09	ACT	HLTV	REMIC	2M1-2M2-2B1	5.0	20.0	4.7	19.8	0.54	0.12	0.05	-	-	-	0.71	53%	3%	NA	YES	NA	YES

Latest Deal Performance Metrics: December 2022 Monthly Statements - STACR

CRTx® AGG Index Constituent Performance Data (Dec-2022 Monthly Statements)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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Latest Deal Performance Metrics: December 2022 Monthly Statements – STACR *(continued)*

CRTx® AGG Index Constituent Performance Data (Dec-2022 Monthly Statements)																					
Deal	Loss	Pool	Form	Structure (paid-off)	Early Redemption Option (Yrs)	Maturity (Yrs)	Rem. Early Redemp. Option (Yrs)	Rem. Maturity (Yrs)	Delinquency Pipeline								CPR	Net Credit Event			
									30d	60d	90d	120d	150d	180d+	Total	MoM		Test	Test	Test	DQ
									DQ%	% Chg	1mth	Pass	Pass	Pass	Pass	Pass		Test	Test	Test	Test
STACR 2021-DNA6	ACT	LLTV	REMIC	M1-M2-B1-B2	5.0	20.0	3.8	18.8	0.39	0.06	0.03	0.02	0.02	0.07	0.60	-3%	3%	NA	NO	YES	YES
STACR 2021-DNA7	ACT	LLTV	REMIC	M1-M2-B1-B2	5.0	20.0	3.9	18.9	0.48	0.09	0.04	0.03	0.02	0.11	0.77	0%	3%	NA	YES	YES	YES
STACR 2021-HQA1	ACT	HLTV	REMIC	M1-M2-B1-B2		12.5		10.7	0.58	0.17	0.05	0.05	0.05	0.24	1.14	-4%	5%	NA	YES	YES	YES
STACR 2021-HQA2	ACT	HLTV	REMIC	M1-M2-B1-B2		12.5		11.0	0.57	0.12	0.06		0.09	0.18	1.02	2%	5%	NA	YES	YES	YES
STACR 2021-HQA3	ACT	HLTV	REMIC	M1-M2-B1-B2	5.0	20.0	3.7	18.8	0.52	0.15	0.07		0.09	0.22	1.05	0%	3%	NA	YES	YES	YES
STACR 2021-HQA4	ACT	HLTV	REMIC	M1-M2-B1-B2	5.0	20.1	4.0	19.0	0.54	0.14	0.08		0.12	0.20	1.08	5%	3%	NA	YES	YES	YES
STACR 2022-DNA1	ACT	LLTV	REMIC	M1A-M1B-M2-B1-B2	5.0	20.0	4.1	19.1	0.56	0.14	0.04		0.10	0.12	0.96	13%	3%	NA	YES	YES	YES
STACR 2022-DNA2	ACT	LLTV	REMIC	M1A-M1B-M2-B1-B2	5.0	20.1	4.2	19.2	0.63	0.13	0.06		0.10	0.11	1.03	0%	3%	NA	YES	YES	YES
STACR 2022-DNA3	ACT	LLTV	REMIC	M1A-M1B-M2-B1-B2	5.0	20.0	4.3	19.3	0.71	0.14	0.07		0.10	0.09	1.11	16%	3%	NA	YES	YES	YES
STACR 2022-DNA4	ACT	LLTV	REMIC	M1A-M1B-M2-B1-B2	5.0	20.0	4.4	19.4	0.66	0.12	0.07		0.08	0.07	1.00	18%	4%	NA	YES	YES	YES
STACR 2022-DNA5	ACT	LLTV	REMIC	M1A-M1B-M2-B1-B2	5.0	20.0	4.5	19.5	0.60	0.14	0.09		0.09	0.04	0.96	7%	3%	NA	YES	YES	YES
STACR 2022-DNA6	ACT	LLTV	REMIC	M1A-M1B-M2	5.0	20.0	4.7	19.8	0.54	0.15	0.05		0.03	-	0.77	24%	3%	NA	NO	YES	YES
STACR 2022-DNA7	ACT	LLTV	REMIC	M1A-M1B-M2	5.0	20.0	4.7	19.8	0.62	0.11	0.05		0.00	-	0.78	8%	3%	NA	YES	YES	YES
STACR 2022-HQA1	ACT	HLTV	REMIC	M1A-M1B-M2-B1-B2	5.0	20.0	4.2	19.3	0.66	0.18	0.09		0.13	0.12	1.18	8%	3%	NA	YES	YES	YES
STACR 2022-HQA2	ACT	HLTV	REMIC	M1A-M1B-M2	5.0	20.0	4.6	19.6	0.62	0.17	0.08		0.13	0.02	1.02	17%	2%	NA	YES	YES	YES
STACR 2022-HQA3	ACT	HLTV	REMIC	M1A-M1B-M2	5.0	20.0	4.7	19.7	0.53	0.16	0.08		0.06	-	0.83	20%	2%	NA	YES	YES	YES

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