

CRTx®

Credit Risk Transfer Return Tracking Index

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Index Rebalancing Update

Released 8/1/2018

Commentary:

The CRTx® Aggregate

- The CRTx® showed a 4th straight month of positive returns, recording +0.71% for July. The index YTD is up 3.09%, versus 8.33% for the first 7 months of 2017.
- Rebalanced aggregate Index market value rises 1.1% versus the prior month to \$47.61 billion. New CAS 2018-C04 classes enter the CRTx® as part of the August index constituency.

The CRTx® Aggregate monthly returns for July were up 0.71%, the 4th straight up month in a row, with sector tone improving versus June. Firmer spreads, a few days extra carry, and steady paydowns helped July's index performance outpace June. Paydowns continued to come in at approximately 1% of the Index's Aggregate UPB for July, providing a recently consistent -3pbs in drag to overall returns.

Index Return Attribution for July 2018

- Net Price Return +28 bps
- Net Paydown Return -3 bps
- CPN Accr/Payment Return +46 bps

July's returns across the component sub-indexes continued to express the firmness in the credit curve. The Upper Mezzanine, Lower Mezzanine, and Subordinate Sub-Indexes were all positive, with 2017 and 2018 deal vintages recording relatively better monthly returns versus more seasoned vintages. Subordinate monthly returns were 1.23%, 1.6x the 0.77% return for the Lower Mezzanine, which is slightly firmer when compared to the 1.7x and 2.1x multiples on relative Sub/LMEZZ YTD and trailing 1-year returns, respectively. Also, the HLTV sub-index posted a +76 bps monthly return, outperforming LLTV by 8 bps and reversing June's relative underperformance.

CRTx® REBALANCING STATS: 7/31/18

August 2018 Aggregate Constituency (MoM Δ):

- Beg. UPB: \$43.96 B (+1.1%)
- Beg. Market Value: \$47.61 B (+1.3%)
- Num. of Securities: 178 (+3)
- Wtd. Avg. Coupon: 5.60% (-4 bps)

Constituent Exits

- None

New Constituent Entries*

- CAS 2018-C04 2M1
- CAS 2018-C04 2M2
- CAS 2018-C04 2B1

*These entries represent 1.99% of August's Aggregate Beginning Constituency market value.

Composition By Beg. Mth Mkt Value for Aug. 2018

Deal Vintage	CRTx® Breakdown			
	Aggregate	UMEZZ	LMEZZ	SUB
All	100.0%	20.1%	68.0%	11.8%
2018	15.5%	3.7%	9.3%	2.5%
2017	29.4%	7.4%	17.0%	4.9%
2016	24.1%	5.0%	16.6%	2.5%
2015	15.7%	2.4%	11.4%	2.0%
<=2014	15.4%	1.7%	13.7%	

Index Rebalancing Update (continued)

CRTx® RNI™ REBALANCING STATS: 7/31/18

August 2018 RNI™ Agg Constituency (MoM Δ):

- Beg. UPB: \$11.26 B (-2.8%)
- Beg. Market Value: \$11.39 B (-2.3%)
- Num. of Securities: 39 (+0)
- Wtd. Avg. Coupon: 4.26% (+1 bps)

Constituent Exits

- CAS 2017-C05 1M1
- CAS 2017-C05 1M2
- CAS 2017-C05 1B1

New Constituent Entries*

- CAS 2018-C04 2M1
- CAS 2018-C04 2M2
- CAS 2018-C04 2B1

*These entries represent 8.31% of August's Aggregate Beginning Constituency market value.

Composition By Beg. Mth Mkt Value for Aug. 2018

Deal Vintage	CRTx® RNI™ Breakdown			
	Aggregate	UMEZZ	LMEZZ	SUB
All	100.0%	23.8%	60.3%	15.9%
2018	64.8%	15.4%	38.9%	10.5%
2017	35.2%	8.4%	21.3%	5.5%
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%

* As of rebalancing for month-beginning August 2018

Commentary (continued)**RNI™ (Rolling New Issues)**

- The CRTx® RNI™ was up 0.90% in July, reversing both last month's negative return and a relative underperformance versus the overall CRTx® Aggregate, which came in at 0.71%. The RNI™ version of the CRTx® is up 2.61%, versus 9.45% for the first 7 months of 2017, and has narrowed the return gap to the CRTx® Aggregate, but still lags for 2018.
- The rebalanced rolling market value drops 2.3% versus the prior month to \$11.39 billion. New CAS 2018-C04 classes enter the CRTx® as part of the August index constituency, while the relatively larger CAS 2017-C05 classes exited.

The improved CRTx® RNI™ Aggregate monthly returns for July reflected better spread performance of recently issued deals, which had been curbed somewhat by perceived weaker credit fundamentals versus earlier issues. The minimal paydown influence remained a modest positive versus the CRTx® Aggregate, contributing virtually zero bps to July's returns versus -3 bps for the Aggregate.

Index Return Attribution for July 2018

- Net Price Return +53 bps
- Net Paydown Return +0 bps
- CPN Accr/Payment Return +37 bps

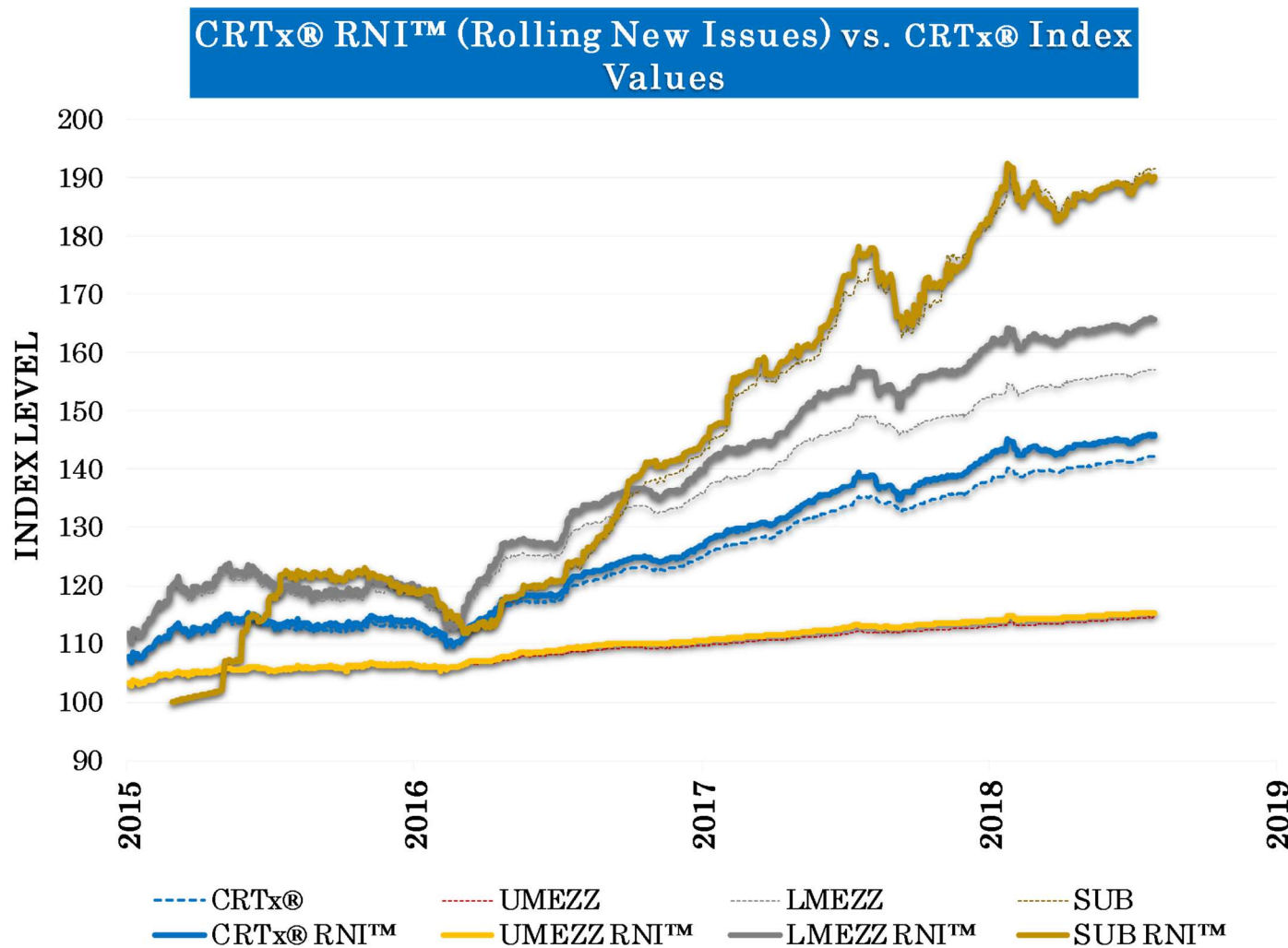
The CRTx® RNI™ reference pool distribution continues to be more broadly distributed across the capital structured versus the CRTx® Aggregate, with a comparatively higher percentage of UMEZZ (23.8% vs. 20.1%) and SUB (15.9% vs. 11.8%) balances, while holding a lower LMEZZ percentage (60.3% vs. 68.0%).

CRTx® Index Suite Total Return Performance (as of Month End 7/31/2018)

CRTx® (Credit Risk Transfer Return Tracking Index) Return Summary									
RETURNS									
		Period						Annualized	
		Daily	Wkly	Mthly	MTD	QTD	YTD	1-YR	As of Date
Aggregate		0.00%	0.04%	0.71%	0.71%	0.71%	3.09%	5.26%	7/31/2018
	Upper Mezzanine	0.00%	0.01%	0.23%	0.23%	0.23%	1.47%	2.27%	7/31/2018
	Lower Mezzanine	-0.01%	0.03%	0.77%	0.77%	0.77%	3.24%	5.39%	7/31/2018
	Subordinate	0.00%	0.11%	1.23%	1.23%	1.23%	5.59%	11.18%	7/31/2018
	LLTV	0.00%	0.05%	0.68%	0.68%	0.68%	3.00%	5.15%	7/31/2018
	HLTV	-0.01%	0.02%	0.76%	0.76%	0.76%	3.25%	5.47%	7/31/2018
Upper Mezzanine	2018	0.01%	0.06%	0.23%	0.23%	0.23%	0.88%	-	7/31/2018
	2017	-0.01%	0.03%	0.23%	0.23%	0.23%	1.28%	2.07%	7/31/2018
	2016	0.01%	-0.02%	0.22%	0.22%	0.22%	1.62%	2.43%	7/31/2018
	2015	0.01%	-0.03%	0.21%	0.21%	0.21%	1.78%	2.38%	7/31/2018
	<=2014	0.01%	-0.04%	0.22%	0.22%	0.22%	1.50%	2.38%	7/31/2018
Lower Mezzanine	2018	0.05%	-0.07%	1.03%	1.03%	1.03%	0.66%	-	7/31/2018
	2017	0.07%	0.15%	1.08%	1.08%	1.08%	3.54%	6.36%	7/31/2018
	2016	0.02%	0.12%	0.70%	0.70%	0.70%	4.05%	6.46%	7/31/2018
	2015	-0.13%	-0.06%	0.37%	0.37%	0.37%	2.90%	5.03%	7/31/2018
	<=2014	-0.06%	-0.07%	0.64%	0.64%	0.64%	2.50%	3.62%	7/31/2018
Subordinate	2018	0.17%	0.12%	1.26%	1.26%	1.26%	-1.07%	-	7/31/2018
	2017	-0.10%	0.08%	1.52%	1.52%	1.52%	5.52%	8.17%	7/31/2018
	2016	0.01%	0.12%	0.63%	0.63%	0.63%	6.67%	15.22%	7/31/2018
	2015	0.01%	0.14%	1.25%	1.25%	1.25%	5.57%	13.29%	7/31/2018
	<=2014							15.45%	7/31/2018

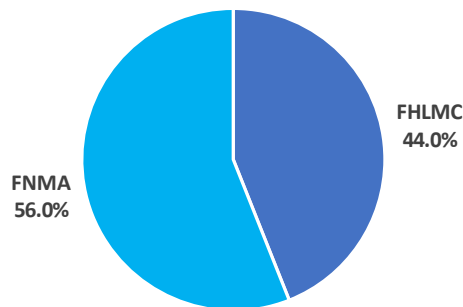
CRTx® RNI™ (Rolling New Issues) Return Summary									
RETURNS									
		Period						Annualized	
		Daily	Wkly	Mthly	MTD	QTD	YTD	1-YR	As of Date
Aggregate		0.04%	-0.02%	0.90%	0.90%	0.90%	2.61%	5.15%	7/31/2018
	Upper Mezzanine	0.00%	0.03%	0.22%	0.22%	0.22%	1.21%	2.07%	7/31/2018
	Lower Mezzanine	0.04%	-0.04%	1.04%	1.04%	1.04%	2.88%	5.84%	7/31/2018
	Subordinate	0.08%	0.00%	1.40%	1.40%	1.40%	3.97%	7.58%	7/31/2018
	LLTV	0.02%	0.01%	0.91%	0.91%	0.91%	2.54%	4.72%	7/31/2018
	HLTV	0.07%	-0.07%	0.88%	0.88%	0.88%	2.75%	5.76%	7/31/2018

CRTx® / CRTx® RNI™ Historical Index Values Comparison (as of Month End 7/31/2018)

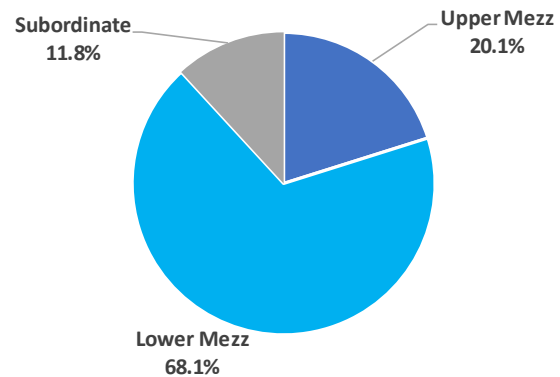


CRTx® Select Constituent Metrics (as of July 2018 Month End Rebalancing)

CRTx® % of Mkt Val By Issuer (Aug 2018)



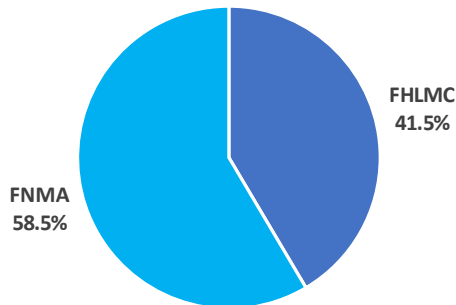
CRTx® % of Mkt Val By Sub Index (Aug 2018)



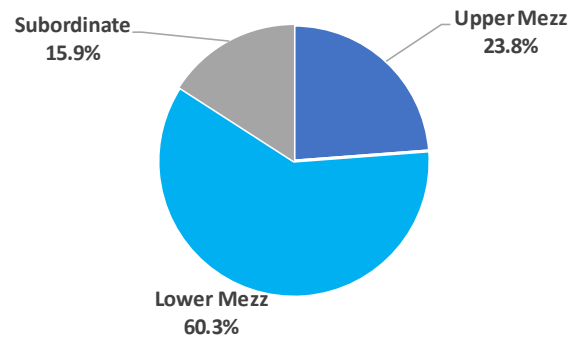
CRTx® Valuation Month	MONTH END TOTAL RETURN	BEG. MONTH CONSTITUENTS	TOTAL BEGINNING MONTH UPB	TOTAL BEGINNING MONTH MARKET VALUE	BEG. MONTH WAVG MARKET VALUE (PX+ACCR)	BEG. MONTH WAVG COUPON RATE	BEG. MONTH WAVG MARGIN
Aug-2015	-0.32%	73	19,542,515,529	19,481,797,766	99.69	3.36	317
Sep-2015	-0.15%	73	19,324,999,672	19,147,710,864	99.08	3.39	319
Oct-2015	0.77%	77	20,025,238,310	19,762,985,048	98.69	3.42	322
Nov-2015	0.20%	81	21,273,165,670	21,105,424,127	99.21	3.52	333
Dec-2015	-0.32%	85	22,142,495,309	21,962,663,455	99.19	3.59	337
Jan-2016	-1.50%	88	22,540,526,163	22,216,766,047	98.56	3.82	339
Feb-2016	-0.99%	91	23,326,992,361	22,602,915,404	96.90	3.87	344
Mar-2016	3.37%	96	24,064,520,730	23,050,619,899	95.79	3.98	354
Apr-2016	2.48%	103	25,391,312,379	25,087,393,893	98.80	4.08	365
May-2016	0.59%	109	26,279,775,166	26,551,262,325	101.03	4.18	374
Jun-2016	0.09%	112	26,855,491,419	27,187,574,474	101.24	4.21	376
Jul-2016	2.30%	120	27,903,598,643	28,158,680,935	100.91	4.24	379
Aug-2016	1.19%	121	28,794,787,795	29,605,268,884	102.81	4.31	382
Sep-2016	1.16%	124	29,552,152,007	30,628,130,025	103.64	4.38	386
Oct-2016	-0.38%	132	30,287,269,424	31,604,398,674	104.35	4.37	384
Nov-2016	0.50%	134	30,141,365,379	31,231,159,519	103.62	4.41	387
Dec-2016	1.39%	134	30,535,737,665	31,677,555,087	103.74	4.49	390
Jan-2017	1.73%	136	30,635,543,863	32,096,125,632	104.77	4.70	395
Feb-2017	0.44%	136	31,409,187,966	33,308,962,720	106.05	4.72	395
Mar-2017	0.69%	144	32,517,186,276	34,429,213,421	105.88	4.71	393
Apr-2017	1.80%	145	33,534,111,196	35,567,760,320	106.06	4.90	392
May-2017	1.18%	148	34,545,143,500	37,102,973,962	107.40	4.89	390
Jun-2017	1.08%	154	36,559,901,193	39,445,597,050	107.89	4.85	383
Jul-2017	1.13%	154	36,953,048,292	40,117,998,232	108.56	5.03	382
Aug-2017	-0.84%	157	37,861,211,578	41,330,840,373	109.16	5.01	377
Sep-2017	-0.26%	161	38,443,044,875	41,405,260,636	107.71	4.99	376
Oct-2017	0.93%	161	37,965,303,718	40,653,923,899	107.08	5.02	378
Nov-2017	0.33%	164	39,280,202,943	42,203,767,946	107.44	4.97	373
Dec-2017	1.96%	168	39,956,637,967	42,844,604,622	107.23	5.03	370
Jan-2018	1.54%	164	39,460,480,186	43,025,625,788	109.03	5.27	372
Feb-2018	-0.26%	167	39,928,425,286	43,982,384,619	110.15	5.25	369
Mar-2018	-0.21%	169	41,017,066,226	44,799,231,625	109.22	5.26	364
Apr-2018	0.85%	173	42,628,557,312	46,147,934,241	108.26	5.46	359
May-2018	0.34%	171	42,241,567,665	45,959,344,946	108.80	5.48	360
Jun-2018	0.10%	174	42,864,983,215	46,548,032,173	108.59	5.53	357
Jul-2018	0.71%	175	43,499,746,985	47,020,352,767	108.09	5.64	355
Aug-2018		178	43,956,283,714	47,612,413,385	108.32	5.60	354

CRTx® RNI™ Select Constituent Metrics (as of July 2018 Month End Rebalancing)

CRTx® RNI™ % of Mkt Val By Issuer (Aug 2018)



CRTx® RNI™ % of Mkt Val By Sub Index (Aug 2018)



CRTx® RNI™ Valuation Month	MONTH END TOTAL RETURN	BEG. MONTH CONSTITUENTS	TOTAL BEGINNING MONTH UPB	TOTAL BEGINNING MONTH MARKET VALUE	BEG. MONTH WAVG MARKET VALUE (PX+ACCR)	BEG. MONTH WAVG COUPON RATE	BEG. MONTH WAVG MARGIN
Aug-2015	-0.27%	51	12,205,241,994	12,261,714,780	100.46	3.60	341
Sep-2015	-0.12%	45	11,146,528,510	11,141,795,400	99.96	3.65	345
Oct-2015	0.64%	46	11,211,240,388	11,172,550,383	99.65	3.73	354
Nov-2015	0.47%	44	11,703,310,993	11,696,931,450	99.95	3.87	367
Dec-2015	-0.49%	44	11,463,095,080	11,469,383,341	100.05	3.87	365
Jan-2016	-1.39%	48	11,985,728,761	11,893,646,769	99.23	4.08	365
Feb-2016	-1.45%	52	12,893,267,492	12,597,052,600	97.70	4.11	369
Mar-2016	3.43%	49	11,927,493,746	11,455,770,097	96.05	4.23	380
Apr-2016	2.88%	52	12,620,144,071	12,526,356,185	99.26	4.44	400
May-2016	0.61%	54	12,728,073,789	12,987,783,827	102.04	4.68	424
Jun-2016	0.02%	54	12,249,693,307	12,530,783,972	102.29	4.76	432
Jul-2016	2.61%	54	12,299,906,392	12,529,906,264	101.87	4.80	435
Aug-2016	1.29%	53	12,066,677,416	12,523,872,105	103.79	4.86	437
Sep-2016	1.27%	56	13,198,577,693	13,786,166,208	104.45	4.89	437
Oct-2016	-0.31%	60	13,594,938,031	14,274,266,773	105.00	4.81	428
Nov-2016	0.33%	60	12,566,169,391	13,072,243,217	104.03	4.74	420
Dec-2016	1.80%	59	12,551,414,958	13,027,812,392	103.80	4.76	418
Jan-2017	1.84%	58	12,640,805,888	13,275,175,101	105.02	4.95	420
Feb-2017	0.54%	57	12,964,446,131	13,718,268,210	105.81	4.89	412
Mar-2017	0.52%	60	13,538,376,545	14,193,918,058	104.84	4.67	389
Apr-2017	1.67%	56	13,408,970,243	13,924,618,857	103.85	4.63	365
May-2017	2.09%	54	13,571,982,822	14,153,849,534	104.29	4.45	346
Jun-2017	1.08%	56	15,068,979,065	15,855,345,378	105.22	4.32	330
Jul-2017	1.36%	51	14,497,092,829	15,277,744,453	105.38	4.43	322
Aug-2017	-1.31%	51	14,491,303,898	15,306,318,014	105.62	4.28	305
Sep-2017	0.17%	54	14,348,388,908	14,810,251,574	103.22	4.14	290
Oct-2017	1.04%	46	13,111,219,325	13,494,197,665	102.92	4.15	291
Nov-2017	0.44%	48	14,393,547,162	14,862,545,297	103.26	4.09	285
Dec-2017	2.15%	51	14,481,730,157	14,878,810,704	102.74	4.09	276
Jan-2018	1.86%	48	13,759,885,957	14,367,377,513	104.41	4.26	271
Feb-2018	-0.52%	48	13,318,377,910	14,033,663,601	105.37	4.17	260
Mar-2018	-0.99%	43	13,241,940,466	13,755,399,800	103.88	4.10	248
Apr-2018	1.17%	46	13,884,239,740	14,126,640,355	101.75	4.23	236
May-2018	0.34%	42	12,545,340,421	12,814,797,737	102.15	4.17	229
Jun-2018	-0.14%	39	11,337,757,334	11,505,111,564	101.48	4.16	220
Jul-2018	0.90%	39	11,577,947,012	11,661,871,155	100.72	4.25	216
Aug-2018		39	11,258,619,216	11,388,276,073	101.15	4.26	220

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