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Tumbling Turnover, Elevated Efficiency

Lower liquidity has become a prominent concern across capital market generally and within securitized credit in particular. In an environment of shifting trading behavior (*Behavior Modification*, June 8, 2016), the structured credit market has experienced a meaningful decline in market turnover,¹ one commonly used metric for assessing liquidity. Structured credit trading volumes have declined 17% since 2012, while debt outstanding has increased 13% over the same period, causing turnover to fall from 47% to 34% over the past four years (Figure1).

Looking at each sector individually (Figure 2), we see that CLOs have experienced the most dramatic decline in turnover, with trading volumes falling 25% since 2012, while CLO debt outstanding has increased 64%, causing turnover to plummet from 38% to just 18%. The ABS and CMBS market have fared better, but have also seen significant declines in trading volumes without a corresponding decline in debt outstanding, resulting in lower turnover compared with prior years.

The most liquid structured credit sector appears to be CRT, which shows even higher turnover than investment grade corporate bonds. The higher turnover in CRT is not surprising; because of the very young age of the sector, newly issued bonds constitute a large portion of its outstanding debt. These bonds are typically the most heavily traded. In addition, the collateral linked to CRT pools is familiar to fixed income investors, since it is the same collateral that backs agency MBS, one of the largest fixed income markets after US Treasuries. Lastly, risk retention for CRT bonds is not a concern, as the GSEs retain both horizontal and vertical slices in excess of 5%, while the question of how other structured credit sectors will deal with risk retention is still up in the air. As such, this dynamic is likely a boon to CRT liquidity, while it acts as a constraint for liquidity in other structured credit sectors.

As new regulations have come into effect and capital charges have increased, dealers have been less willing to provide liquidity to non-agency securitized products. Primary dealers have been shrinking the amount of balance sheet devoted to structured credit, which has

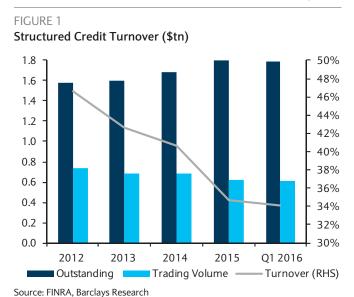


FIGURE 2 Turnover by Asset Class 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 2012 2013 2014 2015 2016 ABS **CMBS** CLO - CRT

Note: CRT turnover prior to 2015 is excluded because of the lack of outstanding transactions. CRT trading volumes are understated because trade reporting is capped at \$5mn. Source: FINRA, MarketAxess, Barclays Research

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¹ We compute a turnover ratio for each structured credit asset class as the ratio of the annualized trading volumes to the outstanding bond balances at each point in time.

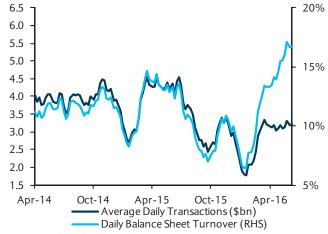
FIGURE 3
Primary Dealer Inventory in Structured Credit (\$bn)



Source: NY Fed, Barclays Research

FIGURE 4

Eight-Week Moving Average of Primary Dealer Transactions (\$bn) and Balance Sheet Turnover

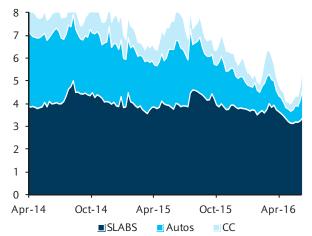


Source: NY Fed, Barclays Research

likely had a large effect on the decreased turnover across the asset class. Average weekly primary dealer inventories of structured credit products have fallen 41% y/y in 2Q16 (Figure 3), while trading volumes have fallen 29% (Figure 4), as dealers have become more efficient with their reduced balance sheet capacity. Figure 4 best demonstrates this phenomenon, as the primary dealer daily balance sheet turnover is now at multi-year highs, suggesting to us that balance sheets are being utilized more efficiently.

The ABS market has also had to cope with CUSIP-level price dissemination since June 1, 2015, further reducing the incentive for primary dealers to hold these assets in their trading books. Dealers are likely more reluctant to take positions when the price they pay is quickly disseminated to the market. Full price transparency often has the effect of resetting the market around the last trade price, eroding potential profits for dealers and discouraging them from using their limited balance sheet capacity to make markets. When looking at primary dealer transactions across the traditional ABS asset classes, we note a sharp drop in the daily average trading volumes in 3Q15, following the introduction of TRACE bond-level reporting. Averaging about \$1.1bn in the two years before June 2015, ABS transactions

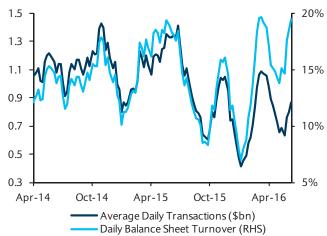
FIGURE 5
Primary Dealers Inventory of SL, Auto, and CC Transactions (\$bn)



Source: NY Fed, Barclays Research

FIGURE 6

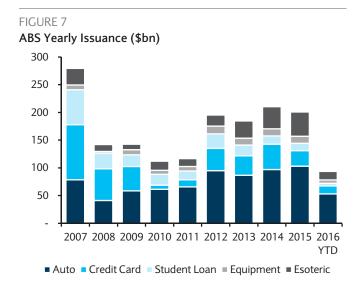
Eight-Week Moving Average of Primary Dealer SLABS, Auto, and CC Transactions (\$bn) and Balance Sheet Turnover



Source: NY Fed, Barclays Research

have been rounding out to about \$840mn per day since (Figure 6). We expect this lower incidence of trading to continue for the foreseeable future, as regulatory headwinds limiting the size of balance sheets will persist. Although primary dealers have found an ameliorating solution – namely, turning over their books more frequently – there is a limit to this, and it certainly cannot fully make up for the much-reduced balance sheets.

Reference Tables



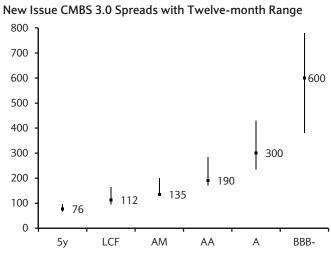
Source: Barclays Research





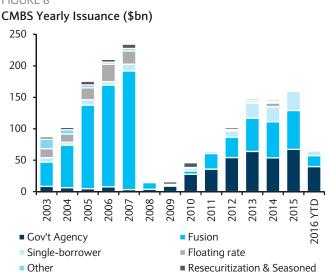
Source: FINRA, Barclays Research

FIGURE 11



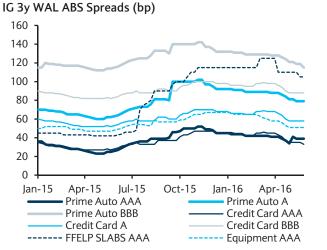
Source: Barclays Research

FIGURE 8



Source: CMA, Barclays Research

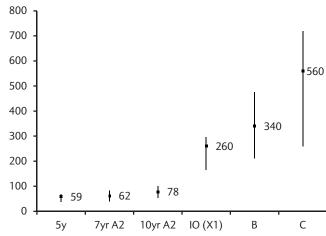
FIGURE 10



Source: Barclays Research

FIGURE 12

Freddie K CMBS Spreads with Twelve-month Range



Source: Barclays Research

FIGURE 13
ABS Spreads

			·	1	2-month	n					1	2-montl	h
Rat.,WAL	Benchmark	6/23	1-wk Chg	Avg	High	Low	Rat., WAL	Benchmark	6/23	1-wk Chg	Avg	High	Low
Prime Auto ABS						Credit Card ABS							
AAA, 1y	EDSF	18	0	30	39	18	AAA, 3y	1m Libor	33	0	40	47	33
AAA, 2y	Swaps	27	-1	38	49	27	AAA, 5y	1m Libor	46	0	51	58	43
AAA, 3y	Swaps	35	-1	42	52	34	AAA, 7y	1m Libor	57	0	61	69	51
A, 3y	Swaps	79	0	87	102	71	A, 3y	1m Libor	58	0	64	70	58
BBB, 3y	Swaps	115	0	129	142	115	A, 5y	1m Libor	83	0	85	93	76
Subprime Au	uto ABS						A, 7y	1m Libor	99	0	101	109	91
AAA, 1y	EDSF	53	0	66	80	53	BBB, 3y	1m Libor	88	0	94	100	88
AAA, 2y	Swaps	58	0	73	90	58	BBB, 5y	1m Libor	113	0	115	123	106
A, 3y	Swaps	135	-5	183	225	135	BBB, 7y	1m Libor	129	0	131	139	122
BBB, 3y	Swaps	205	-5	255	300	205	Student Loa	n ABS					
Equipment A	NBS						AAA, 1y	1m Libor	60	0	80	100	37
AAA, 1y	EDSF	33	0	41	49	33	AAA, 3y	1m Libor	80	0	103	125	46
AAA, 2y	Swaps	43	0	51	59	43	AAA, 5y	1m Libor	110	0	120	135	58
AAA, 3y	Swaps	51	0	59	67	51	AAA, 7y	1m Libor	130	0	138	150	71
Source: Barcla	ys Research												

FIGURE 14 CMBS Spreads

			12-month						12-month			
Rating	6/23	1-wk Chg.	Avg.	High	Low	Rating	6/23	1-wk Chg.	Avg.	High	Low	
CMBS 3.0 2015							CMBS 3.0 2013					
5у	76	0	81	97	68	5y	76	0	79	95	64	
LCF	112	0	128	165	95	LCF	94	0	117	154	88	
AM	135	0	159	200	133	AM	125	0	146	185	121	
AA	190	0	216	285	171	AA	160	0	181	210	148	
Α	300	0	322	430	235	Α	235	0	262	330	209	
BBB-	600	0	556	780	382	BBB-	485	0	470	630	344	
CMBS 3.0 2014							Freddie K					
5у	78	0	81	96	68	5y	59	0	56	70	38	
LCF	115	0	124	158	95	7yr A2	62	0	64	82	40	
AM	135	0	154	190	130	10yr A2	78	0	78	100	54	
AA	175	0	206	260	170	IO (X1)	260	0	239	295	165	
Α	260	0	295	380	236	В	340	0	324	475	210	
BBB-	560	0	520	705	371	С	560	0	476	720	260	

Source: Barclays Research

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