

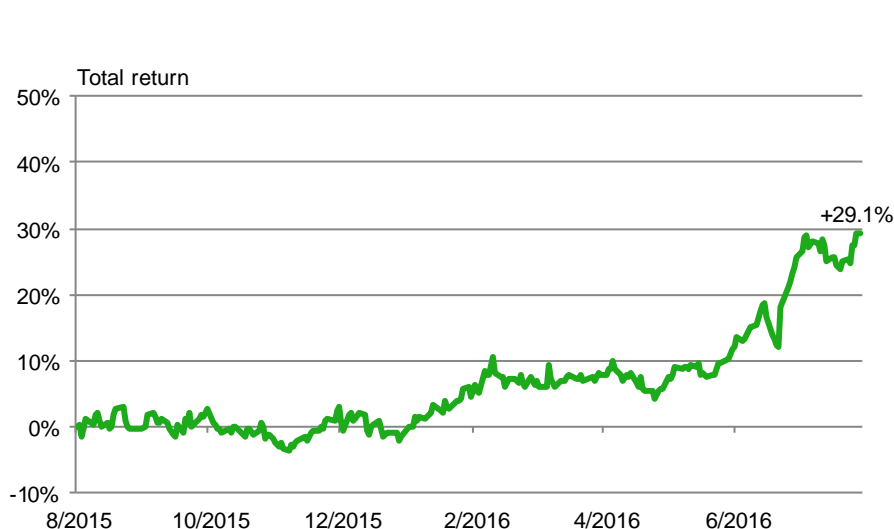
Global fixed income monthly focus – July 2016

Leveraged loans • Credit default swaps • Global corporate bonds • Sovereigns • Municipal bonds • Securitised products

Global credit rallied sharply in July, as the post-Brexit fears faded quickly after several benchmark government bonds hit record lows early in the month along with a 31-year low for the British pound vs US dollar. The strong US employment report, coupled with the anticipation of aggressive Bank of England rate and quantitative easing actions, which actually came to fruition in August, drove both the equity and fixed income markets sharply higher.

- The average spread basis between North American and European loans ended the month at -44bps, which is the widest basis over the past 12 months. North American and European spreads were mixed across ratings, sectors, and regions in July. North American loans continued to outperform European loans, with the former generally tightening over 20bps more than the latter during the month
- The post-Brexit recovery continued apace in July as credit markets bounced back from the political upheaval in the UK. The [Markit iTraxx Europe](#) started the month at 84bps, some 15bps tighter than the 99bps level reached shortly after the referendum. The rally didn't stop there; by the end of July the index was trading at 67bps, the tightest level this year
- The most notable trend in July, and indeed in 2016, was the outstanding performance of sterling denominated corporate debt. Total returns in the [Markit iBoxx £ Liquid Investment Grade Index](#) were up 5.2% over the month, easily outpacing the respectable 1.72% and 1.24% achieved by the [Markit iBoxx € Liquid Investment Grade Index](#) and the [Markit iBoxx \\$ Liquid Investment Grade Index](#)
- In June we saw the Brexit contagion impact all of the European members of the G7, with Germany, Italy, France and the UK hitting their widest CDS levels for the year. However, the contagion proved short-lived, and European sovereigns mounted a strong recovery in July. Highlighting the strength of UK sovereign bonds, the Markit iBoxx £ Gilts 25+ year index has returned almost 30% over the past 12 months (**Figure 1**)
- Total municipal bond issuance dropped sharply to only \$27.2bn in July, which is a 40% decline versus the record setting June and 19% below last July's total. YTD issuance is only 2.6% below the same period in 2015. This somewhat tepid issuance, during a time of record low rates, indicates that governments held a strong degree of fiscal discipline, as the widespread perception that low rates indicates a negative economic climate has made issuers reluctant to pile on new net debt this year
- Global securitised products rallied across the broader sector in July, as low rates, historically wide spreads, and strengthening US employment data increased overall investor demand. The US consumer ABS market had a particularly strong month, as a surge in new issuance was met with incessant investor demand and spreads tightening gradually alongside each new deal that was priced

Figure 1: Markit iBoxx £ Gilts 25+ years



Source: Markit.

Leveraged loans

North America loan spread basis to Europe widens to new one year high

The average spread basis between North American and European loans ended the month at -44bps, which is the widest basis over the past 12 months (**Figure 2**). North American and European spreads were mixed across ratings, sectors, and regions in July (**Table 3**). North American loans continue to outperform European loans, with the former generally tightening over 20bps more than the latter during the month. Loan level pricing data indicates that B- rated cohorts were among the worst performing rating category across every sector.

The widening of B- credit spreads is most apparent in recent credit basis trends (**Figure 3**), where the spread between North American B and B- loans widened the most at +27bps on average across all sectors. The same widening in B- spreads lead to B- and CCC+ spreads compressing the most at -36bps on the month. We note that the B+/B and B/B- spreads are both approximately 15% from their widest one year basis of 62bps and 317bps, respectively.

Distressed energy issues dominated North America's worst performers

The energy sector came under pressure in July after a very strong June (**Table 1**). Four out of the five worst performers in the distressed category were from the energy sector, as crude oil prices declined 15% during the month. The American Energy Marcellus 7/14 Cov-Lite 2nd Lien TL issue was the worst performer globally, as its price declined over 29% due to a slowdown in output of natural gas and stagnating prices to end the month at a 10.50 price. On a positive note, coal producer Peabody Energy 9/13 Cov-Lite TL was the best performer globally, partially driven by the bankruptcy court approving the company's request to set aside funds to pay New Mexico property taxes, with the loan issue increasing 20% to end the month at a 50.66 price.

The department store Belk's 12/15 Cov-Lite TL was the best performer globally in the par loan category, on the company naming a new CEO and potentially closing certain underperforming stores. The loan issue increased 11% to end the month at an 87.81 price.

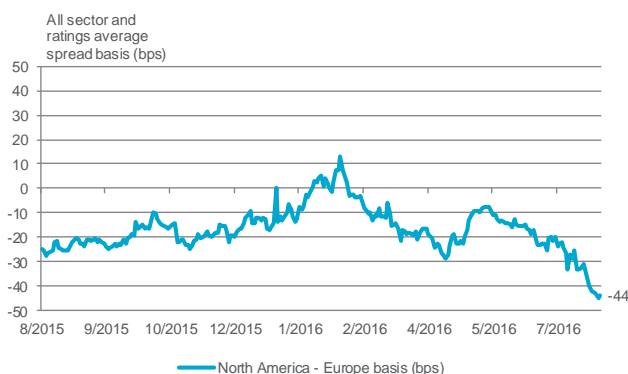
European consumer services issues the best performers in the region

Former distressed truck fleet issue Fraikin 2/07 GBP Holdco TL was the best performing European distressed loan last month and is the best performing par loan in July, increasing an additional 9% during the month on the June 30th announcement that they will be acquired by Petit Forestier.

UK commercial waste industrial company Biffa's 1/13 TLB issue was the best performing European distressed loan, increasing over 16% to end the month at a 59.67 price. According to the Financial Times¹, the company is owned by Angelo Gordon, Avenue Capital and Sankaty Advisors and is exploring a £1bn IPO after a 27% increase in profits.

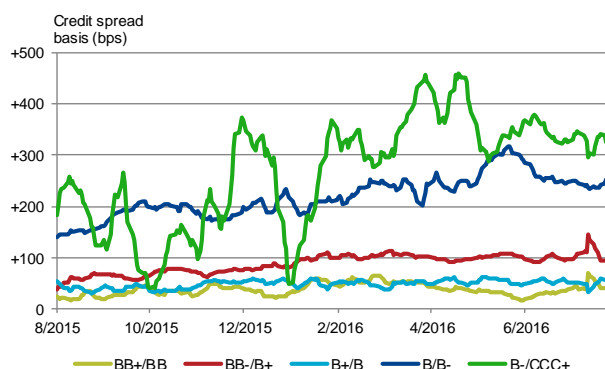
The Netherland's largest waste-to-energy processor AVR's 7/15 Holdco PIK TL issue was the worst performer in Europe, declining almost 24% and ending the month at a 38.00 price. We note that on July 7th British waste services Shanks Group reached an agreement in principal to purchase AVR using a combination of equity and cash from its owner Van Gansewinkel for the equivalent of €440m.

Figure 2: North America to Europe average spread to LIBOR basis across all ratings



Source: IHS Markit

Figure 3: North America credit spread to LIBOR basis



Source: IHS Markit

¹ Source: Financial Times article, "UK waste disposal group Biffa heads for £1bn IPO" by Gill Plimmer published on July 6th 2016.

Table 1: July North American loans best and worst price performance²
North America

LXID	Loan Name	Sector	Country	Liq score	7/29 price	% change	One year low	Date	One year high	Date	
Best Performers											
Par											
1	LX148858	Belk 12/15 Cov-Lite TL	Consumer Services	USA	1	87.81	+11.0%	78.75	6/29/16	89.56	11/24/15
2	LX151041	Veritas 1/16 (EUR) TLB1	Financials	USA	1	93.09	+10.2%	84.50	6/30/16	93.09	7/29/16
3	LX127398	RedPrairie 12/12 Cov-Lite 2nd Lien TL	Technology	USA	2	89.75	+8.6%	77.50	2/24/16	91.45	8/7/15
4	LX136121	Fairmount Minerals 3/14 TLB2	Industrials	USA	1	87.00	+7.5%	43.13	2/29/16	90.25	8/3/15
5	LX136918	Hi-Crush 4/14 Cov-Lite TLB	Basic Materials	USA	3	85.85	+7.3%	60.33	3/14/16	89.67	10/26/15
Distressed											
1	LX132557	Peabody Energy 9/13 Cov-Lite TL	Energy	USA	2	50.66	+20.0%	34.35	3/1/16	76.54	8/10/15
2	LX137115	Affinion 5/14 2nd Lien TL	Consumer Services	USA	1	82.00	+14.5%	69.21	6/27/16	91.31	10/7/15
3	LX132457	Fieldwood 9/13 2nd Lien TL	Energy	USA	3	31.00	+12.7%	12.42	2/11/16	53.60	8/3/15
4	LX136212	Catalina Marketing 4/14 Cov-Lite 2nd Lien TL	Financials	USA	3	67.63	+9.3%	54.90	2/11/16	72.67	8/14/15
5	LX123795	Syniverse (4/12) TL	Technology	USA	1	80.50	+8.3%	68.00	1/29/16	91.30	10/13/15
Worst Performers											
Par											
1	LX141710	Bluestem 11/14 TL	Consumer Services	USA	3	85.38	-3.3%	85.33	2/23/16	99.25	8/31/15
2	LX145100	Quality Distribution 7/15 TL	Industrials	USA	3	89.00	-3.0%	82.81	3/3/16	99.58	8/18/15
3	LX149587	Northgate 2/16 (EUR) TLB	Industrials	USA	5	97.75	-1.4%	97.33	7/8/16	99.08	7/4/16
4	LX144969	Alere 6/15 TLB	Healthcare	USA	1	98.35	-1.1%	98.35	7/29/16	100.36	9/21/15
5	LX133785	Del Monte Foods 2/14 Cov-Lite TL	Utilities	USA	3	92.06	-1.0%	91.42	7/20/16	97.88	10/26/15
Distressed											
1	LX138432	American Energy Marcellus 7/14 Cov-Lite 2nd Lien TL	Energy	USA	5	10.50	-29.2%	10.50	7/29/16	38.83	8/4/15
2	LX131403	Larchmont Resources 8/13 TL	Energy	USA	2	31.83	-11.6%	30.67	5/3/16	85.83	8/14/15
3	LX136541	Frac Tech International 4/14 Cov-Lite TL	Energy	USA	2	35.00	-10.1%	10.20	2/19/16	68.42	8/4/15
4	LX130228	Quicksilver Resources 6/13 Cov-Lite 2nd Lien TL	Energy	USA	4	18.92	-9.9%	18.92	7/29/16	55.80	8/3/15
5	LX127583	Ameriforge 1/13 2nd Lien TL	Industrials	USA	4	15.00	-6.3%	14.33	1/18/16	67.67	9/11/15

Source: IHS Markit

² Par is defined as a loan with a month end price of 85 or higher and distressed has a price lower than 85.

Table 2: July European loans best and worst price performance²

Europe

	LXID	Loan Name	Sector	Country	Liq score	7/29 price	% change	One year low	Date	One year high	Date
Best Performers											
Par											
1	LX064209	Fraikin 2/07 (GBP) Holdco TL	Consumer Services	FRA	4	93.05	+9.3%	51.50	1/25/16	93.05	7/29/16
2	LX138005	Mauser 7/14 (USD) Cov-Lite 2nd Lien TL	Industrials	DEU	4	97.08	+5.4%	81.83	2/26/16	99.00	8/3/15
3	LX134585	Prisa 12/13 Performing Debt TL2	Consumer Services	ESP	2	86.88	+5.0%	80.00	3/1/16	88.46	8/4/15
4	LX146779	AVR 7/15 Opco PIK TL	Industrials	NLD	3	98.75	+4.4%	87.17	2/17/16	98.75	7/29/16
5	LX139585	Formula One 8/14 (USD) Cov-Lite 2nd Lien TL	Consumer Services	LUX	2	98.00	+3.6%	81.30	2/11/16	99.83	8/4/15
Distressed											
1	LX128283	Biffa 1/13 TLB	Industrials	GBR	4	59.67	+16.7%	51.13	7/5/16	59.67	7/29/16
2	LX126785	Cortefiel 9/12 Extended PIK TLB2	Consumer Services	ESP	2	66.75	+14.8%	55.50	7/1/16	85.00	12/8/15
3	LX133515	Saur 10/13 PIK TLB	Utilities	FRA	3	64.13	+10.6%	46.83	8/25/15	64.13	7/29/16
4	LX141716	Autobar 10/14 Senior TL	Consumer Services	NLD	1	68.07	+7.0%	62.50	6/24/16	95.79	8/6/15
5	LX139562	Endemol 8/14 (USD) Cov-Lite 2nd Lien TL	Consumer Services	NLD	4	68.13	+6.9%	63.33	6/27/16	94.50	8/19/15
Worst Performers											
Par											
1	LX138207	Serbia Broadband (Telemach) 6/14 PIK TL	Consumer Services	NLD	3	99.86	-3.7%	96.46	3/1/16	104.03	6/9/16
2	LX133019	Tunstall 9/13 (GBP) TLB1	Telecommunications Services	GBR	5	90.38	-2.9%	87.17	8/4/15	94.50	6/28/16
3	LX131553	CBR 9/13 (Germany) Extended TLC2	Consumer Services	DEU	2	85.83	-2.5%	80.17	3/1/16	99.00	8/11/15
4	LX129946	Oxea 7/13 (USD) Cov-Lite TLB2	Basic Materials	LUX	3	94.56	-2.1%	93.58	7/14/16	98.75	5/17/16
5	LX132405	Hilding Anders 9/13 (EUR) 2nd Lien Extended TL	Consumer Goods	SWE	4	86.50	-1.9%	83.63	3/1/16	93.00	11/19/15
Distressed											
1	LX146780	AVR 7/15 Holdco PIK TL	Industrials	NLD	5	38.00	-23.6%	30.20	3/2/16	56.00	8/19/15
2	LX135826	Camaieu 2/14 2nd Lien Extended TL	Consumer Services	FRA	5	24.33	-14.1%	24.33	7/29/16	57.83	10/21/15
3	LX137914	PagesJaunes 6/14 (EUR) A7 TL	Technology	FRA	4	49.71	-6.0%	49.40	3/11/16	79.63	8/4/15
4	LX116034	AHAB / Ahmad Hamad Algozaibi & Bros 5/07 TL	Industrials	SAU	5	14.17	-4.8%	10.83	12/30/15	19.33	8/17/15
5	LX135963	Petroleum Geo-Services 3/14 Cov-Lite TLB	Energy	NOR	1	63.50	-3.3%	52.00	2/16/16	89.08	7/21/15

Source: IHS Markit

Table 3: North American and European loan sector curve monthly discount margin spread change in basis points

		BBB-	BB+	BB	BB-	B+	B	B-	CCC+
Basic Materials	NA	-0	-14	-7	-23	-31	-32	-5	-41
	EU	+23	+13	+14	-2	-11	-16	+32	-18
	Change NA-EU	-23.5	-26.7	-21.0	-21.5	-19.7	-16.5	-37.2	-23.2
Consumer Goods	NA	+1	-12	-5	-22	-29	-31	-4	-40
	EU	+23	+13	+14	-2	-11	-16	+32	-18
	Current NA-EU	-22.2	-25.3	-19.7	-20.1	-18.4	-15.2	-35.9	-21.9
Consumer Services	NA	+19	+6	+13	-4	-11	-13	+14	-22
	EU	+41	+31	+32	+16	+7	+2	+50	-0
	Current NA-EU	-21.9	-25.1	-19.4	-19.9	-18.1	-14.9	-35.6	-21.6
Energy	NA	+25	+12	+19	+2	-5	-7	+20	-16
	EU	+50	+40	+41	+25	+16	+11	+58	+9
	Current NA-EU	-24.8	-27.9	-22.3	-22.8	-21.0	-17.8	-38.5	-24.5
Financials	NA	-3	-16	-9	-25	-33	-34	-8	-44
	EU	+21	+11	+13	-3	-13	-17	+30	-20
	Current NA-EU	-24.1	-27.3	-21.6	-22.1	-20.3	-17.1	-37.8	-23.8
Healthcare	NA	+14	+0	+8	-9	-16	-18	+9	-27
	EU	+36	+26	+27	+11	+2	-2	+45	-5
	Current NA-EU	-22.3	-25.5	-19.8	-20.3	-18.5	-15.3	-36.0	-22.0
Industrials	NA	-6	-19	-12	-29	-36	-37	-11	-47
	EU	+16	+6	+8	-8	-18	-22	+25	-25
	Current NA-EU	-22.2	-25.4	-19.7	-20.2	-18.4	-15.2	-35.9	-21.9
Technology	NA	+6	-7	-0	-17	-24	-26	+1	-35
	EU	+27	+17	+18	+2	-7	-12	+36	-14
	Current NA-EU	-21.1	-24.3	-18.6	-19.1	-17.3	-14.1	-34.8	-20.8
Telecommunication Services	NA	-9	-23	-15	-32	-40	-41	-14	-50
	EU	+15	+5	+6	-10	-19	-24	+24	-26
	Current NA-EU	-24.4	-27.5	-21.9	-22.4	-20.6	-17.4	-38.1	-24.1
Utilities	NA	+5	-8	-1	-18	-25	-27	-0	-36
	EU	+29	+19	+21	+4	-5	-9	+38	-12
	Current NA-EU	-24.2	-27.4	-21.7	-22.2	-20.4	-17.2	-37.9	-23.9

Source: IHS Markit

Credit default swaps

Central banks drive rally

The post-Brexit recovery continued apace in July as credit markets bounced back from the political upheaval in the UK. The [Markit iTraxx Europe](#) started the month at 84bps, some 15bps tighter than the 99bps level reached shortly after the referendum. The rally didn't stop there – by the end of July the index was trading at 67bps, the tightest level this year.

Central banks have clearly contributed to the change in risk appetite. The ECB's Corporate Sector Purchase Programme (CSPP) is well under way and expectations that the Bank of England would follow suit by purchasing corporate bonds were duly met early in August. The expansion of QE into corporate debt has probably driven bond yields lower and CDS spreads have moved in the same direction.

Europe outperforms North America

So, given the intervention by the ECB and Bank of England, it was no surprise to see European markets outperform their North American counterparts. The [Markit iTraxx Europe](#) started the month 6bps wider than the [Markit CDX.NA.IG](#); by the end of July it was more than 4bps tighter. The North American index posted a modest credit improvement of 5.5bps.

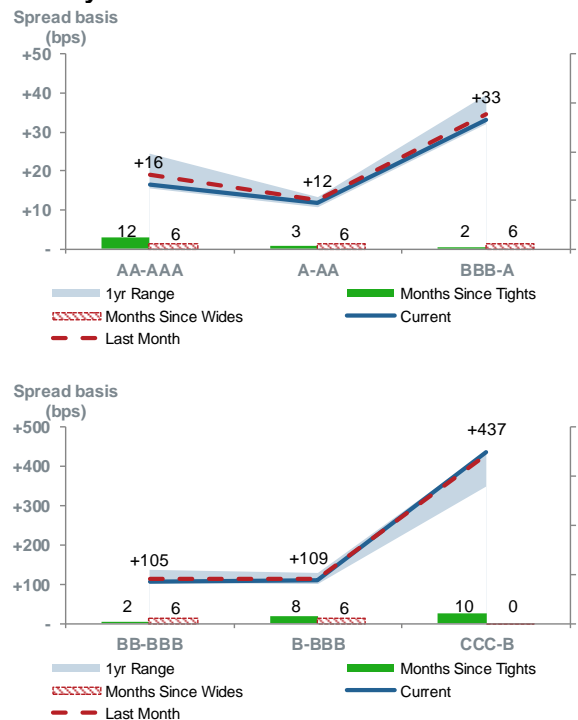
We should note here that the skew on the Markit CDX.NA.IG – the difference between the traded level and the intrinsic level derived from the constituents – was at 11bps both at the start and the end of the month. The different investor base and stronger liquidity in the index compared to single names helps explain the large basis.

Oil & gas lagging behind

North American performance also suffered from a retreat in the energy sector, with the decline in the oil price no doubt a contributing factor (**Table 4** and **Table 5**). Four of the five worst performers were upstream oil & gas companies, and they widened by 19%-31%. All four firms are investment grade names, but trade with junk implied ratings, according to Markit data. Investors will have to assess whether the CDS market is pricing risk more effectively than the rating agencies, particularly in sectors with rising default rates.

Exploration and production firms also dominated the worst performers in Europe, though the 5%-10% deterioration was less severe than in North America.

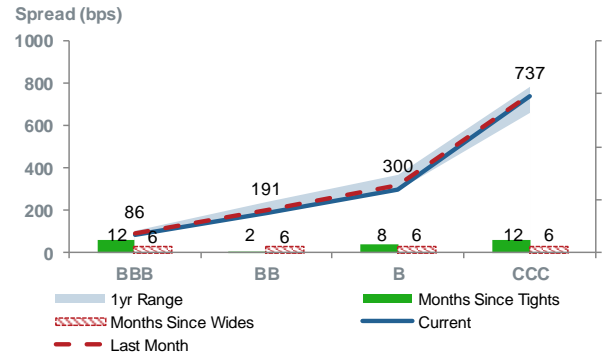
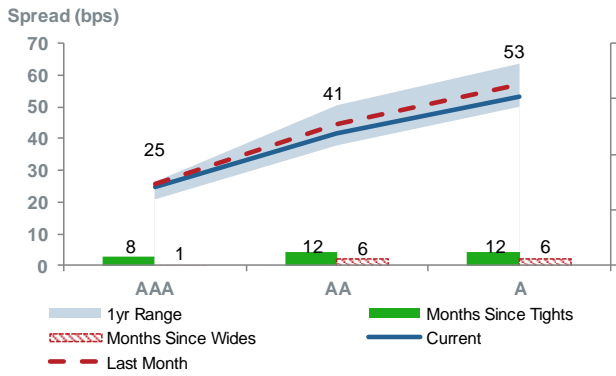
Figure 4: Global CDS sector ratings spread basis summary



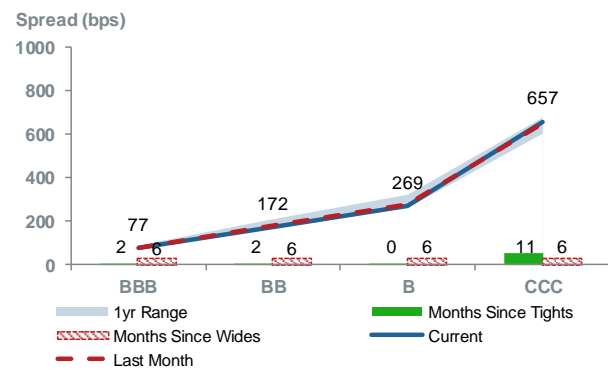
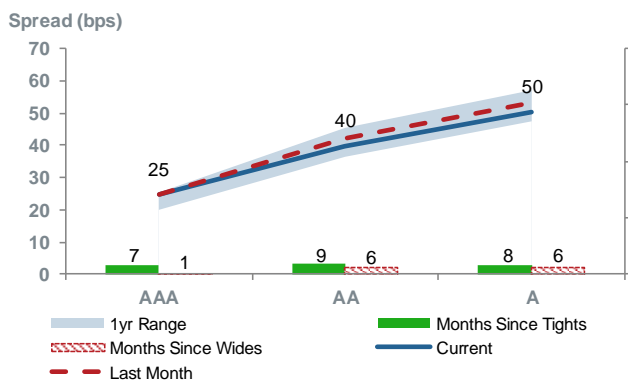
Source: IHS Markit

Figure 5: July regional CDS sector spread summary

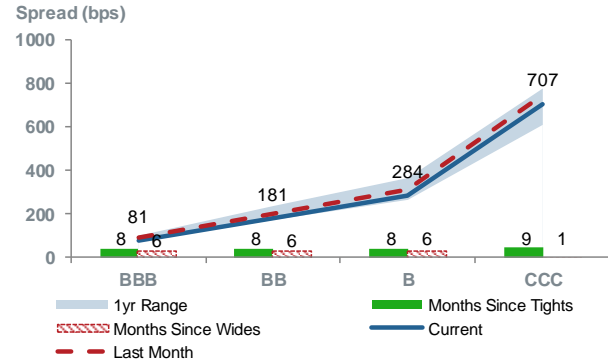
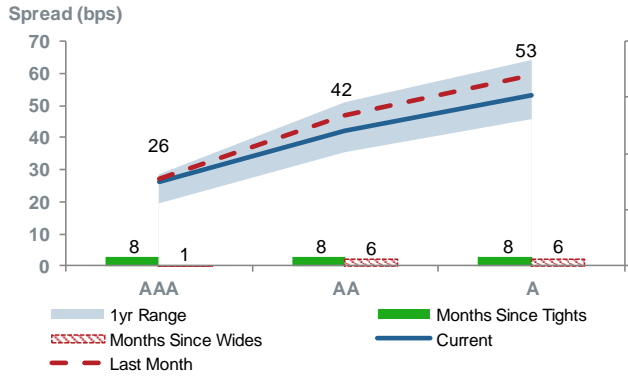
Global



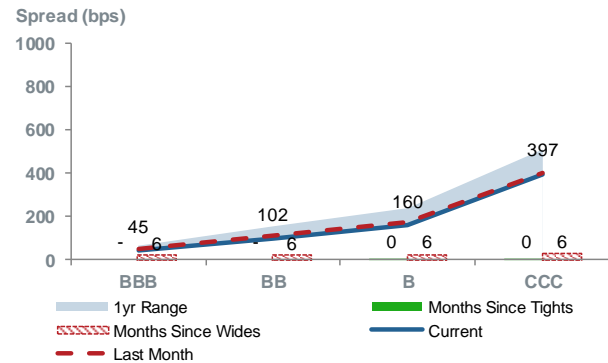
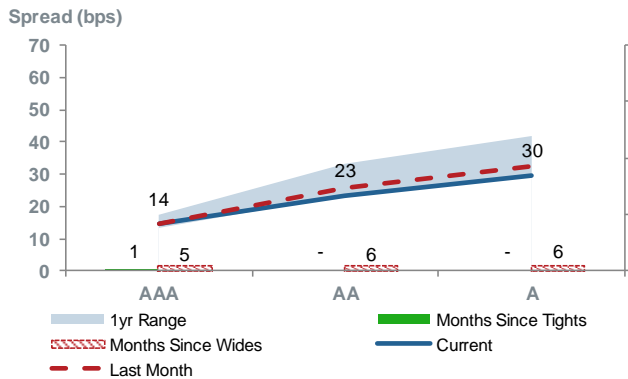
North America



Europe



Japan



Source: IHS Markit

Table 4: July liquid 5yr corporate CDS best spread performance³

Best performers

	Ticker	Company	Sector	Country	Liq score	7/29 spread	Change	% change	One year tight	Date	One year wide	Date
Americas												
1	X	Utd Sts Stl Corp	Basic Materials	USA	2	672	-280	-29.4%	664	8/5/15	2755	1/27/16
2	DIS	Walt Disney Co	Consumer Services	USA	1	18	-7	-27.1%	15	10/26/15	39	8/24/15
3	RDN	Radian Gp Inc	Financials	USA	2	266	-97	-26.7%	239	8/3/15	614	1/26/16
4	SPRICOM	Sprint Comms Inc	Telecom Services	USA	1	689	-242	-26.0%	430	9/9/15	1762	2/9/16
5	AIG-IntLeaseFin	Intl Lease Fin Corp	Industrials	USA	2	173	-56	-24.4%	166	8/28/15	487	2/11/16
EMEA												
1	PREMFOO	Premier Foods Fin PLC	Consumer Goods	GBR	2	260	-104	-28.6%	134	4/12/16	735	8/24/15
2	RWE	RWE AG	Utilities	DEU	1	82	-33	-28.5%	79	8/3/15	170	4/8/16
3	COOERAB	Coooperatieve Rabobank UA	Financials	NLD	1	62	-24	-27.7%	53	1/8/16	98	6/27/16
4	INTNED-BankNV	ING Bk N V	Financials	NLD	2	63	-24	-27.3%	50	12/2/15	98	6/27/16
5	GLCORE	Glencore Intl AG	Basic Materials	CHE	2	305	-114	-27.2%	241	8/3/15	1128	1/20/16
APAC												
1	mitsol	Mitsui OSK Lines Ltd	Industrials	JPN	2	142	-61	-29.9%	102	8/11/15	350	1/29/16
2	MITTOA	Mitsui Chems Inc	Basic Materials	JPN	2	47	-17	-25.9%	47	7/29/16	117	10/1/15
3	KAWKIS	Kawasaki Kisen Kaisha Ltd	Industrials	JPN	2	167	-48	-22.5%	102	8/11/15	309	2/12/16
4	NPG-NPI	Nippon Paper Inds CoLtd	Basic Materials	JPN	2	51	-13	-20.4%	51	7/29/16	146	1/21/16
5	NIPPOST	Nippon Steel Sumitomo Metal Corp	Basic Materials	JPN	2	45	-11	-20.2%	43	7/15/16	129	2/17/16

Source: IHS Markit

³ A liquid CDS is defined as an entity with a current Markit liquidity score of 1 or 2. IHS Markit liquidity scores range from 1-5, with 1 being the most liquid and 5 the least liquid.

Table 5: July liquid 5yr corporate CDS worst spread performance³

Worst performers

	Ticker	Company	Sector	Country	Liq score	7/29 spread	Change	% change	One year tight	Date	One year wide	Date
Americas												
1	APA	Apache Corp	Energy	USA	2	198	+47	+31.4%	114	11/9/15	354	2/24/16
2	COP	Conocophillips	Energy	USA	1	198	+47	+30.9%	63	8/17/15	387	2/19/16
3	AVT	Avnet Inc	Consumer Goods	USA	2	89	+17	+24.1%	56	12/30/15	96	5/4/16
4	APC	Adarko Petroleum Corp	Energy	USA	1	291	+47	+19.4%	109	8/10/15	530	2/19/16
5	HESS	Hess Corp	Energy	USA	2	290	+46	+19.1%	176	8/5/15	635	2/19/16
EMEA												
1	STOL	Statoil Asa	Energy	NOR	1	57	+5	+9.7%	41	7/22/16	144	2/11/16
2	RDSPLC	Royal Dutch Shell Plc	Energy	GBR	1	78	+6	+8.2%	55	8/3/15	174	1/15/16
3	STENA	Stena Aktiebolag	Industrials	SWE	1	754	+52	+7.5%	459	9/17/15	973	2/12/16
4	REPSSA	Repsol Sa	Energy	ESP	1	188	+8	+4.5%	110	8/3/15	451	2/11/16
5	ASTL	Astaldi S Per Azioni	Industrials	ITA	2	1462	+54	+3.9%	417	8/3/15	1489	6/27/16
APAC												
1	CITOH	Itochu Corp	Industrials	JPN	2	55	+6	+11.7%	40	7/19/16	104	10/11/15
2	JFEHLD	Jfe Hldgs Inc	Basic Materials	JPN	2	69	-4.6	-6.3%	60	8/11/15	171	2/15/16
3	WPLAU	Woodside Pete Ltd	Energy	AUS	2	147	-11	-6.8%	115	8/3/15	284	1/21/16
4	BCHINL	Bk Of China Ltd	Financials	CHN	2	134	-11.3	-7.8%	116	8/5/15	180	2/11/16
5	TELECO	Telstra Corp Ltd	Telecom Services	AUS	2	62	-5	-8.0%	54	8/3/15	83	2/11/16

Source: IHS Markit

Global corporate bonds

Central bank intervention ensured that corporate bonds enjoyed an overwhelmingly positive month in July.

Sterling investment grade bonds outperform

The most notable trend in July, and indeed in 2016, was the outstanding performance of sterling denominated corporate debt. Total returns in the [Markit iBoxx £ Liquid Investment Grade Index](#) were up 5.20% over the month, easily outpacing the respectable 1.72% and 1.24% achieved by the [Markit iBoxx € Liquid Investment Grade Index](#) and the [Markit iBoxx \\$ Liquid Investment Grade Index](#).

Most of the recent sterling depreciation occurred immediately after the Brexit referendum in June, so fluctuations in currency values were not a major factor affecting performance in July. A more sanguine view of the UK's future after Brexit may have contributed to an increased demand for corporate bonds.

Central banks driving down yields

But it is likely that expectation of intervention from the Bank of England drove prices higher as investors anticipated the buyer of last resort entering the market. The expectations were proven correct in August, though it was by no means considered a certainty immediately prior to the decision.

The ECB, of course, has been buying corporate bonds as part of QE since June, and there is little doubt that the policy has driven down euro-denominated bond yields. The yield on [Markit iBoxx € AA Corporates](#) is now just 0.37%, which is 1.66% lower than the equivalent in sterling and a huge 2.35% lower than AA US dollar yields.

Shorter duration in the euro index accounts for some of the variation, particularly compared to sterling, and the Bank of England's corporate bond purchasing programme may well reduce the difference over the coming months.

European high-yield lags behind

Sterling denominated high yield bonds underperformed their investment grade counterparts, with the [Markit iBoxx GBP Liquid High Yield Index](#) returning 3.63% compared to 5.20% for IG. The underperformance is even more marked when looking at year-to-date figures. The sterling index has returned 5.41% in 2016 compared to 13.09% for IG.

The Markit iBoxx € Liquid High Yield Index has returned a comparable 5.54%, though US high yield has significantly outperformed, with the [Markit iBoxx EUR Liquid High Yield Index](#) returning 10.79% year-to-date. This is greater than the 8.65% returned by the

dollar investment grade index, in contrast to the pattern seen in sterling and euro.

Table 6: July corporate bond US and European iBoxx indices performance

	Total Return						Yield						Duration		
	Month			YTD			Current			Month			\$	€	£
	\$	€	£	\$	€	£	\$	€	£	\$	€	£			
Corporates	+1.24%	+1.72%	+5.20%	+8.65%	+5.88%	+13.09%	3.36%	0.87%	2.67%	-0.12%	-0.29%	-0.56%	6.9	5.4	8.6
Corporates AAA	+1.12%	+2.24%	+4.24%	+9.13%	+8.93%	+21.91%	2.93%	0.52%	1.73%	-0.08%	-0.24%	-0.26%	9.7	8.7	15.6
Corporates AA	+0.67%	+1.19%	+4.17%	+6.87%	+5.76%	+13.85%	2.72%	0.37%	2.03%	-0.07%	-0.20%	-0.43%	6.4	5.6	9.2
Corporates A	+1.06%	+1.55%	+5.44%	+7.48%	+5.45%	+13.62%	3.01%	0.64%	2.57%	-0.11%	-0.25%	-0.54%	6.6	5.5	9.3
Corporates BBB	+1.58%	+2.02%	+5.26%	+10.42%	+6.29%	+12.31%	3.87%	1.24%	3.00%	-0.16%	-0.35%	-0.65%	7.1	5.2	7.7
Banks	+0.92%	+1.26%	+4.52%	+5.10%	+3.42%	+8.38%	3.08%	0.87%	2.83%	-0.12%	-0.24%	-0.63%	4.9	4.4	6.6
Basic Materials	+2.14%	+2.21%	+6.75%	+14.37%	+11.13%	+21.95%	3.94%	0.74%	2.91%	-0.21%	-0.42%	-0.83%	7.3	5.5	7.8
Consumer Goods	+1.19%	+1.74%	+3.20%	+8.58%	+6.88%	+9.91%	3.02%	0.68%	1.98%	-0.13%	-0.28%	-0.48%	6.6	5.8	6.0
Consumer Services	+1.68%	+2.05%	+5.01%	+11.45%	+7.34%	+15.64%	3.41%	0.73%	2.42%	-0.16%	-0.34%	-0.48%	8.6	5.9	10.0
Financials	+1.02%	+1.55%	+4.58%	+5.73%	+4.04%	+9.20%	3.14%	1.11%	2.98%	-0.13%	-0.28%	-0.58%	5.4	4.8	7.2
Health Care	+1.49%	+1.38%	+7.11%	+9.27%	+6.05%	+22.02%	3.11%	0.66%	2.25%	-0.13%	-0.21%	-0.53%	8.0	6.2	12.9
Industrials	+1.35%	+1.55%	+4.71%	+9.60%	+6.10%	+14.75%	3.09%	0.53%	2.30%	-0.13%	-0.25%	-0.49%	7.8	5.5	9.0
Insurance	+1.62%	+3.19%	+5.38%	+7.74%	+5.12%	+7.66%	3.65%	2.55%	4.11%	-0.15%	-0.44%	-0.68%	7.8	6.4	7.2
Non-Financials	+1.36%	+1.85%	+5.58%	+10.35%	+7.25%	+15.62%	3.45%	0.73%	2.52%	-0.12%	-0.30%	-0.55%	7.7	5.8	9.4
Oil & Gas	+0.74%	+1.73%	+3.84%	+11.61%	+8.40%	+9.77%	4.14%	1.03%	2.28%	-0.05%	-0.27%	-0.53%	7.3	5.8	6.7
Technology	+1.15%	+2.32%	N/A	+8.10%	+8.39%	N/A	3.23%	0.37%	N/A	+0.01%	-0.31%	N/A	7.0	7.0	N/A
Telecommunications	+1.95%	+2.09%	+5.66%	+11.70%	+7.52%	+16.84%	3.75%	0.83%	2.71%	-0.18%	-0.32%	-0.57%	8.6	6.0	9.4
Utilities	+1.44%	+1.98%	+6.61%	+10.98%	+6.85%	+16.73%	3.49%	0.75%	2.70%	-0.13%	-0.33%	-0.60%	8.8	5.5	10.3
High Yield Liquid High Yield	+2.34%	+2.19%	+3.63%	+10.79%	+5.54%	+5.41%	6.41%	3.91%	5.77%	-0.42%	-0.51%	-0.87%	3.9	3.5	3.3
Convertible CVBX	+5.19%	+4.81%	+1.29%	+1.30%	-0.71%	+2.76%	-0.38%	7.08%	7.62%	-0.95%	-1.04%	-0.13%	5.2	3.9	5.6
Contingent Convertible	+4.17%	+4.81%	+1.29%	+3.86%	-0.71%	+2.76%	7.14%	7.08%	7.62%	-0.77%	-1.04%	-0.13%	4.4	3.9	5.6

Source: IHS Markit

Table 7: July global corporate bond best price performance

Best performers

	Ticker	Issue	Sector	Country	CCY	Liq score	7/29 price	Change	% change	One year low	Date	One year high	Date
Americas													
1	REN	Resolute Energy Corporation 8.5 5/2020	Energy	USA	USD	1	76.75	+19.25	+33.5%	25.00	3/17/16	78.00	7/20/16
2	VANGNAT	Vanguard Natural Resources, Llc 7.875 4/2020	Financials	USA	USD	1	41.50	+9.50	+29.7%	10.00	3/8/16	89.02	8/3/15
3	IHEAINC	Iheartcommunications, Inc. 10 1/2018	Consumer Services	USA	USD	1	63.75	+12.25	+23.8%	27.25	2/24/16	79.50	8/4/15
4	AV	Avaya Inc. 10.5 3/2021	Technology	USA	USD	1	26.90	+4.87	+22.1%	20.00	5/17/16	80.50	8/3/15
5	CALA	C.A. La Electricidad De Caracas 8.5 4/2018	Utilities	VEN	USD	1	48.00	+8.31	+20.9%	23.00	2/15/16	48.00	7/29/16
EMEA													
1	NORSSKO	Norske Skog Holding As 8 2/2021	Basic Materials	NOR	EUR	2	39.57	+11.30	+40.0%	23.00	2/17/16	58.00	8/19/15
2	ALGESCO	Algeco Scotsman Global Finance Plc 10.75 10/2019	Industrials	GBR	USD	1	62.75	+14.50	+30.1%	19.83	2/15/16	68.50	8/4/15
3	RWE-FinBV	Rwe Finance B.V. 6.125 7/2039	Utilities	DEU	GBP	2	135.76	+21.29	+18.6%	102.66	2/17/16	135.76	7/29/16
4	HSBC	Hsbc Holdings Plc 6 3/2040	Financials	GBR	GBP	2	128.88	+16.33	+14.5%	103.70	2/26/16	128.88	7/29/16
5	FIRQU	First Quantum Minerals Ltd. 7.25 5/2022	Basic Materials	ZMB	USD	1	88.25	+11.00	+14.2%	39.54	1/20/16	88.25	7/29/16
APAC													
1	SEAGHDD	Seagate Hdd Cayman 5.75 12/2034	Technology	SGP	USD	2	81.00	+11.25	+16.1%	59.75	2/24/16	81.25	7/12/16
2	INDOE	Indo Energy Finance li B.V. 6.375 1/2023	Energy	IDN	USD	1	64.56	+8.92	+16.0%	32.11	2/15/16	64.78	7/25/16
3	YINGDGA	Yingde Gases Investment Limited 7.25 2/2020	Basic Materials	CHN	USD	1	82.26	+10.24	+14.2%	63.14	3/2/16	87.00	8/6/15
4	VDR	Vedanta Resources Plc 7.125 5/2023	Basic Materials	IND	USD	1	86.13	+10.38	+13.7%	42.25	1/21/16	89.61	7/25/16
5	BHP-BilFinLtd	Bhp Billiton Finance Limited 4.3 9/2042	Energy	AUS	GBP	2	121.43	+11.01	+10.0%	86.26	1/22/16	121.43	7/29/16

Source: IHS Markit

Table 8: July global corporate bond worst price performance

Worst performers

Ticker	Issue	Sector	Country	CCY	Liq score	7/29 price	Change	% change	One year low	Date	One year high	Date
Americas												
1 CLST	Claire's Stores, Inc. 8.875 3/2019	Consumer Services	USA	USD	2	11.83	-9.17	-43.7%	10.90	7/27/16	44.37	9/2/15
2 ODBR-FIN	Odebrecht Finance Ltd. 4.375 4/2025	Industrials	BRA	USD	2	32.29	-10.91	-25.3%	25.05	5/9/16	70.00	8/3/15
3 APS	Neptune Orient Lines Limited 4.65 9/2020	Industrials	USA	SGD	3	67.00	-15.00	-18.3%	60.00	3/23/16	99.88	8/4/15
4 SQA	Sequa Corporation 7 12/2017	Industrials	USA	USD	2	21.00	-4.50	-17.6%	13.00	2/26/16	68.50	8/13/15
5 EVEREAC	Everest Acquisition Finance Inc. 9.375 5/2020	Energy	USA	USD	1	58.34	-12.41	-17.5%	19.00	2/11/16	103.00	8/3/15
EMEA												
1 CAISFRA	Caisse Francaise De Financement Local .375 6/2025	Financials	FRA	EUR	2	102.65	-876.73	-89.5%	101.76	7/15/16	990.27	7/11/16
2 PACIDRI	Pacific Drilling S.A 5.375 6/2020	Energy	LUX	USD	1	26.40	-6.60	-20.0%	19.00	3/1/16	76.10	8/3/15
3 MONTE	Banca Monte Dei Paschi Di Siena S.P.A. 11/2017	Financials	ITA	EUR	1	77.39	-14.61	-15.9%	52.70	1/20/16	93.90	9/14/15
4 ELDOINT	Eldorado Intl. Finance Gmbh 8.625 6/2021	Consumer Goods	AUT	USD	2	85.50	-10.20	-10.7%	75.25	7/7/16	97.00	6/28/16
5 PACIFDR	Pacific Drilling V Limited 7.25 12/2017	Energy	LUX	USD	1	36.80	-3.60	-8.9%	26.00	3/1/16	85.50	8/3/15
APAC												
1 SWIBCAP	Swiber Capital Pte. Ltd. 6.5 8/2018	Energy	SGP	SGD	4	30.00	-10.00	-25.0%	30.00	7/29/16	99.95	4/28/16
2 MIEHOL	Mie Holdings Corporation 7.5 4/2019	Energy	CHN	USD	2	60.15	-6.78	-10.1%	29.00	1/26/16	70.50	8/3/15
3 BALLINT	Ballarpur International Graphic Paper Holdings B.V. 9.75 12/2099	Basic Materials	IND	USD	1	60.38	-5.15	-7.9%	60.00	7/27/16	88.88	11/10/15
4 KDB	The Korea Development Bank 3.25 12/2024	Financials	KOR	KRW	4	104.97	-6.65	-6.0%	103.68	8/6/15	112.31	6/27/16
5 PUBLUTI	Public Utilities Board 3.012 7/2022	Utilities	SGP	SGD	3	102.18	-3.61	-3.4%	98.80	9/16/15	106.97	6/27/16

Source: IHS Markit

Sovereigns

European members of G7 all retreated from June wides in July

In June we saw the Brexit contagion impact all of the European members of the G7, with Germany, Italy, France and the UK hitting their widest CDS levels for the year. But the contagion proved short-lived, and European sovereigns mounted a strong recovery in July (**Table 9**).

The UK rallied by 15% to close the month at 37bps, a significant improvement from the 50bps hit in the wake of the Brexit referendum result. But this is still considerably wider than the 18bps 2015 year-end level, indicating that the market is pricing in the uncertain outcome of the negotiations to leave the EU. Not only is the UK's eventual trading arrangement with the EU unknown, the timing of its exit is still to be determined.

The UK's Prime Minister, Theresa May, has indicated that Article 50 will be triggered in 2017, but with German and French elections next year, it is possible that the process will be delayed.

France was the strongest sovereign performer in July (Australia excepted), tightening by 21% to close the month at 32bps. Peripheral Eurozone countries such as Spain and Italy also posted strong rallies, tightening by 19% and 11% respectively. The UK's prospective exit may have triggered the next stage in the Eurozone crisis, however it hasn't yet materialised.

But Italy faces a referendum on constitutional change in October, and polls indicate the result could be close. Greece's problems are also bubbling under the surface. It would be no surprise to see further volatility in sovereign spreads later this year.

Emerging market CDS come under pressure

The worst performing sovereign CDS in July were primarily emerging market names, with Turkey conspicuously at the top of the table. On July 15 a coup was attempted against the government, which ultimately failed but still led to market participants pricing in increased political risk. The country's spreads widened from 225bps to 288bps after the coup, and by the end of the month it had recovered slightly but was still 14bps wider at 271bps. It should also be noted that Turkey is consistently one of the most heavily traded and liquid names in the CDS universe, and volumes spiked up to 768 trades, the highest since the DTCC started publishing data in 2010.

Russia and Saudi Arabia were the only other liquid sovereigns to widen over the month, a reflection of their dependence on oil and gas exports.

Table 9: July G7 industrialised countries ranked by percent change in CDS spreads

			7/29 10yr bond yield	CDS change	7/29 CDS	% change	One year tight	Date	One year wide	Date
1	FRTR	France	0.11%	-8.8	32.4	-21.4%	25.7	12/24/15	50.6	6/24/16
2	UKIN	United Kingdom	0.69%	-6.5	37.1	-14.8%	15.2	9/30/15	50.6	6/24/16
3	JAPAN	Japan	-0.18%	-4.9	35.8	-12.1%	33.2	7/15/16	56.1	2/12/16
4	DBR	Germany	-0.12%	-2.3	17.3	-11.6%	12.6	12/24/15	24.9	6/27/16
5	ITALY	Italy	1.18%	-17.1	133.0	-11.4%	91.6	12/9/15	183.3	6/27/16
6	CAN	Canada	1.03%	-0.9	25.5	-3.3%	21.0	8/26/15	26.9	3/16/16
7	USGB	United States	1.46%	+2.4	24.2	+11.2%	14.3	9/18/15	24.5	5/23/16

Source: IHS Markit

Table 10: July liquid sovereign 5yr CDS best and worst spread performance³

			Liq Score	Change	7/29 spread	% change	One year tight	Date	One year wide	Date
Best Performers										
1	AUSTLA	Australia	1	-8	28	-22.7%	28	7/29/16	56	2/11/16
2	FRTR	France	1	-9	32	-21.4%	26	12/24/15	51	6/24/16
3	SPAIN	Spain	1	-20	87	-18.5%	80	12/8/15	137	6/27/16
4	BELG	Belgium	2	-10	45	-18.3%	33	1/4/16	68	6/27/16
5	THAI	Thailand	2	-20	93	-17.7%	90	7/20/16	172	9/29/15
6	UKIN	United Kingdom	2	-6	37	-14.8%	15	9/30/15	51	6/24/16
7	SWED	Sweden	2	-4	23	-13.4%	13	12/30/15	31	6/24/16
8	INDON	Indonesia	1	-24	159	-13.3%	157	7/14/16	274	9/29/15
9	PHILIP	Philippines	1	-14	99	-12.5%	95	11/20/15	143	9/29/15
10	JAPAN	Japan	2	-5	36	-12.1%	33	7/15/16	56	2/12/16
Worst Performers										
1	TURKEY	Turkey	1	+271	32	+13.6%	216	7/12/16	323	9/29/15
2	RUSSIA	Russia	1	+237	9	+4.0%	216	7/12/16	447	8/24/15
3	SAUDI	Saudi Arabia	2	+179	6	+3.3%	63	8/10/15	207	1/18/16
4	PANAMA	Panama	1	+151	-4	-2.8%	137	7/12/16	225	2/11/16
5	MEX	Mexico	1	+152	-5	-2.9%	130	9/17/15	231	2/11/16
6	COLOM	Colombia	1	+195	-6	-3.2%	176	7/22/16	325	2/11/16
7	ARGENT	Argentina	1	+405	-16	-3.9%	387	7/22/16	3694	4/25/16
8	FINL	Finland	2	+27	-1	-5.2%	15	12/2/15	30	6/24/16
9	CHILE	Chile	1	+87	-6	-6.2%	77	7/20/16	153	9/29/15
10	PERU	Peru	1	+127	-10	-7.0%	120	7/12/16	230	2/11/16

Source: IHS Markit

Table 11: July sovereign bond best price performance

Best performers

Ticker	Issue	CCY	Liq score	7/29 price	Change	% change	7/29 yield	One year low	Date	One year high	Date
Americas											
1 ELSALV	Republic of El Salvador 7.625 2/2041	USD	2	103.25	+14.30	+16.1%	8.72%	74.50	2/10/16	103.57	7/26/16
2 PERU	Republic of Peru 6 2/2029	PEN	5	100.26	+10.86	+12.2%	7.30%	85.40	9/9/15	100.26	7/29/16
3 VENZ	Bolivarian Republic of Venezuela 7 12/2018	USD	2	54.87	+4.81	+9.6%	41.69%	31.57	2/15/16	54.87	7/29/16
4 MEX	United Mexican States 5.625 3/2114	GBP	2	103.79	+8.74	+9.2%	5.92%	86.98	2/19/16	103.79	7/29/16
5 COSTAR	Republic of Costa Rica 7 4/2044	USD	2	105.64	+7.32	+7.4%	7.14%	81.85	2/15/16	106.86	7/14/16
EMEA											
1 EGYPT	Arab Republic of Egypt 6.875 4/2040	USD	2	93.00	+10.07	+12.1%	8.57%	78.00	1/20/16	97.75	9/9/15
2 KENY	Republic of Kenya 11 9/2025	KES	4	100.00	+7.00	+7.5%	9.37%	86.14	7/8/16	100.00	7/29/16
3 MOROC	Kingdom of Morocco 5.5 12/2042	USD	2	114.27	+7.05	+6.6%	5.00%	92.00	1/21/16	114.29	7/28/16
4 SPAIN	Kingdom of Spain 3.45 7/2066	EUR	1	123.38	+7.52	+6.5%	2.85%	103.97	5/27/16	123.38	7/29/16
5 THSTAT	The State Treasury of The Republic of Poland 2.375 1/2036	EUR	1	109.06	+5.87	+5.7%	2.17%	98.62	3/23/16	109.06	7/29/16
APAC											
1 MONGAA	Mongolia 5.125 12/2022	USD	1	90.21	+7.72	+9.4%	8.74%	68.15	2/24/16	90.66	7/14/16
2 SRILAN	Democratic Socialist Republic of Sri Lanka 6.125 6/2025	USD	1	101.02	+7.32	+7.8%	7.09%	82.50	2/11/16	101.02	7/29/16
3 AUSTLA	Commonwealth of Australia 1.25 8/2040	AUD	3	120.63	+7.63	+6.7%		100.25	11/13/15	120.63	7/29/16
4 INDON	Republic of Indonesia 6.75 1/2044	USD	2	135.50	+8.40	+6.6%	4.94%	103.63	1/21/16	135.50	7/29/16
5 IGB	Republic of India 6.83 1/2039	INR	3	94.75	+5.83	+6.6%	7.89%	83.89	2/26/16	98.60	4/22/16

Source: IHS Markit

Table 12: July sovereign bond worst price performance

Worst performers

Ticker	Issue	CCY	Liq score	7/29 price	Change	% change	7/29 yield	One year low	Date	One year high	Date	
Americas												
1	ARGENT	Argentine Republic 7.625 4/2046	USD	2	106.58	-1.64	-1.5%	6.97%	97.11	5/4/16	109.25	7/4/16
2	FONDMIV	Fondo Mivivienda S.A. 3.375 4/2019	USD	1	101.77	-1.22	-1.2%	2.25%	98.54	2/11/16	103.50	7/19/16
3	COLOM	Republic of Colombia 3 3/2033	COP	3	90.48	-1.01	-1.1%		79.30	2/11/16	91.49	6/30/16
4	MEX	United Mexican States 8.5 12/2018	MXN	1	106.80	-1.15	-1.1%	4.98%	106.80	7/29/16	111.35	10/27/15
5	BLZE	Belize 5 2/2038	USD	3	55.80	-.57	-1.0%	12.34%	46.50	4/7/16	74.75	8/3/15
EMEA												
1	NGERIA	Federal Republic of Nigeria 16.39 1/2022	NGN	3	103.57	-6.45	-5.9%	13.75%	99.71	9/14/15	123.93	11/12/15
2	TURKEY	Republic of Turkey 4.875 4/2043	USD	2	92.86	-4.82	-4.9%	5.03%	82.13	9/29/15	101.57	7/11/16
3	NGERIA	Federal Republic of Nigeria 14.2 3/2024	NGN	3	94.21	-4.31	-4.4%	14.51%	88.40	9/9/15	121.46	11/26/15
4	TURKEY	Republic of Turkey 6.75 5/2040	USD	2	116.75	-5.13	-4.2%	5.15%	105.37	9/29/15	127.00	7/11/16
5	ANGOLA	Republic of Angola 9.5 11/2025	USD	2	95.04	-3.72	-3.8%	9.70%	78.71	2/11/16	100.25	11/24/15
APAC												
1	JAPAN	Japan .4 3/2056	JPY	1	102.38	-6.49	-6.0%	0.17%	101.47	6/8/16	113.12	7/6/16
2	SRILAN	Democratic Socialist Republic of Sri Lanka 8 1/2032	LKR	5	70.39	-2.97	-4.0%	11.78%	69.35	6/27/16	73.99	6/29/16
3	INDON	Republic of Indonesia 6 1/2027	IDR	4	78.38	-2.69	-3.3%	8.80%	73.79	9/30/15	88.66	4/19/16
4	THAI	Kingdom of Thailand 3.4 6/2036	THB	3	112.86	-2.82	-2.4%	2.41%	99.78	12/10/15	123.54	4/6/16
5	PHILIP	Republic of The Philippines 3.25 8/2023	PHP	5	104.88	-2.49	-2.3%	2.13%	90.78	2/3/16	107.70	4/20/16

Source: IHS Markit

Municipal bonds

Total municipal bond issuance dropped sharply to \$27.2bn in July, which is a 40% decline compared with the record setting prior month and 19% below last July's total (**Figure 7**). YTD issuance is only 2.6% below the same period in 2015. This somewhat tepid issuance during a time of record low rates indicates that governments were demonstrating a strong fiscal discipline. The widely held perception that low rates suggest a negative economic climate has made issuers reluctant to pile on new net debt this year.

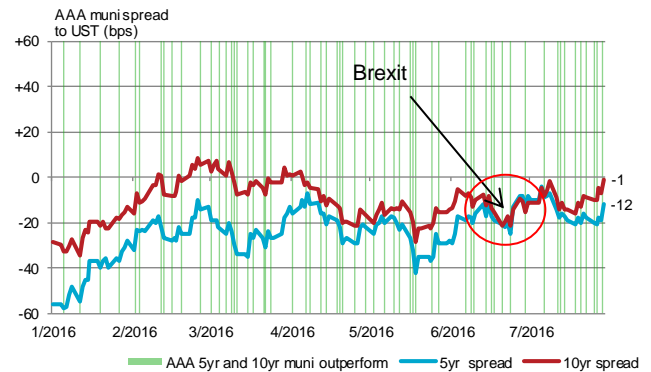
General obligation bond issuance was \$10.3bn, which is less than half of June's total. Revenue bond issuance declined \$7.2bn month-over-month, for a total of \$16.9bn in total.

Brexit briefly makes 10yr AAA municipal bond spreads to treasuries tighter than 5yr spreads

The relentless rally in interest rates and curve flattening after the Brexit vote briefly resulted in 10yr AAA municipal bond spreads to treasuries tightening through 5yr bonds until July 6th (**Figure 6**). However, both AAA 5- and 10-yr bonds are well off their tightest spreads vs treasuries this year of -58bps and -35bps, respectively, reported in early January.

Despite the gradual widening of AAA muni spread to treasuries and the equivalent increase in the more widely used municipal bond to treasury yield ratio measure, 5- and 10-yr municipal bonds outperformed treasuries on a yield spread prospective almost half the trading days in July (highlighted in green). Both 5- and 10-yr AAA municipal bonds outperformed treasuries on a yield spread basis 10 out of the 21 days in July, with only March reporting a slightly better 11 out of 23 trading days.

Figure 6: AAA 5yr and 10yr muni spreads to treasuries



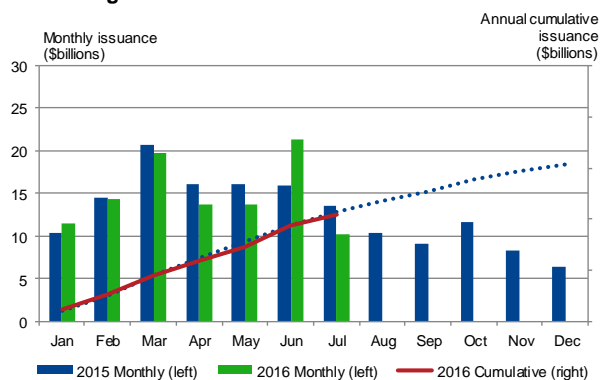
Source: IHS Markit

Puerto Rico's failure to make their July 1st GO payment triggers a CDS credit event

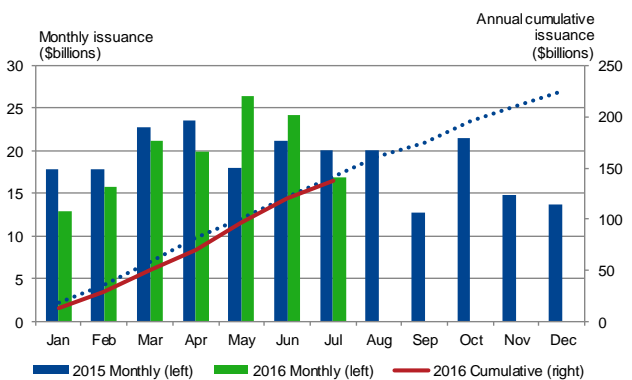
On July 18th, ISDA announced that the Commonwealth of Puerto Rico's recent failure to make the scheduled payment on their general obligation bond is being declared an event of default. This declaration will result in the scheduling of an auction to determine the standard recovery amount paid to holder of insurance on the general obligation bonds. The CDS is a constituent in MCDX 2010-21, which translates into approximately \$340m in exposure to the index based on the credit being 1/50th of the \$17bn in outstanding index contracts based on DTCC data.

Figure 7: Municipal bond issuance

General obligation



Revenue



Source: SIFMA

Table 13: July municipal revenue bond best price performance**Best performers**

	Issuer	Issue	Liq score	7/29 price	Change	% change	One year low	Date	One year high	Date
1	Delaware Transn Auth U S 301 Proj Rev	Revenue - Us 301 Project 2015 5 6/2055	2	120.19	+3.10	+2.6%	110.97	12/4/15	120.20	7/28/16
2	New Jersey St Transn Tr Fd Auth	Transportation Program - 2015-Aa 5.25 6/2041	2	113.97	+2.89	+2.6%	104.34	11/19/15	113.98	7/28/16
3	California Statewide Cmnty Dev Auth Rev	Revenue - Adventist Health System/West 2015-A 4.375 3/2044	2	114.80	+2.83	+2.5%	100.26	8/3/15	115.11	7/15/16
4	Massachusetts St Dev Fin Agy Rev	Revenue - Dana-Farber Cancer Institute Issue 2016-N 5 12/2041	2	124.84	+2.03	+1.7%	121.31	6/23/16	124.84	7/28/16
5	California Statewide Cmnty Dev Auth Rev	Revenue - Loma Linda University Medical Center 2014-A 5.5 12/2054	2	117.17	+1.86	+1.6%	103.35	11/4/15	117.17	7/29/16
6	Gainesville Fla Utils Sys Rev	Utilities System Revenue - 2014-B 5 10/2029	2	125.87	+1.91	+1.5%	117.69	8/3/15	126.91	7/7/16
7	Peace River/Manasota Regl Wtr Supply Auth Fla Rev	Utility System Refunding Revenue - 2014-B 5 10/2028	2	124.72	+1.77	+1.4%	115.17	8/3/15	125.22	6/24/16
8	Michigan Fin Auth Rev	Local Government Loan Program Revenue - 2014 C-3 5 7/2026	2	122.70	+1.71	+1.4%	113.04	9/16/15	123.63	7/7/16
9	St Johns Cnty Fla Sales Tax Rev	Sales Tax Revenue And Refunding - 2015 5 10/2031	2	123.76	+1.60	+1.3%	114.07	8/3/15	124.92	7/8/16
10	New Jersey St Transn Tr Fd Auth	Transportation System - 2010-D 5.25 12/2023	2	116.89	+1.48	+1.3%	106.97	9/22/15	116.89	7/29/16

Source: IHS Markit

Table 14: July municipal revenue bond worst price performance**Worst performers**

	Issuer	Issue	Liq score	7/29 price	Change	% change	One year low	Date	One year high	Date
1	Virgin Islands Pub Fin Auth Rev	Revenue (Virgin Islands Matc - Senior Lien/ Working Capital 2010 5 10/2029	2	100.59	-7.35	-6.8%	100.47	7/7/16	110.68	2/11/16
2	Union City Calif Cmnty Redev Agy Successor Agy Tax Allocation	Tax Allocation Refunding - Community Redevelopment Project 2015- 5 10/2031	2	123.07	-4.05	-3.2%	114.66	11/12/15	127.87	7/6/16
3	Guam Govt Business Privilege Tax Rev	Business Privilege Tax - 2011-A 5 1/2022	2	113.12	-3.54	-3.0%	112.86	9/16/15	118.27	6/16/16
4	University Calif Revs	Limited Project Revenue - 2015-I 5 5/2032	2	122.72	-3.37	-2.7%	115.10	9/16/15	126.80	7/6/16
5	Michigan Fin Auth Rev	Hospital Revenue And Refundi - Trinity Health Credit Group 2011- 5 12/2039	2	114.49	-2.93	-2.5%	107.35	11/17/15	117.64	6/27/16
6	California St Pub Wks Brd Lease Rev	Lease Revenue - Various Judicial Coucil Projects 2013-A 5 3/2038	2	115.90	-2.77	-2.3%	111.14	9/16/15	120.40	6/16/16
7	Gloucester Cnty N J Impt Auth Rev	Revenue Refunding - Rowan University Project 2015-B 5 7/2025	2	124.69	-2.64	-2.1%	118.49	5/26/16	128.08	7/6/16
8	Metropolitan Transn Auth N Y Rev	Transportation Revenue - 2015 Subseries A-1 5 11/2045	2	118.79	-2.47	-2.0%	109.95	11/12/15	122.03	7/6/16
9	Clark Cnty Nev Arpt Rev	Airport System Subordinate Lien Revenue - 2014 A-2 5 7/2029	2	120.73	-2.33	-1.9%	113.39	8/5/15	123.69	7/6/16
10	University Tex Perm Univ Fd	Permanent University Fund Refunding - 2006-B 5.25 7/2028	2	135.90	-2.42	-1.8%	126.41	11/12/15	138.84	7/4/16

Source: IHS Markit

Securitised products

Global securitised products rallied across the broader sector in July, as low rates, historically wide spreads, and strengthening US employment data increased overall investor demand. The US consumer ABS market had a particularly strong month, as a surge in new issuance was met with incessant investor demand and spreads tightening gradually alongside each new deal that was priced. We note that the US ABS rally also included previously out of favour sectors like subprime auto subordinates and private/FFELP student loan paper. European ABS spreads also tightened on the month, but that price action was mostly driven by anaemic supply during the month, which most market participants expect to slow down even further in August.

AAA CLO spreads were mostly unchanged in July, while 1.0 and 2.0 BBBs tightened 34bps and 81bps, respectively, on the month (**Figure 8**). US and European AAA 1.0 CLOs ended the month flat at L+149bps and L+124bps, respectively, with the latter only 2bps lower than the widest level reported in late-February. US AAA 2.0 CLOs closed a modest 2bps tighter at L+172bps, which is mid-range of the past year's trading range. The lower end of the capital structure tightened the most, with BB 2.0 CLOs tightening between 100bps and 200bps in July to end the month in a range of L+710 bps to L+950bps.

First risk retention compliant CMBS deal priced

The highlight of July for the CMBS market was the pricing of the \$871m WFCM 2016-BNK1, which was the first US risk compliant transaction to enter the market. The deal provided a good test for the market for compliant deals, as the actual risk retention mandate does not go into effect until this December. We note that the deal's sponsors chose to comply by purchasing a vertical slice of the capital structure.

CMBS spreads tightened across the credit curve in July, with AAA 8bps, AA 38bps, A 45bps, BBB 67bps, and BBB- 66bps tighter on the month (**Figure 9**). We note that the AA rating category at swaps +227bps is the only one that is inside its one year mid-range (swaps + 241bps).

Loan balance pay-ups continue to surge

Loan balance stories reached record levels in July (**Table 15**). Fannie Mae and Freddie Mac pay-ups outperformed Ginnie Mae across the coupon stack, with LLB and HLB pools performing best among all the loan balance categories. Pay-ups for the 3.5% coupon cohort increased across most story types, with the exception of Fannie/Freddie low fico and investor pools, and Ginnie new production.

Non-agency rally sharply on the tailwinds from the recent Countrywide settlement payments

Non-agency MBS spreads tightened in July, with lower credit CRT bonds among the best performers during the month. Legacy non-agency continues to be met with stronger demand, as the combination of very little jumbo MBS supply entering the market and the overall optimism in the US residential real estate market driven by low mortgage rates and improving labour conditions. The additional benefits of the legacy collateral is that the vast majority of the worst of the borrowers have been purged from those pools, with most homeowners in the current pools residing in the property for over 10 years by now. We note that the manufactured housing ABS market had a stabilization in performance a few years after the record delinquencies and defaults that began in 2003, although we caveat that the MH market is much smaller and less complex than the non-agency market.

The large Countrywide settlement payments made in June provided a shot of adrenaline into the legacy non-agency market. IHS Markit's MBS team published an article on July 28th entitled [Recovery Go! Investors try to catch them all](#) that discussed the Countrywide settlement, as well as several other anticipated settlements. That positive momentum could potentially continue as a result of the August 12th announcement that the NY State court approved the \$4.5bn JP Morgan settlement, which will impact over 300 of the issuer's deals. Outside the obvious benefit of a discount price bond receiving the additional principal payment, the settlement payments benefit the entire capitals structure in the form of increased credit support through the deleveraging of the AAAs and potentially lower capital requirements for holders of bonds that had a significant increase in credit enhancement.

Figure 8: US and European CLO AAA/BBB spread summary

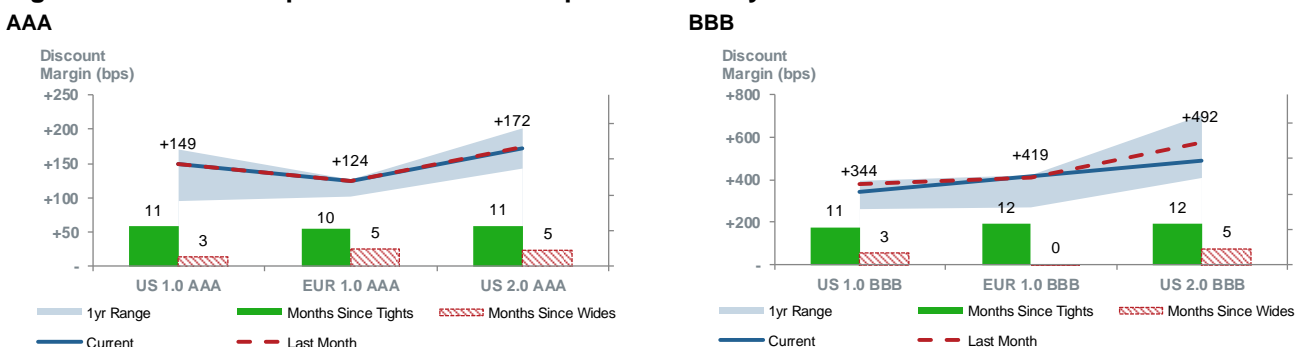


Table 15: July 2016 agency specified pools pay-ups in ticks (1/32 points)

FNM/FHL 30Y Specified Pools Pay-ups					
Coupon	3	3.5	4	4.5	5
LLB (85K)	0-31	1-30	2-23	2-28	3-07
MLB (110K)	0-22	1-22	2-13	2-14	2-11
HLB (150K)	0-20	1-11	1-24	1-23	1-15
New Prod	0-01	0-04	0-07	0-15	N/A
Low FICO	0-04	0-10	0-14	0-12	0-28
Investor	0-09	0-06	0-10	0-13	0-21
MHA <90	0-01	0-08	0-08	0-11	0-18
MHA <95	0-14	0-07	0-17	0-22	0-23
MHA <100	0-11	0-15	0-22	0-25	0-22
MHA <105	0-11	0-17	0-16	0-29	1-06
<125 LTV	0-08	1-02	0-31	1-18	2-02
125+ LTV	0-26	1-03	1-21	2-00	2-09

Source: IHS Markit

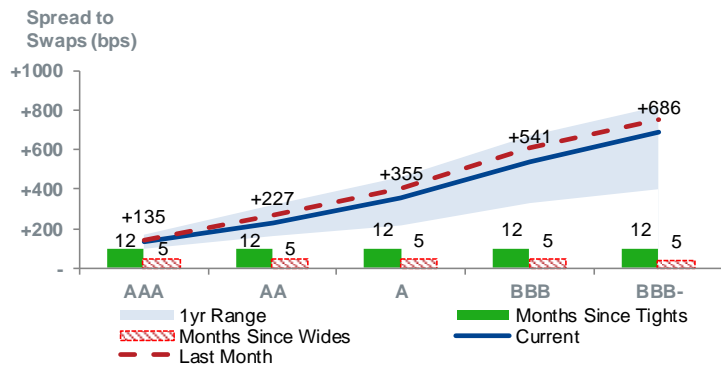
MoM Change				
3	3.5	4	4.5	5
+0-07	+0-08	+0-12	+0-10	+0-06
-0-01	+0-04	+0-05	+0-04	-0-09
+0-04	+0-05	+0-05	+0-03	+0-06
+0-01	+0-01	0-00	-0-03	N/A
-0-04	-0-01	-0-03	0-00	+0-05
0-00	-0-01	+0-02	-0-02	0-00
-0-01	+0-02	+0-01	-0-01	0-00
-0-02	+0-02	+0-04	+0-03	+0-01
0-00	+0-01	+0-07	+0-05	0-00
-0-06	+0-01	+0-02	-0-01	+0-05
+0-05	+0-01	0-00	-0-09	0-00
0-00	+0-13	+0-03	0-00	0-00

GNMA 30Y Specified Pools Pay-ups					
Coupon	3	3.5	4	4.5	5
LLB ₁ (85K)	0-21	1-15	2-27	2-08	1-31
LLB ₂ (110K)	0-13	1-10	2-16	2-14	3-08
MLB (125K)	0-05	1-00	1-23	1-30	1-10
HLB ₁ (150K)	0-11	1-04	1-28	2-09	2-02
HLB ₂ (175K)	0-10	0-23	1-01	0-31	0-28
New Prod	0-03	0-03	0-14	0-23	0-15
PR Geo	0-10	1-14	2-13	3-06	1-29

Source: IHS Markit

MoM Change				
3	3.5	4	4.5	5
+0-04	+0-07	0-00	0-00	0-00
-0-01	+0-06	0-00	0-00	0-00
-0-02	+0-08	0-00	-0-01	0-00
-0-01	+0-05	0-00	+0-02	-0-13
0-00	+0-16	+0-22	0-00	0-00
-0-02	-0-03	0-00	-0-03	0-00
+0-01	+0-01	0-00	0-00	0-00

Figure 9: CMBS credit curve spread to swaps (10-year)



Source: Trepp

Table 16: Global consumer ABS spread summary

	Current (bps)	MoM change (bps)	1yr tight	Date	1yr wide	Date
US Credit Cards - Fixed-Rate						
2-3yr AAA US Swaps	+25	-8	+27	8/4/15	+58	3/11/16
4-5yr AAA US Swaps	+41	-1	+42	7/11/16	+71	4/18/16
US Credit Card - Floating-Rate						
2-3yr AAA US LIBOR DM	+30	-	+28	9/17/15	+40	3/16/16
4-5yr AAA US LIBOR DM	+45	-21	+42	8/3/15	+96	5/16/16
US Prime Auto - Fixed-Rate						
0-2yr AAA EDSF	+22	-3	+25	7/13/16	+45	3/29/16
2+yr AAA US Swaps	+28	-4	+32	7/13/16	+60	3/29/16
European Prime Auto Loan - Floating-Rate						
AAA EUR LIBOR DM	+25	-18	+25	7/29/16	+54	2/5/16
US Subprime Auto - Fixed-Rate						
1-2-yr AAA EDSF	+53	-9	+51	8/6/15	+84	5/12/16
2+yr AAA US Swaps	+65	-10	+61	8/10/15	+97	11/5/15
US Equipment - Fixed-Rate						
2+yr AAA US Swaps	+35	-27	+45	8/18/15	+85	6/14/16
European Equipment - Floating-Rate						
A EUR LIBOR DM	+101	-14	+101	7/29/16	+174	9/7/15
US FFELP Student Loans - Floating-Rate						
2-4yr AAA 3mo US LIBOR DM	+68	-58	+62	8/4/15	+151	3/25/16
10+yr AAA 3mo US LIBOR DM	+128	-49	+124	8/3/15	+191	3/21/16

Source: IHS Markit

Chris Fenske
Co-head of fixed income
pricing research
+1 212-205-7142
chris.fenske@ihsmarkit.com

Gavan Nolan
Co-head of fixed income
pricing research
+44 207-260-2232
gavan.nolan@ihsmarkit.com

The intellectual property rights to this report provided herein are owned by Markit Group limited. Any unauthorised use, including but not limited to copying, distributing, transmitting or otherwise of any data appearing is not permitted without Markit's prior consent. Markit shall not have any liability, duty or obligation for or relating to the content or information ("data") contained herein, any errors, inaccuracies, omission or delays in the data, or for any actions taken in reliance thereon. In no event shall Markit be liable for any special, incidental, consequential damages, arising out of the use of the data. Markit is a trademark owned by the Markit group. This report does not constitute nor shall it be construed as an offer by Markit to buy or sell any particular security, financial instrument or financial service. Markit provides a variety of services and products to various clients, including the issuers of securities that Markit may refer to in this report. Markit receives compensation and fees in connection with these services and products. The analysis provided in this report is of a general and impersonal nature. Such analysis is based on data derived from Markit's proprietary products that are offered for sale by Markit. Data from third party sources may yield different results. This report shall not be construed as investment advice and the data contained herein has not been adapted to, and is not intended for use in, any particular investment strategy or portfolio. Markit makes no representations that the data contained herein is appropriate for any investor or investment strategy. This report does not establish a fiduciary relationship between Markit and any recipient of this report, and Markit disclaims any fiduciary duties in that regard. This report does not and shall not be construed as providing any recommendations as to whether it is appropriate for any person or entity to "buy", "sell" or "hold" a particular investment.