

Global fixed income monthly focus – September 2016

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Continued strength in the US labour market is increasing overall expectations for a Fed rate increase by the year end. Central banks appeared to be almost in a holding pattern for most of the month, with the Bank of England being among the most aggressive ahead of a potential hard Brexit. The Bank of England commenced its Corporate Bond Purchase Scheme (CBPS) on September 27 as it extended its QE programme to corporate debt. Markets anticipated the start of the intervention, leading to strong performance in sterling bonds over the summer.

- On October 13, 2016 the US Securities and Exchange Commission (SEC) approved its long-awaited final rules regarding [Investment Company Liquidity Risk Management Program](#) and [Investment Company Swing Pricing](#) (“Final Rules”) alongside new final rules concerning [Investment Company Reporting Modernization](#). We anticipate that the Final Rules will bring liquidity to the front and centre of fund risk management programs. Below we summarize some of the key aspects of the Final Rules
- The average spread basis between North American and European loans ended September back at its one year low of -52bps (originally reached in July) after beginning the month at -43bps
- CDS spreads ended the month on a negative note, driven by financials. The concerns over Deutsche Bank’s future, in particular the threat of a CoCo triggering due to the large fine imposed by the US Department of Justice, led to bearish sentiment affecting the whole sector
- Total returns in the [Markit iBoxx £ Liquid Investment Grade Index](#) were down 1.59%, lagging well behind the unimpressive -0.27% and -0.12% in the [Markit iBoxx \\$ Liquid Investment Grade Index](#) and the [Markit iBoxx € Liquid Investment Grade Index](#), respectively
- Philippines was the worst performing sovereign CDS over the month, widening by 31.5% to 116bps, while Mexico followed with a widening of 20% to 166bps
- Total municipal bond issuance increased by \$36.9bn in September, which brings revenue bond issuance 7.9% higher and general obligation issuance 6.7% higher than the same period of time last year
- Most securitised products sectors reached their tightest spreads over the past year in September, with spreads continuing to grind tighter across the broader sector. Increases in US and European consumer ABS supply continue to be met with strong demand from investors

Regulatory update

Select highlights of SEC Investment Company Liquidity Risk Management Program and Swing Pricing Final Rulemakings

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Goal of the Final Rules

The Final Rules are a follow-up to [Financial Stability Board](#) (FSB) and the US [Financial Stability Oversight Council](#) (FSOC) consultations to curb perceived liquidity risk concerns coming out of open-end mutual fund and exchange-traded fund (ETF) investment in fixed income and other potentially illiquid asset classes, such as loans. The Final Rules are the first finalized effort by regulators to mitigate the perceived “risk that [open-end] funds [and certain exchange-traded funds (“ETFs”)] will be unable to meet their redemption obligations and mitigating dilution of the interests of fund shareholders.”

Liquidity risk management requirement and board responsibilities

The starting place for the new Final Rules is the requirement to implement a written liquidity risk management program overseen by the fund’s board. A fund’s board would also have to review this program’s effectiveness on at least an annual basis. In contrast to the [proposed rules](#), the board would not be responsible for determining a specific minimum for more liquid assets. Under the Final Rules, the board would instead review a fund’s “Highly Liquid Investment Minimum” as a part of its review of the written report relating to the fund’s liquidity risk management program. The board would also have to approve a fund’s swing pricing policies and procedures.

Highly Liquid Investment Minimum and Illiquid Investment limit

The Final Rules set a hard limit on investments in “illiquid” investments and a discretionary minimum for investments in “highly liquid” assets. The Illiquid Investment limit is set at 15% of net assets. The Highly Liquid Investment Minimum is set at the discretion of the fund’s investment manager or its officer(s). “Illiquid” and “highly liquid” investments are defined in the next section.

Liquidity risk classification buckets

In a concession to commenters, the Final Rules reduced number of asset liquidity classification buckets from the proposed six to four buckets based on how long it can be “reasonably expected” to sell and/or “convert to cash” (settle) the asset without “significantly changing the market value” based on “current market conditions”:

- (i) “[Highly liquid](#)” investments are those that can be “converted to cash” within three calendar days;
- (ii) “[Moderately liquid](#)” investments are those that can be “converted to cash” within three and seven calendar days;
- (iii) “[Less liquid](#)” investments are those that can be sold within seven calendar days but “conversion to cash” is reasonably expected to occur in more than seven days; and
- (iv) “[Illiquid](#)” investments are those that cannot be “reasonably expected to be sold without a significant change in price within seven calendar days

The proposal also changed the proposed position-level liquidity classifications to asset-class-level - unless market, trading, or investment-specific considerations warrant a position-level classification.

The “significantly changing the market value” standard

In response to comments, the SEC amended the proposed “material affect” on price standard from the proposal to a “significantly changing the market value” standard for the purpose of classifying assets by liquidity. The SEC explained that the new standard does not require a fund to actually re-value or re-price the investment for classification purposes, nor does the standard require the fund to incorporate general market movements in liquidity determinations or estimate market impact precisely.

In-Kind and Unit Investment Trust (UIT) ETFs

UIT ETFs are not subject to the Final Rules while “In-Kind” ETFs, defined as ETFs that generally meet redemptions “through in-kind transfers of securities, positions, and assets” with only a “de minimis” amount of cash transfers. In-Kind ETFs are not required to classify their portfolio investments or comply with the highly liquid investment minimum requirement.

Form N-LIQUID

The Final Rules added a new (not proposed) Form N-LIQUID that would be confidentially submitted to the SEC within one business day after either the fund’s level of “illiquid” assets exceeds 15% of its net assets or seven consecutive days when its “highly liquid” investments fall below the fund’s minimum for more than a brief period of time.

Swing pricing

The swing pricing rule will permit mutual funds to use swing pricing – the process of adjusting a fund’s net asset value to pass on to purchasing or redeeming shareholders costs associated with their trading activity. The swing pricing allowance is designed to protect non-redeeming shareholders from dilution associated with shareholder purchases and redemptions and would be another tool to help funds manage liquidity risks.

A fund that chooses to use swing pricing would adjust its net asset value by a specified amount– the swing factor – once the level of net purchases into or net redemptions from the fund has exceeded a specified percentage or percentages of the fund’s net asset value known as the swing threshold. A fund’s swing pricing policies and procedures would have to specify the process for how the fund’s swing factor and swing threshold would be determined (taking into account certain considerations) and establish and disclose an upper limit on the swing factor used that may not exceed 2% of net asset value per share.

Forms

The Final Rules would require funds to describe their procedures for redeeming fund shares, the number of days in which the fund typically expects to pay redemption proceeds, and the methods for meeting redemption requests in an amended Form N-1A. Funds taking advantage of swing pricing would be required to make certain reports relating to swing pricing, including an explanation of a fund’s use of swing pricing in its registration statement.

On the Form N-PORT, a fund will be required to report the percentages of its portfolio representing the four liquidity classification buckets at an asset-class level. These disclosures would be made public after a 60-day delay each fiscal quarter. On a confidential basis to the SEC via the Form N-PORT, funds also will be required to report position-level liquidity classification information to the Commission and information regarding a fund’s Highly Liquid Investment Minimum.

On the Form N-CEN, funds will be required to disclose information regarding the use of lines of credit and interfund borrowing and lending, and would require an ETF to report if it is an in-kind ETF. The swing pricing amendments would add a new item to Form N-CEN that would require a fund to report information regarding the use of swing pricing, including a fund’s swing factor upper limit.

Compliance date

Compliance with the Final Rules will be required by December 1, 2018 for open-end funds, including open-end ETFs, and by June 1, 2019 for “smaller entities.”

Leveraged loans

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

The average spread basis between North American and European loans ended September back at its one year low of -52bps (originally reached in July) after beginning the month at -43bps (**Figure 1**). North American and European spreads were tighter across the entire CCC+ rating category for every sector except energy (**Table 3**). Both regions' energy spreads widened over 20bps across ratings, with the exception of CCC+, which tightened 33bps in North America and 22bps in Europe. The BB+ rating group was the worst performer among the rating categories, with most BB+ European sectors widening modestly and the sectors that actually tightened still underperforming all other rating categories for both regions.

The leveraged loan credit curve was flatter at the far end of the curve during the month (**Figure 2**). B-/CCC+ flattened the most at -56bps on the month, with BB-/B+ a more modest -6bps on the month.

North American consumer goods and services dominated the best par loan performers list

North American consumer goods and services issues made up four of the five best and three out of five of the worst performing par loans in September (**Table 1**). The baseball and hockey equipment maker Performance Sports Group's Bauer Performance 4/14 TLB issue was the best performing par loan, increasing 11.7% in price to end the month at an 89.65 price. According to *The Globe and Mail*¹, the company's shares rallied before the company's largest shareholder said it is "evaluating the company's financial position and may consider proposals involving a refinancing of PSG's debt or even a sale of the business or some of its assets." Harrah's 6/14 B7 Non RSA TLB +6.0%, Savers 10/12 Cov-Lite TLC +5.0%, and FleetPride 11/12 TL +4.7% were the other strong performing consumer goods and services issues in the par loan category.

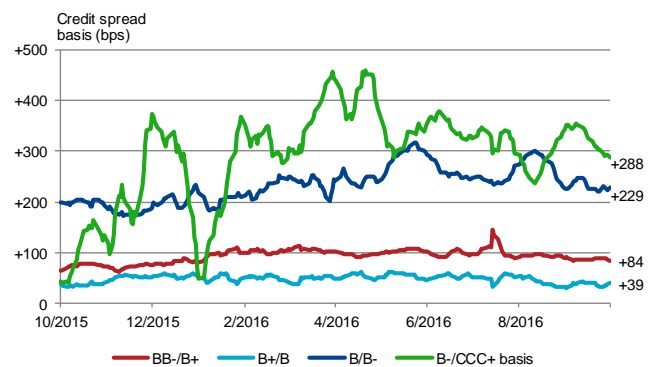
Arch Coal (5/12) TLB was the best performing distressed loan globally, increasing 47.7% to end the month at a 76.33 price. The US bankruptcy court approved the company's plan to eliminate \$4.7bn in debt and emerge from chapter 11 bankruptcy.

Figure 1: North America to Europe average spread to LIBOR basis across all ratings and sectors



Source: IHS Markit

Figure 2: North America credit spread to LIBOR basis



Source: IHS Markit

Distressed technology company issues were the best performers in Europe

Distressed technology issues SkillSoft 4/14 Cov-Lite 2nd Lien TL and PagesJaunes 6/14 (EUR) A7 TL were the best performers in Europe during the month, increasing 15.4% and 9.2%, respectively. In the case of PagesJaunes, some of the rally of that issue may be driven by the company's owner SoLocal proposing a debt restructuring plan that is being met by resistance from some shareholders.

Autobar 10/14 Senior TL was the worst performer in the European distressed category, declining 11.1% to end the month at a 63.55 price.

¹ Source: the Globe and Mail article, "[Shares of Performance Sports tumble 10% on heels of last week's surge](#)" by Christina Pellegrini published on September 6th 2016.

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

LXID	Loan Name	Sector	Country	Liq score	9/30 price	% change	One year low	Date	One year high	Date	
Best performers											
Par											
1	LX135673	Bauer Performance 4/14 TLB	Consumer Goods	CAN	4	89.65	+11.7%	75.10	4/13/16	97.00	12/17/15
2	LX137320	Harrah's 6/14 B7 Non RSA TLB	Consumer Services	USA	1	114.19	+6.0%	80.17	2/25/16	114.19	9/30/16
3	LX126298	Savers 10/12 Cov-Lite TLC	Consumer Services	USA	3	91.20	+5.0%	72.17	2/18/16	91.20	9/30/16
4	LX128299	Hamilton Sundstrand 2/13 Cov-Lite TL	Financials	USA	2	93.33	+4.9%	80.13	2/22/16	93.75	8/12/16
5	LX126795	FleetPride 11/12 TL	Consumer Goods	USA	3	88.83	+4.7%	67.88	1/22/16	96.38	10/5/15
Distressed											
1	LX124057	Arch Coal (5/12) TLb	Energy	USA	2	76.33	+47.7%	27.25	2/11/16	76.33	9/30/16
2	LX134515	Samson 12/13 Cov-Lite 2nd Lien TL	Energy	USA	2	27.43	+17.2%	13.13	10/7/15	29.25	9/14/16
3	LX134883	Phillips Pet Food 1/14 2nd Lien TL	Consumer Services	USA	4	82.25	+16.9%	67.88	2/15/16	82.25	9/30/16
4	LX132557	Peabody Energy 9/13 Cov-Lite TL	Energy	USA	1	78.75	+14.5%	34.35	3/1/16	78.76	9/28/16
5	LX128751	Total Safety 3/13 2nd Lien TL	Industrials	USA	4	39.67	+13.3%	35.00	9/5/16	77.83	10/1/15
Worst performers											
Par											
1	LX148271	Concordia 10/15 (GBP) Cov-Lite TL	Healthcare	CAN	1	90.42	-5.9%	90.42	9/30/16	99.75	6/6/16
2	LX130126	CareStream 6/13 2nd Lien Cov-Lite TL	Healthcare	USA	4	90.25	-4.0%	75.80	2/25/16	96.38	8/16/16
3	LX144231	Acosta 4/15 TLB1	Consumer Services	USA	2	95.00	-2.3%	93.58	2/25/16	99.75	6/6/16
4	LX141526	Toys 'R' Us 10/14 Cov-Lite TLB4	Consumer Services	USA	1	86.56	-2.2%	70.96	12/14/15	88.83	8/23/16
5	LX135908	Neiman Marcus 3/14 Cov-Lite TL	Consumer Services	USA	1	91.88	-2.0%	83.29	2/19/16	98.02	11/5/15
Distressed											
1	LX118816	TXU/TCEH 4/11 Extended TL	Utilities	USA	1	28.77	-10.1%	27.03	4/5/16	37.86	10/1/15
2	LX148810	LightSquared 12/15 2nd Lien TL	Technology	USA	4	64.50	-7.9%	61.75	6/29/16	73.83	2/10/16
3	LX131817	Rue 21 10/13 TLB	Consumer Services	USA	2	49.83	-6.9%	48.17	8/2/16	86.50	11/6/15
4	LX128047	CrossMark 1/13 TL	Consumer Services	USA	4	64.33	-5.2%	63.83	9/27/16	87.30	10/12/15
5	LX135229	Avaya 1/14 B6 TLB	Technology	USA	1	75.63	-3.3%	65.33	2/19/16	88.08	11/12/15

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: September European loans best and worst price performance²

Europe

	LXID	Loan Name	Sector	Country	Liq score	9/30 price	% change	One year low	Date	One year high	Date
Best performers											
Par											
1	LX147068	Maxeda 7/15 E1 TL	Consumer Services	NLD	2	90.00	+8.1%	79.25	1/11/16	92.32	10/9/15
2	LX136501	SkillSoft 4/14 Cov-Lite TL	Technology	LUX	1	88.44	+5.8%	71.13	2/3/16	89.80	10/2/15
3	LX128950	Doncasters 4/13 (GBP) Cov-Lite TL	Industrials	GBR	4	98.55	+5.5%	91.20	3/2/16	99.26	10/9/15
4	LX139557	Endemol 8/14 (EUR) Cov-Lite TL	Consumer Services	NLD	2	91.44	+5.4%	83.83	6/2/16	99.38	10/2/15
5	LX137655	All3Media 6/14 (GBP) TLB	Industrials	GBR	2	98.34	+3.4%	87.75	2/29/16	98.34	9/30/16
Distressed											
1	LX136503	SkillSoft 4/14 Cov-Lite 2nd Lien TL	Technology	LUX	1	60.00	+15.4%	42.00	3/2/16	84.88	10/2/15
2	LX137914	PagesJaunes 6/14 (EUR) A7 TL	Technology	FRA	1	61.75	+9.2%	49.40	3/11/16	67.00	11/25/15
3	LX139562	Endemol 8/14 (USD) Cov-Lite 2nd Lien TL	Consumer Services	NLD	2	73.80	+7.2%	63.33	6/27/16	90.17	10/6/15
4	LX121460	Jack Wolfskin (2nd Lien 8/11) Hybrid TL	Consumer Goods	DEU	4	70.00	+7.1%	63.13	6/28/16	75.70	10/6/15
5	LX139588	Expro Holdings 8/14 Cov-Lite TL	Energy	LUX	1	83.47	+5.4%	57.91	2/16/16	83.47	9/30/16
Worst performers											
Par											
1	LX146944	Amedes Holding 7/15 TLB	Healthcare	DEU	1	96.95	-3.8%	96.94	9/28/16	100.81	9/5/16
2	LX137596	Agrokor 5/14 PIK Toggle (PIK 10.50%) TL	Consumer Goods	HRV	4	90.38	-3.6%	90.17	9/27/16	100.21	10/1/15
3	LX152168	HC Starck 3/16 (EUR) TLE	Basic Materials	DEU	3	85.50	-1.9%	85.30	9/1/16	93.00	4/12/16
4	LX149978	Hunkemoller 2/16 TLB	Consumer Services	NLD	5	98.25	-1.8%	98.25	9/30/16	100.17	8/29/16
5	LX132405	Hilding Anders 9/13 (EUR) 2nd Lien Extended TL	Consumer Goods	SWE	4	86.63	-0.7%	83.63	3/1/16	93.00	11/19/15
Distressed											
1	LX141716	Autobar 10/14 Senior TL	Consumer Services	NLD	3	63.55	-11.1%	62.50	6/24/16	93.83	10/2/15
2	LX110984	HC Starck 11/06 (EUR) 2nd Lien TLB	Basic Materials	DEU	5	54.20	-8.5%	53.60	9/19/16	82.75	3/31/16
3	LX133025	CBR 9/13 Extended B/C Pro Rata	Consumer Services	DEU	4	84.10	-2.3%	80.17	3/1/16	97.25	10/13/15
4	LX068349	Ecobat 5/07 (EUR) PIK TL	Industrials	GBR	2	23.71	-2.2%	19.50	5/30/16	24.25	8/31/16
5	LX126785	Cortefiel 9/12 Extended PIK TLB2	Consumer Services	ESP	2	63.50	-1.3%	55.50	7/1/16	85.00	12/8/15

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	-10	+2	-12	-10	-16	-9	-7	-64
	EU	+0	+14	-2	+1	-5	+1	+3	-53
	Change NA-EU	-10.4	-11.5	-10.2	-10.3	-10.3	-10.1	-10.4	-10.5
Consumer Goods	NA	-13	-1	-15	-13	-19	-13	-11	-67
	EU	-3	+11	-5	-2	-8	-2	+0	-56
	Current NA-EU	-10.7	-11.9	-10.5	-10.7	-10.7	-10.5	-10.8	-10.8
Consumer Services	NA	-19	-7	-21	-19	-25	-19	-17	-73
	EU	-9	+5	-11	-9	-15	-8	-6	-63
	Current NA-EU	-10.4	-11.6	-10.2	-10.4	-10.4	-10.2	-10.5	-10.5
Energy	NA	+21	+33	+19	+21	+15	+22	+24	-33
	EU	+31	+45	+29	+32	+26	+32	+34	-22
	Current NA-EU	-10.6	-11.8	-10.4	-10.6	-10.6	-10.4	-10.7	-10.7
Financials	NA	-19	-6	-21	-18	-24	-18	-16	-72
	EU	-8	+5	-11	-8	-14	-8	-5	-62
	Current NA-EU	-10.2	-11.4	-10.0	-10.2	-10.2	-10.0	-10.3	-10.3
Healthcare	NA	-21	-9	-23	-20	-27	-20	-18	-75
	EU	-10	+3	-12	-10	-16	-10	-7	-64
	Current NA-EU	-10.8	-11.9	-10.6	-10.7	-10.7	-10.5	-10.8	-10.9
Industrials	NA	-19	-7	-21	-19	-25	-19	-16	-73
	EU	-8	+5	-11	-8	-14	-8	-6	-62
	Current NA-EU	-10.7	-11.9	-10.6	-10.7	-10.7	-10.5	-10.8	-10.9
Technology	NA	-25	-13	-27	-25	-31	-25	-23	-79
	EU	-15	-2	-18	-15	-21	-15	-12	-69
	Current NA-EU	-10.1	-11.3	-9.9	-10.1	-10.1	-9.8	-10.1	-10.2
Telecommunication Services	NA	-21	-9	-23	-20	-27	-20	-18	-75
	EU	-10	+3	-13	-10	-16	-10	-7	-64
	Current NA-EU	-10.6	-11.8	-10.4	-10.6	-10.6	-10.4	-10.7	-10.7
Utilities	NA	-19	-7	-21	-19	-25	-19	-16	-73
	EU	-9	+5	-11	-8	-14	-8	-6	-62
	Current NA-EU	-10.7	-11.9	-10.5	-10.7	-10.7	-10.4	-10.8	-10.8

Source: IHS Markit

Credit default swaps

Semi-annual roll dominates CDS activity and almost wipes out the Markit iTraxx skew

The CDS market in September is typically dominated by one event: the semi-annual roll. The outperformance of single names observed during August was maintained in the run up to the roll on September 20, with the skew between the [Markit iTraxx](#) indices and their theoretical levels all but eliminated.

However, it was business as usual after the roll – the skew on the [Markit iTraxx Europe](#) was back to 5bps by month-end and on the [Markit iTraxx Crossover](#) it was 7bps, both seeing single names trading wider than indices.

Deutsche Bank drives financial CDS wider

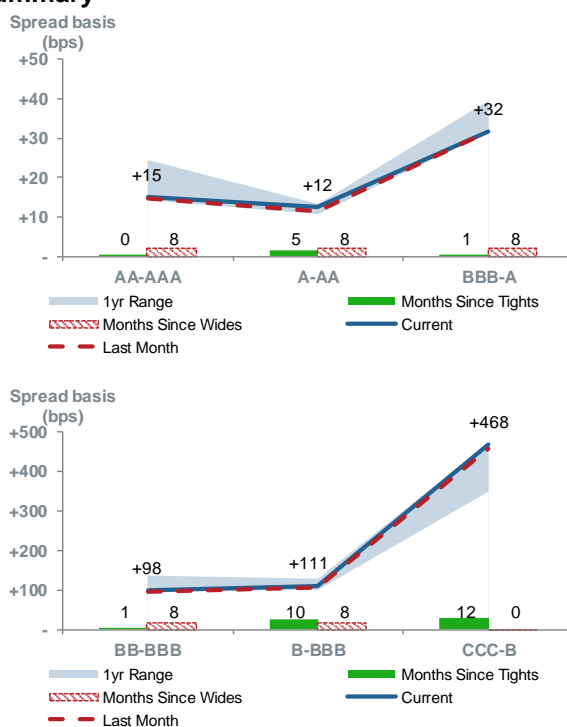
Spreads ended the month on a negative note, driven by financials. The concerns over Deutsche Bank’s future, in particular the threat of a CoCo triggering due to the large fine imposed by the US Department of Justice, led to bearish sentiment affecting the whole sector.

Deutsche Bank’s senior five-year spreads closed at 251bps on September 26, which is 156bps wider than where it started the year. If this wasn’t bad enough, the closing level was 5bps wider than Glencore, leaving Deutsche Bank as the widest name in the [Markit iTraxx Europe](#).

This is a significant development, and reflects the negative sentiment surrounding the German bank. But the movements in subordinated, rather than CDS, are probably more indicative of the wider malaise affecting European banks. The [Markit iTraxx Subordinated Financials](#) index hit 247bps on September 29, 60bps wider than the level earlier this month. The index is now trading at a multiple of 2.43 to its senior sibling. It has only surpassed this multiple three times since the introduction of the latest ISDA definitions in October 2014. The first was in the days following the change in definitions, the second was in February of this year, and the third on the day after Brexit.

With the exception of Brexit, all of the previous circumstances occurred when the spectre of bail-ins was stalking the market and junior segments of the capital structure were perceived to be at risk. Banco Espírito Santo defaulted in August 2014, leaving subordinated bond holders wary of further cases of government involvement. In February of this year Deutsche Bank’s CoCo bonds were rumoured to be close to triggering, and the same speculation helped push subordinated spreads to their current elevated levels.

Figure 3: Global CDS sector ratings spread basis summary



Source: IHS Markit

European insurer spreads widen on the heels of Deutsche Bank

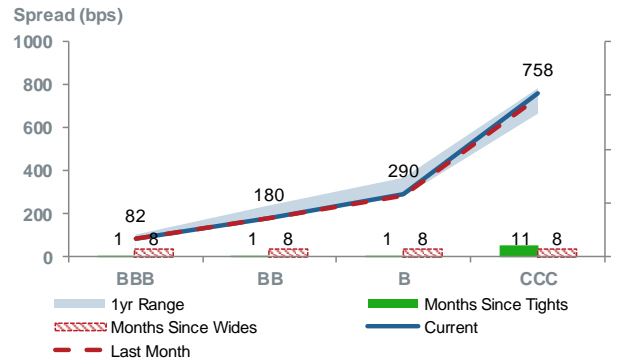
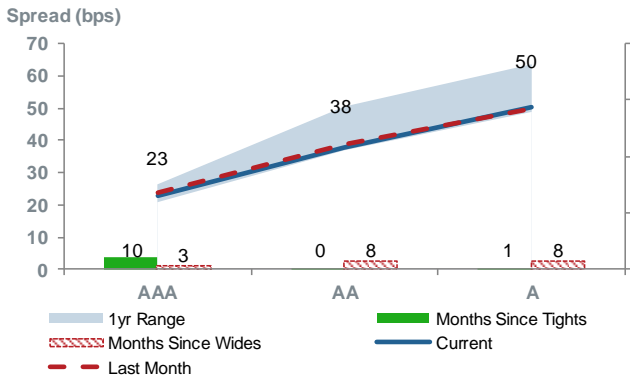
Deutsche Bank’s problems had a knock on effect on European insurers, which dominated the list of worst performers in September (**Table 5**). The sector is already struggling with ultra-low or negative interest rates: a trend that shows no sign of changing.

Retailers worst performers in North America

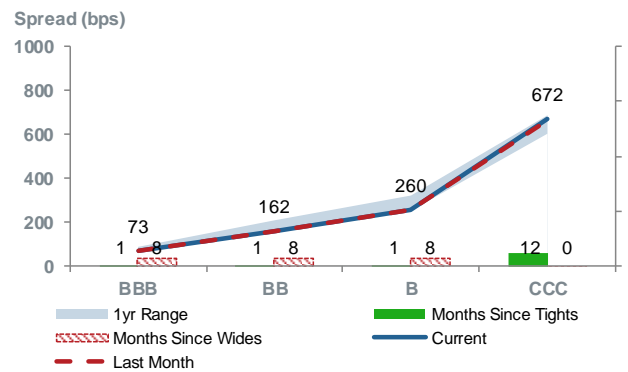
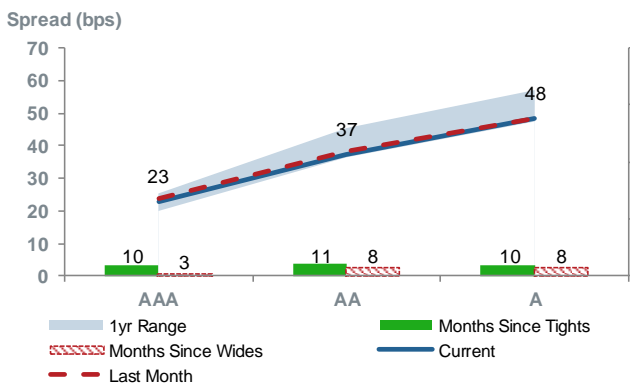
Retailers were well represented in North America’s worst performers, perhaps a reflection of impending US interest rate rises. Monetary policies in the US and Europe are clearly moving in different directions, and this will no doubt have a bearing on relative movements in the CDS market.

Figure 4: September regional CDS sector spread summary

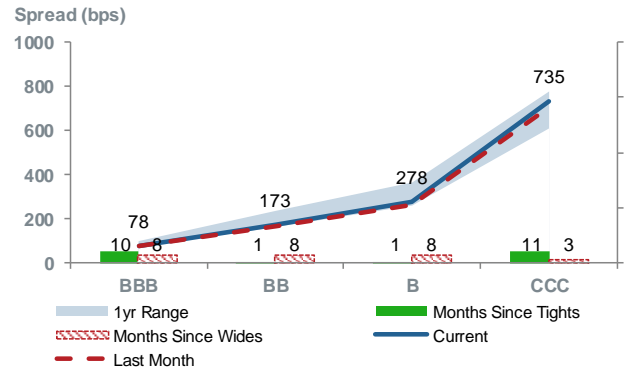
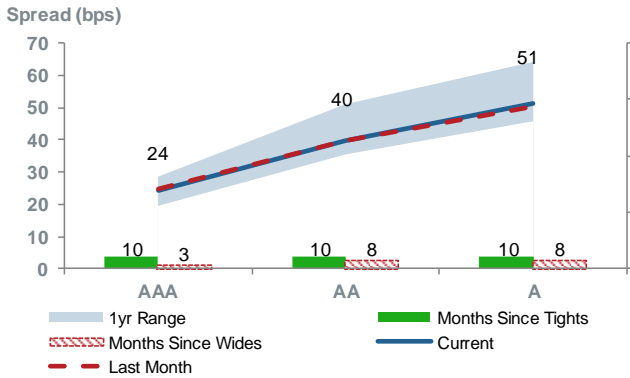
Global



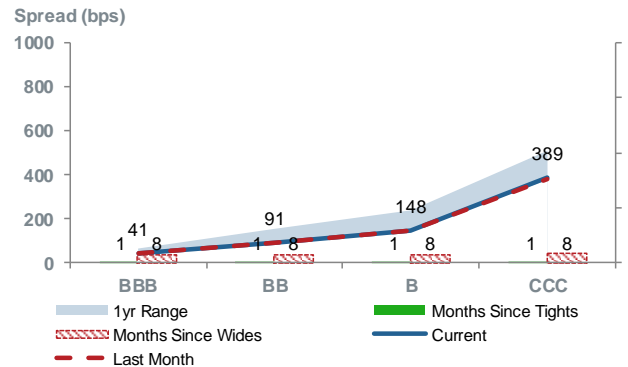
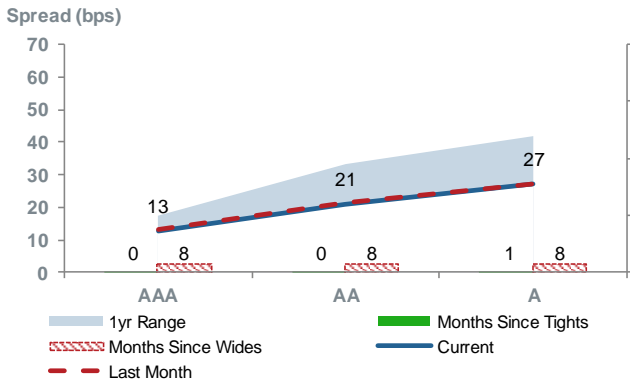
North America



Europe



Japan



Source: IHS Markit

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

Best performers

	Ticker	Company	Sector	Country	Liq score	9/30 spread	Change	% change	One year tight	Date	One year wide	Date
Americas												
1	MBI-InsCorp	Mbia Ins Corp	Financials	USA	2	1417	-673	-32.2%	1296	6/8/16	4315	1/18/16
2	PDV	Petroleos De Venezuela Sa	Energy	VEN	2	3536	-1509	-29.9%	3536	9/30/16	11163	2/11/16
3	TECKRS	Teck Res Ltd	Energy	CAN	1	379	-126	-24.9%	379	9/30/16	2215	12/8/15
4	ENB	Enbridge Inc	Energy	CAN	2	201	-54	-21.1%	201	9/30/16	502	2/11/16
5	CHK	Chesapeake Engy Corp	Energy	USA	2	823	-181	-18.0%	823	9/30/16	10164	2/9/16
EMEA												
1	REPSSA	Repsol Sa	Energy	ESP	1	152	-28	-15.7%	139	9/8/16	451	2/11/16
2	SCHAFIN	Schaeffler Fin Bv	Consumer Goods	NLD	2	126	-21	-14.4%	111	9/8/16	314	2/11/16
3	NSINO	Norske Skogindustrier Asa	Basic Materials	NOR	1	2824	-447	-13.7%	2824	9/30/16	5953	3/16/16
4	HEMABON	Hema Bondco I Bv	Consumer Services	NLD	1	1265	-107	-7.8%	1115	11/30/15	1768	9/19/16
5	GROUPE	Casino Guichardperrac hon	Consumer Services	FRA	1	273	-22	-7.3%	211	10/23/15	519	1/18/16
APAC												
1	RIOLN-Ltd	Rio Tinto Ltd	Basic Materials	AUS	2	121	-5	-4.1%	119	9/9/16	279	2/10/16
2	BHP	Bhp Billiton Ltd	Basic Materials	AUS	2	112	-4	-3.6%	108	9/9/16	252	1/21/16
3	HITACH	Hitachi Ltd	Industrials	JPN	2	25	-0	-1.3%	24	9/13/16	55	2/12/16
4	WPLAU	Woodside Pete Ltd	Energy	AUS	2	142	-2	-1.1%	135	9/9/16	284	1/21/16
5	KOMATS	Komatsu Ltd	Industrials	JPN	2	27	-0	-0.1%	24	9/13/16	62	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. Markit liquidity scores range from 1-5, with 1 being the most liquid and 5 the least liquid.

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

Worst performers

	Ticker	Company	Sector	Country	Liq score	9/30 spread	Change	% change	One year tight	Date	One year wide	Date
Americas												
1	DIS	Walt Disney Co	Consumer Services	USA	1	26	+7	+39.2%	15	10/26/15	34	2/11/16
2	KRAFHEI	Kraft Heinz Foods Co	Consumer Goods	USA	1	56	+15	+37.8%	38	8/23/16	61	12/18/15
3	WMT	Wal Mart Stores Inc	Consumer Services	USA	1	42	+11	+36.3%	28	8/16/16	48	3/9/16
4	STCENT	21st Century Fox America Inc	Consumer Services	USA	1	48	+12	+35.6%	33	8/12/16	70	10/14/15
5	HOSHOT-HSTRES	Host Hotels & Resorts Lp	Financials	USA	2	114	+29	+34.1%	84	8/30/16	181	1/20/16
EMEA												
1	ALZSE	Allianz Se	Financials	DEU	1	51	+15	+43.5%	33	12/2/15	68	2/9/16
2	SWREL	Swiss Reins Co Ltd	Financials	CHE	1	52	+15	+41.4%	33	3/11/16	68	2/9/16
3	MUNRE	Munich Re	Financials	DEU	1	49	+14	+40.7%	32	3/11/16	67	2/9/16
4	HANNRUE	Hannover Rueck Se	Financials	DEU	1	53	+15	+39.1%	36	9/7/16	79	2/9/16
5	ZINCO	Zurich Ins Co Ltd	Financials	CHE	1	53	+14	+35.7%	36	8/16/16	79	2/11/16
APAC												
1	NPG-NPI	Nippon Paper Inds Coltd	Basic Materials	JPN	2	43	+8	+21.9%	34	9/9/16	146	1/21/16
2	NIPYU	Nippon Yusen Kabushiki Kaisha	Industrials	JPN	2	71	+10.7	+17.6%	59	9/8/16	136	2/12/16
3	KOBSTL	Kobe Stl Ltd	Basic Materials	JPN	2	96	+13	+15.8%	79	9/9/16	309	2/15/16
4	KAWHI	Kawasaki Heavy Inds Ltd	Industrials	JPN	2	49	+6.5	+15.2%	40	9/6/16	120	2/17/16
5	MITTOA	Mitsui Chems Inc	Basic Materials	JPN	2	41	+5	+15.1%	35	9/9/16	117	10/1/15

Source: IHS Markit

Global corporate bonds

Sterling corporate debt lost ground over September but is still comfortably outperforming its euro and US dollar counterparts.

Sterling investment grade bonds lag behind

The Bank of England commenced its Corporate Bond Purchase Scheme (CBPS) on September 27 as it extended its QE programme to corporate debt. Markets anticipated the start of the intervention, leading to strong performance in sterling bonds over the summer.

But this trend wasn't continued in the month that the programme actually began. Total returns in the [Markit iBoxx £ Liquid Investment Grade Index](#) were down 1.59%, lagging well behind the unimpressive -0.27% and -0.12% in the [Markit iBoxx \\$ Liquid Investment Grade Index](#) and the [Markit iBoxx € Liquid Investment Grade Index](#), respectively.

AAA bonds down but still up on the year

The relative performance needs to be placed in perspective: sterling investment grade corporate debt has returned 14.78% this year, easily exceeding the 8.67% and 6.05% posted by USD and EUR bonds.

But the recent weakness in GBP bonds does warrant closer examination. AAA rated sterling debt, which has been the strongest performing segment of the investment grade universe in 2016, retreated 3.71% over the month. USD AAA bonds gave up 0.9% over the month, while the euro equivalent index managed to post a positive return of 0.03%.

Sterling bank debt, which is not eligible for the CBSP, held up relatively well, despite the negative sentiment surrounding Deutsche Bank. The [Markit iBoxx £ Bank Index](#) gave up 0.93% in returns, the best of any investment grade sector barring Oil and Gas.

A “hard” Brexit counteracting QE

It seems that concerns over a “hard” Brexit – where the UK would no longer have access to the EU single market – are weighing heavily on sterling debt. The British government is continuing to insist that it can negotiate a bespoke deal, where it will retain partial access to the single market and restrict free movement of labour. The rhetoric from EU leaders suggests this will be difficult to achieve, and the UK will be left trading with the EU on WTO rules.

If yields continue to rise, this may force the Bank of England to increase its £10bn target for corporate bond purchases and accelerate the pace of acquisition. The Bank will have to be cognisant of the effect on secondary market liquidity, already a worry for some investors.

Oil price helping US high yield

USD denominated high yield bonds were the stand out performers over the month, with the [Markit iBoxx \\$ Liquid High Yield Index](#) returning 0.48%. The asset class has now gained 13.76% since the beginning of the year, outpacing all investment grade sectors with the exception of Basic Materials. The stabilisation of the oil price at around \$50 a barrel has helped USD high yield, which has a significant weighting in oil and gas.

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

	Total Return						Yield						Duration		
	Month			YTD			Current			Month			\$	€	£
	\$	€	£	\$	€	£	\$	€	£	\$	€	£			
Corporates	-0.27%	-0.12%	-1.59%	+8.67%	+6.05%	+14.78%	3.43%	0.87%	2.55%	+0.07%	+0.03%	+0.21%	6.8	5.3	8.6
Corporates AAA	-0.90%	+0.03%	-3.71%	+8.15%	+8.54%	+23.51%	3.11%	0.57%	1.66%	+0.15%	+0.01%	+0.24%	10.1	8.5	15.5
Corporates AA	-0.31%	+0.03%	-1.71%	+6.55%	+5.77%	+15.00%	2.82%	0.38%	1.95%	+0.07%	-0.00%	+0.19%	6.3	5.5	9.1
Corporates A	-0.33%	-0.04%	-1.86%	+7.24%	+5.64%	+15.40%	3.11%	0.64%	2.43%	+0.07%	+0.02%	+0.20%	6.6	5.4	9.3
Corporates BBB	-0.19%	-0.22%	-1.28%	+10.84%	+6.48%	+14.05%	3.89%	1.25%	2.87%	+0.07%	+0.06%	+0.20%	7.1	5.1	7.8
Banks	-0.18%	-0.26%	-0.93%	+5.19%	+3.70%	+9.15%	3.15%	0.84%	2.76%	+0.08%	+0.07%	+0.16%	4.9	4.4	6.6
Basic Materials	+0.12%	+0.00%	-1.38%	+15.11%	+11.40%	+25.48%	3.97%	0.73%	2.59%	+0.03%	+0.01%	+0.20%	7.3	5.4	7.8
Consumer Goods	-0.18%	-0.01%	-0.94%	+8.19%	+6.73%	+10.92%	3.14%	0.73%	1.85%	+0.06%	+0.01%	+0.15%	6.6	5.7	6.0
Consumer Services	-0.42%	+0.14%	-1.89%	+10.99%	+7.61%	+17.76%	3.52%	0.71%	2.27%	+0.08%	-0.01%	+0.21%	8.5	5.7	9.9
Financials	-0.20%	-0.28%	-1.07%	+5.81%	+4.34%	+10.48%	3.22%	1.09%	2.89%	+0.08%	+0.07%	+0.20%	5.3	4.7	7.1
Health Care	-0.46%	+0.04%	-2.65%	+8.56%	+6.03%	+24.66%	3.26%	0.71%	2.11%	+0.09%	-0.00%	+0.22%	7.9	6.1	12.8
Industrials	-0.31%	+0.16%	-1.67%	+9.15%	+6.34%	+16.35%	3.19%	0.53%	2.16%	+0.05%	-0.00%	+0.18%	7.5	5.4	9.3
Insurance	-0.39%	-0.72%	-1.27%	+7.87%	+5.78%	+9.46%	3.71%	2.52%	3.97%	+0.08%	+0.14%	+0.22%	7.6	6.3	7.2
Non-Financials	-0.32%	-0.00%	-1.90%	+10.34%	+7.32%	+17.59%	3.51%	0.74%	2.39%	+0.06%	+0.01%	+0.21%	7.7	5.7	9.5
Oil & Gas	-0.18%	-0.13%	-0.89%	+13.08%	+8.70%	+11.15%	4.05%	0.99%	2.11%	+0.06%	+0.02%	+0.11%	7.3	5.8	6.6
Technology	-0.32%	+0.03%	N/A	+8.26%	+8.10%	N/A	3.24%	0.43%	N/A	+0.06%	+0.00%	N/A	7.3	6.9	N/A
Telecommunications	-0.40%	-0.06%	-2.41%	+11.47%	+7.64%	+17.13%	3.84%	0.84%	2.75%	+0.06%	+0.03%	+0.30%	8.6	5.9	10.0
Utilities	-0.65%	-0.07%	-2.16%	+10.57%	+6.83%	+19.51%	3.58%	0.79%	2.52%	+0.09%	+0.03%	+0.21%	8.8	5.4	10.4
High Yield Liquid High Yield	+0.48%	-0.46%	-0.88%	+13.76%	+6.73%	+7.34%	6.03%	3.78%	5.44%	-0.05%	+0.29%	+0.41%	3.7	3.5	3.1
Convertible CVBX	+0.50%	-0.74%	+1.29%	+3.12%	+0.76%	+2.76%	-0.72%	6.98%	7.62%	-0.17%	+0.36%	-0.13%	5.3	3.8	5.6
Contingent Convertible	-0.99%	-0.74%	+1.29%	+5.08%	+0.76%	+2.76%	7.24%	6.98%	7.62%	+0.45%	+0.36%	-0.13%	4.3	3.8	5.6

Source: IHS Markit

Table 7: September global corporate bond best price performance

Best performers

Ticker	Issue	Sector	Country	CCY	Liq score	9/30 price	Change	% change	One year low	Date	One year high	Date	
Americas													
1	SQA	Sequa Corporation 7 12/2017	Industrials	USA	USD	2	32.50	+12.50	+62.5%	13.00	2/26/16	52.00	10/12/15
2	MEC	Murray Energy Corporation 11.25 4/2021	Energy	USA	USD	1	57.50	+13.75	+31.4%	10.00	3/21/16	57.50	9/30/16
3	CALA	C.A. La Electricidad De Caracas 8.5 4/2018	Utilities	VEN	USD	1	64.50	+14.50	+29.0%	23.00	2/15/16	64.50	9/30/16
4	WNT	W&T Offshore, Inc. 8.5 6/2019	Energy	USA	USD	2	38.75	+8.22	+26.9%	10.13	4/11/16	50.00	11/9/15
5	PDV	Petroleos De Venezuela, S.A. 5.25 4/2017	Energy	VEN	USD	1	85.48	+16.36	+23.7%	34.81	2/12/16	85.48	9/30/16
EMEA													
1	INTSAT-Lux	Intelsat (Luxembourg) S.A. 7.75 6/2021	Telecom Services	LUX	USD	1	33.27	+3.74	+12.7%	21.41	7/14/16	67.81	10/7/15
2	TAKKLUX	Takko Luxembourg 2 S.C.A. 9.875 4/2019	Consumer Services	DEU	EUR	3	64.51	+6.10	+10.4%	52.40	12/23/15	67.07	9/29/16
3	NORSKSK	Norske Skog As 11.75 12/2019	Basic Materials	NOR	EUR	2	84.36	+5.81	+7.4%	58.75	3/4/16	87.50	10/5/15
4	OHLSA	Obrascon Huarte Lain Sa 7.625 3/2020	Industrials	ESP	EUR	2	91.48	+6.00	+7.0%	68.41	8/5/16	104.64	11/17/15
5	PAGEFIN	Pagesjaunes Finance & Co. S.C.A. 8.875 6/2018	Consumer Services	FRA	EUR	1	61.66	+4.03	+7.0%	46.91	7/19/16	79.75	11/6/15
APAC													
1	BALLINT	Ballarpur International Graphic Paper Holdings B.V. 12/2099	Basic Materials	IND	USD	3	46.00	+5.42	+13.3%	40.02	8/23/16	88.88	11/10/15
2	TDBM	Trade And Development Bank Of Mongolia Llc 9.375 5/2020	Financials	MNG	USD	1	98.77	+8.27	+9.1%	74.92	2/24/16	104.10	7/15/16
3	BOHAGEN	Bohai General Capital Ltd 6.4 10/2017	Basic Materials	CHN	CNY	2	73.00	+5.50	+8.1%	56.50	6/15/16	98.32	3/28/16
4	VDR	Vedanta Resources Plc 6 1/2019	Basic Materials	IND	USD	1	99.38	+5.75	+6.1%	47.00	1/21/16	99.38	9/30/16
5	CITILIM	Citic Limited 5.9 7/2018	Industrials	CHN	HKD	4	106.60	+5.06	+5.0%	101.51	9/2/16	107.99	9/5/16

Source: IHS Markit

Table 8: September global corporate bond worst price performance

Worst performers

Ticker	Issue	Sector	Country	CCY	Liq score	9/30 price	Change	% change	One year low	Date	One year high	Date
Americas												
1 CONCHEA	Concordia Healthcare Corp. 7 4/2023	Healthcare	BRB	USD	1	64.25	-13.75	-17.6%	62.25	9/26/16	94.75	4/25/16
2 CONCORI	Concordia International Corp. 9.5 10/2022	Industrials	CAN	USD	1	68.77	-13.98	-16.9%	68.08	9/27/16	101.75	4/25/16
3 ERICINC	Erickson Incorporated 8.25 5/2020	Industrials	USA	USD	2	42.33	-8.17	-16.2%	39.00	6/3/16	71.00	10/19/15
4 AV	Avaya Inc. 10.5 3/2021	Technology	USA	USD	1	22.35	-3.90	-14.9%	20.00	5/17/16	45.00	10/2/15
5 APS	Neptune Orient Lines Limited 4.4 11/2019	Industrials	USA	SGD	3	79.00	-8.50	-9.7%	78.00	2/23/16	97.75	11/6/15
EMEA												
1 SEVEENE	Seven Energy Finance Limited 10.25 10/2021	Energy	NGA	USD	2	30.54	-21.74	-41.6%	29.66	9/12/16	65.00	10/5/15
2 BANCPODI	Banca Popolare Di Vicenza Societa Per Azioni. 9.5 9/2025	Financials	ITA	EUR	2	68.33	-14.87	-17.9%	54.00	2/19/16	106.00	11/13/15
3 MONTE	Banca Monte Dei Paschi Di Siena S.P.A. 11/2017	Financials	ITA	EUR	1	67.29	-10.18	-13.1%	52.70	1/20/16	93.87	11/19/15
4 DEBKAG	Deutsche Bank Ag, Frankfurt Am Main 7.125 12/2099	Financials	DEU	GBP	2	72.59	-10.57	-12.7%	68.02	2/11/16	94.75	10/7/15
5 HOLDIK	Holdikks 6.75 7/2021	Consumer Services	FRA	EUR	2	78.82	-9.89	-11.1%	76.08	9/19/16	100.50	11/13/15
APAC												
1 HSINCHO	Hsin Chong Construction Group Ltd. 8.75 5/2018	Industrials	CHN	USD	1	77.68	-20.45	-20.8%	77.68	9/30/16	103.50	1/8/16
2 EZRAHOL	Ezra Holdings Limited 4.875 4/2018	Energy	SGP	SGD	2	60.62	-14.00	-18.8%	60.12	9/21/16	84.50	3/16/16
3 EZIOHOL	Ezion Holdings Limited 4.875 6/2021	Energy	SGP	SGD	4	81.00	-10.50	-11.5%	81.00	9/30/16	97.45	4/19/16
4 ASPITRE	Aspial Treasury Pte Ltd 5.3 4/2020	Financials	SGP	SGD	3	90.19	-9.13	-9.2%	90.19	9/30/16	99.77	6/14/16
5 NAMCHE	Nam Cheong Limited 5.05 8/2019	Industrials	MYS	SGD	3	49.00	-3.84	-7.3%	49.00	9/30/16	97.45	3/23/16

Source: IHS Markit

Sovereigns

Emerging market CDS suffer on greater expectations for US rate hike

Emerging market sovereigns are vulnerable to events out of their control, particularly policy decisions taken in the developed world. Expectations that the US Federal Reserve will hike interest rates in December have damaged sentiment in the emerging market asset class. Philippines was the worst performer in CDS over the month, widening by 31.5% to 116bps, while Mexico followed with a widening of 20% to 166bps (**Table 10**).

Investors often take flight from emerging market debt when yields in developed markets rise, as the compressed yield differential makes them less attractive.

But the emerging market asset class is certainly not homogeneous; idiosyncratic risk can be a major fact in determining sovereign credit risk. Turkey is a prime example, where the political turmoil after the failed coup earlier this year and consequent downgrade to junk triggered significant volatility. Its CDS spreads were 7% wider at 259bps, though it should be noted that this is still 11bps tighter than where they began the year.

Venezuela is clearly a country that has issues specific to itself. Its five-year CDS have been trading in excess of 50 points upfront for nearly two years, placing it firmly in distressed territory. However, it mounted a tentative recovery in September after PdVSA, the state-owned oil company, improved the terms of a debt exchange and extended the deadline, making it more attractive to investors. But Venezuela's credit standing is still poor – it is ranked as the 178th riskiest country in the IHS Markit sovereign risk service – and its spreads will remain susceptible to volatility.

Italian CDS comes under pressure ahead of December's referendum

Emerging markets may be riding through rocky waters, but it hasn't been plain sailing for all developed market sovereigns. Italy saw its spreads widen by 13% to 153bps ahead of a crucial referendum in December (**Table 9**). The sovereign's spreads were 56bps wider than 2015 year-end levels, though they are some way off the 184bps reached post-Brexit.

The referendum is on constitutional change, but a defeat for Prime Minister Matteo Renzi would put his position in doubt and plunge the country into yet another political crisis. The polls indicate that it is neck-and-neck, so more volatility in CDS and bonds can be expected in the run up to the vote.

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

			9/30 10yr bond yield	CDS change	9/30 CDS	% change	One year tight	Date	One year wide	Date
1	UKIN	United Kingdom	0.65%	+0.3	33.9	+0.7%	15.4	10/1/15	50.6	6/24/16
2	USGB	United States	1.60%	+0.3	26.5	+1.2%	14.8	10/9/15	27.3	9/20/16
3	FRTR	France	0.16%	+1.1	29.8	+3.7%	25.7	12/24/15	50.6	6/24/16
4	CAN	Canada	1.00%	+1.6	31.7	+5.3%	22.2	11/13/15	31.7	9/30/16
5	JAPAN	Japan	-0.09%	+1.9	34.5	+5.9%	31.7	9/5/16	56.1	2/12/16
6	ITALY	Italy	1.19%	+17.8	153.2	+13.1%	91.6	12/9/15	183.3	6/27/16
7	DBR	Germany	-0.12%	+3.3	20.2	+19.8%	12.6	12/24/15	24.9	6/27/16

Source: IHS Markit

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

			Liq Score	Change	9/30 spread	% change	One year tight	Date	One year wide	Date
Best Performers										
1	VENZ	Venezuela	1	+3188	-1333	-29.5%	3188	9/30/16	10686	2/15/16
2	BELG	Belgium	1	+30	-5	-14.6%	30	9/30/16	68	6/27/16
3	POLAND	Poland	2	+74	-2	-2.4%	71	9/22/16	107	6/27/16
4	KOREA	South Korea	1	+42	-1	-2.1%	39	9/22/16	79	2/11/16
5	SOAF	South Africa	1	+253	-4	-1.4%	219	8/16/16	387	1/20/16
6	ISRAEL	Israel	1	+73	-1	-1.2%	68	10/16/15	97	1/20/16
7	COLOM	Colombia	1	+168	-1	-0.6%	154	9/8/16	325	2/11/16
8	IRELND	Ireland	2	+59	0	-0.6%	38	12/16/15	92	6/27/16
9	RUSSIA	Russia	1	+216	-1	-0.4%	194	9/8/16	393	1/20/16
10	PERU	Peru	1	+102	1	+0.5%	95	9/7/16	230	2/11/16
Worst Performers										
1	PHILIP	Philippines	1	+116	28	+31.5%	84	9/8/16	136	2/11/16
2	MEX	Mexico	1	+166	28	+20.1%	129	9/7/16	231	2/11/16
3	DBR	Germany	1	+20	3	+19.8%	13	12/24/15	25	6/27/16
4	CHILE	Chile	1	+87	11	+14.6%	67	8/15/16	149	10/1/15
5	ITALY	Italy	1	+153	18	+13.1%	92	12/9/15	183	6/27/16
6	AUSTLA	Australia	1	+25	3	+11.3%	20	9/8/16	56	2/11/16
7	PORTUG	Portugal	1	+312	23	+7.9%	162	10/23/15	355	2/12/16
8	PANAMA	Panama	1	+140	10	+7.7%	122	9/7/16	225	2/11/16
9	TURKEY	Turkey	1	+259	17	+7.0%	216	7/12/16	312	10/1/15
10	CHINA	China	1	+107	7	+6.6%	94	9/8/16	148	2/11/16

Source: IHS Markit

Table 11: September sovereign bond best price performance

Best performers

Ticker	Issue	CCY	Liq score	9/30 price	Change	% change	9/30 yield	One year low	Date	One year high	Date	
Americas												
1	VENZ	Bolivarian Republic Of Venezuela 7.75 10/2019	USD	1	61.74	+12.06	+24.3%	35.78%	29.10	2/12/16	61.74	9/30/16
2	COLOM	Republic Of Colombia 7.75 9/2030	COP	3	105.46	+4.37	+4.3%	7.62%	84.64	2/11/16	105.47	9/7/16
3	BRAZIL	Federative Republic Of Brazil 10 1/2027	BRL	3	934.64	+35.88	+4.0%	-16.60%	717.17	2/19/16	935.35	6/29/16
4	CHILE	Republic Of Chile 6 1/2032	CLP	4	117.82	+3.27	+2.9%	4.66%	114.52	9/20/16	117.83	9/26/16
5	ECUA	Republic Of Ecuador 7.95 6/2024	USD	2	89.62	+2.01	+2.3%	10.29%	62.42	1/18/16	90.75	9/26/16
EMEA												
1	KENY	Republic Of Kenya 11 9/2025	KES	3	100.00	+12.93	+14.8%	12.60%	85.86	8/24/16	100.00	9/23/16
2	REPUOFAF	Republic Of Mozambique 10.5 1/2023	USD	2	81.64	+7.16	+9.6%	17.19%	74.00	8/10/16	81.64	9/30/16
3	UKIN	United Kingdom Of Great Britain And Northern Ireland 0.125 11/2065	GBP	3	265.93	+11.93	+4.7%		160.68	4/28/16	265.93	9/30/16
4	SOAF	Republic Of South Africa 2 1/2025	ZAR	4	95.84	+3.30	+3.6%		91.54	8/29/16	103.85	3/22/16
5	NGERIA	Federal Republic Of Nigeria 16 6/2019	NGN	3	102.96	+2.99	+3.0%	15.98%	99.97	9/14/16	118.05	11/27/15
APAC												
1	MONGAA	Mongolia 10.875 4/2021	USD	1	107.19	+7.32	+7.3%	10.91%	98.67	4/8/16	111.10	7/13/16
2	SRILAN	Democratic Socialist Republic Of Sri Lanka 13.5 6/2044	LKR	5	112.69	+6.20	+5.8%	12.64%	105.04	8/5/16	113.31	9/8/16
3	KOREA	Republic Of Korea 1 6/2026	KRW	3	100.58	+4.60	+4.8%	1.44%	95.55	9/1/16	100.58	9/30/16
4	CHINA	People'S Republic Of China 4.11 5/2025	CNY	5	110.20	+1.95	+1.8%	3.02%	106.88	10/9/15	111.19	8/16/16
5	INDON	Republic Of Indonesia 6 1/2027	IDR	4	79.39	+1.36	+1.7%	9.36%	75.18	10/1/15	88.66	4/19/16

Source: IHS Markit

Table 12: September sovereign bond worst price performance

Worst performers

Ticker	Issue	CCY	Liq score	9/30 price	Change	% change	9/30 yield	One year low	Date	One year high	Date
Americas											
1 MEX	United Mexican States 5.75 10/2110	USD	2	106.14	-7.93	-7.0%	5.03%	90.03	1/20/16	114.67	8/18/16
2 BLZE	Belize 5 2/2038	USD	2	53.33	-1.87	-3.4%	12.66%	46.50	4/7/16	73.50	11/24/15
3 COSTAR	Republic Of Costa Rica 5.625 4/2043	USD	2	91.11	-2.99	-3.2%	6.07%	70.29	12/16/15	94.52	8/30/16
4 BRAZIL	Federative Republic Of Brazil 5 1/2045	USD	2	90.77	-2.47	-2.7%	5.47%	64.68	12/21/15	95.55	8/18/16
5 URUGAY	Oriental Republic Of Uruguay 4.125 11/2045	USD	2	93.79	-2.13	-2.2%	3.71%	74.91	1/18/16	96.28	8/24/16
EMEA											
1 UKIN	United Kingdom Of Great Britain And Northern Ireland 3.5 7/2068	GBP	1	176.85	-17.91	-9.2%	1.10%	125.04	11/9/15	196.35	8/30/16
2 KENY	Republic Of Kenya 12.705 6/2022	KES	5	97.82	-7.72	-7.3%	11.36%	97.81	9/23/16	105.53	9/22/16
3 PORTUG	Portuguese Republic 4.1 2/2045	EUR	2	97.55	-5.94	-5.7%	3.89%	87.38	2/11/16	114.46	10/2/15
4 GREECE	Hellenic Republic 3 2/2035	EUR	1	59.70	-2.03	-3.3%	7.84%	47.26	2/11/16	65.92	5/25/16
5 OMAN	Sultanate Of Oman 4.75 6/2026	USD	1	100.16	-3.26	-3.1%	4.32%	97.50	6/27/16	104.99	8/19/16
APAC											
1 AUSTLA	Commonwealth Of Australia 1.25 8/2040	AUD	3	114.28	-5.03	-4.2%		100.25	11/13/15	121.05	8/3/16
2 BHREIN	Kingdom Of Bahrain 6 9/2044	USD	2	83.58	-3.15	-3.6%	7.10%	70.00	1/18/16	87.16	9/7/16
3 PHILIP	Republic Of The Philippines 8 7/2031	PHP	3	146.49	-4.84	-3.2%	3.53%	134.72	1/20/16	156.77	7/7/16
4 NZ	New Zealand 2.5 9/2035	NZD	4	111.52	-3.50	-3.0%		97.91	12/17/15	116.58	8/3/16
5 TGB	Taiwan, Province Of China 1.25 4/2036	TWD	5	99.74	-2.84	-2.8%	1.10%	99.50	9/27/16	103.20	8/22/16

Source: IHS Markit

Municipal bonds

Total municipal bond issuance increased by \$36.9bn in September, which brings revenue bond issuance 7.9% higher and general obligation issuance 6.7% higher than the same period of time last year (**Figure 5**). Total year to date issuance is a very strong 7.4% versus the same period in 2015, as issuers rush to fit in deals ahead of the elections in November and what appears to be a likely Fed rate increase in December.

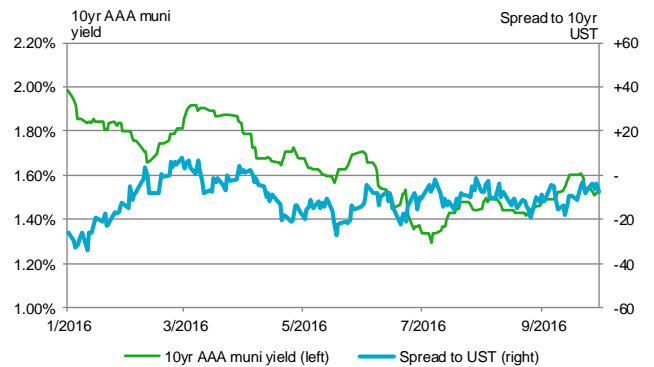
AAA 10-year municipal bond spreads remain range bound since Brexit

Data indicates that the 10-year AAA municipal bond spread to treasuries has remained within a 20bp range since the Brexit announcement on June 24 (**Figure 6**). The last time the 10-year AAA muni yields exceeded treasury yields was in early-April, however it did come within a very close 3bps from hitting parity during its widest point of the month on September 22.

Puerto Rico issues dominated the best performers list

The top four performing revenue bonds this month were all Puerto Rican issues (**Table 13**), with none of the Commonwealth's bonds making it into the worst performer's category (**Table 14**). Puerto Rico Commonwealth Aqueduct & Sewer Authority Revenue senior lien 2008-A 6.0% 7/2038 was the best performer, increasing 6.7% on the month and hitting a new one year high price of 76.99. Puerto Rico Sales Tax Financing Corp Sales Tax Revenue issues Sales Tax Revenue - Senior 2011-C 5.0% 8/2040 and First Subordinate 2009-A 6.0% 8/2042 were the next best, each ending the month over 3% higher from a price perspective.

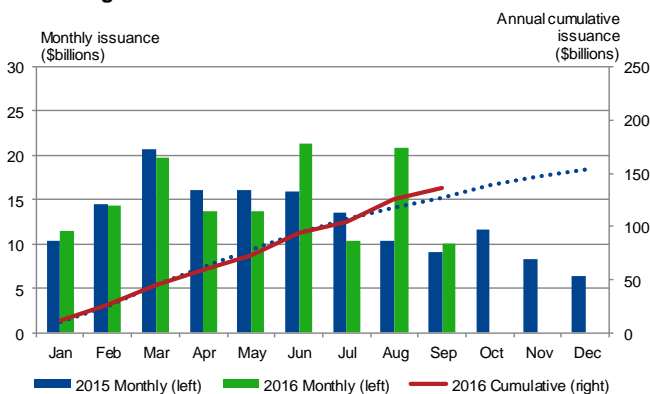
Figure 6: AAA 10yr municipal bonds spreads to US Treasuries have been range bound since Brexit



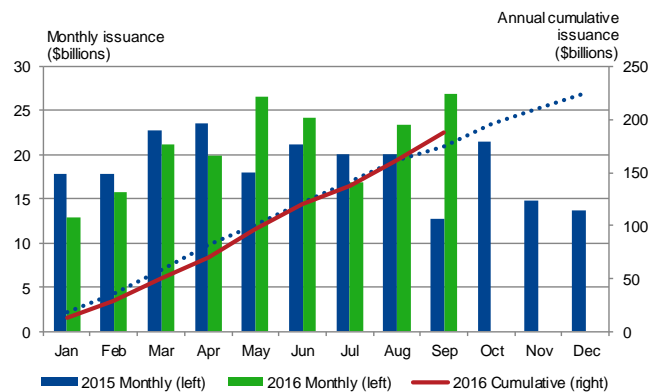
Source: IHS Markit

Figure 5: Municipal bond issuance

General obligation



Revenue



Source: SIFMA

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

	Issuer	Issue	Liq score	9/30 price	Change	% change	One year low	Date	One year high	Date
1	Puerto Rico Comwth Aqueduct & Swr Auth Rev	Revenue (Senior Lien) - 2008-A 6 7/2038	2	76.98	+4.87	+6.7%	63.50	5/11/16	76.99	9/29/16
2	Puerto Rico Sales Tax Fing Corp Sales Tax Rev	Sales Tax Revenue - Senior 2011-C 5 8/2040	2	74.50	+2.49	+3.5%	55.00	1/5/16	74.50	9/30/16
3	Puerto Rico Sales Tax Fing Corp Sales Tax Rev	Sales Tax Revenue - First Subordinate 2009-A 6 8/2042	2	53.25	+1.73	+3.4%	37.00	12/9/15	54.13	9/9/16
4	Puerto Rico Elec Pwr Auth Pwr Rev	Power Revenue - 2013-A 6.75 7/2036	2	67.31	+2.06	+3.1%	54.37	5/10/16	67.38	9/13/16
5	New Jersey St Transn Tr Fd Auth	Transportation System - 2010-D 5 12/2023	2	114.99	+2.57	+2.3%	106.50	10/1/15	115.64	9/1/16
6	Galveston Tex Wtrwks & Swr Sys Rev	Waterworks And Sewer System Revenue Refunding - 2014 5 5/2028	2	122.16	+2.03	+1.7%	114.85	11/12/15	122.33	9/28/16
7	Lancaster Cnty Pa Hosp Auth Rev	Health Center R - Landis Homes Retirement Community Project 2015 5 7/2045	2	114.01	+1.73	+1.5%	100.45	11/12/15	114.18	9/28/16
8	Chicago Ill O Hare Intl Arpt Rev	General Airport Senior Lien Revenue Refunding - 2015-B 5 1/2024	2	123.10	+1.61	+1.3%	116.96	11/12/15	125.08	7/6/16
9	New Jersey St Tpk Auth Tpk Rev	Turnpike Revenue - 2014-A 5 1/2034	2	122.89	+1.36	+1.1%	112.15	11/17/15	123.70	9/8/16
10	District Columbia Rev	Revenue - Association Of American Medical Colleges Issue 2011-B 5 10/2041	2	112.49	+1.19	+1.1%	107.92	11/12/15	112.60	9/28/16

Source: IHS Markit

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

	Issuer	Issue	Liq score	9/30 price	Change	% change	One year low	Date	One year high	Date
1	Ohio St Air Quality Dev Auth Rev	Air Quality Developm - Firstenergy Generation Corp. Project 2009 5.7 08/2020	2	96.99	-4.51	-4.4%	96.97	9/29/16	112.94	5/6/16
2	New York N Y City Transitional Fin Auth Rev	Future Tax Secured Subordinate Tax-Exe - Fiscal 2015 Subseries E 5 02/2041	2	118.92	-4.29	-3.5%	112.23	11/12/15	124.64	7/6/16
3	California Health Facs Fing Auth Rev	Revenue - 2013-A 5 08/2052	1	116.01	-4.12	-3.4%	107.92	10/12/15	120.12	8/31/16
4	Nevada St Hwy Impt Rev	Highway Revenue (Motor Vehicle Fuel Tax) Improvement & Refu - 20 5 12/2027	2	127.46	-4.50	-3.4%	124.40	3/16/16	131.96	8/31/16
5	Los Angeles Calif Dept Wtr & Pwr Rev	Power System Revenue - 2016-A 5 07/2046	2	121.70	-3.95	-3.1%	120.40	5/10/16	126.25	6/27/16
6	New York Transn Dev Corp Spl Fac Rev	Laguardia Airport Terminal B Redevelopment Project 2016-A 5.25 01/2050	2	113.06	-3.43	-2.9%	113.06	9/30/16	118.20	7/6/16
7	San Diego Calif Pub Facs Fing Auth Swr Rev	Senior Sewer Revenue Refunding - 2016-A 5 05/2034	2	124.48	-3.59	-2.8%	120.24	3/11/16	128.23	8/12/16
8	Virgin Islands Pub Fin Auth Rev	Revenue And Refunding Virgin Is - Capital Projects 2009 Senior A 5 10/2024	2	99.76	-2.71	-2.6%	99.30	9/21/16	110.95	7/6/16
9	Ohio St Wtr Dev Auth Wtr Pollutn Ctl Rev	Pollution Control - Firstenergy Nuclear Generation Project 2009 4.375 06/2033	2	100.64	-2.68	-2.6%	100.62	9/29/16	103.32	8/30/16
10	Texas Wtr Dev Brd Rev	State Water Implementation Revenue Fund For - Master Trust 2015 5 10/2040	2	119.69	-3.08	-2.5%	113.90	10/26/15	125.05	7/6/16

Source: IHS Markit

Securitised products

Most securitised products sectors reached their tightest spreads over the past year in September, with spreads continuing to grind tighter across the broader sector. Increases in US and European consumer ABS supply continue to be met with strong demand from investors. US subprime auto was the best performing consumer ABS sector, with 1-2-yr AAA paper tightening 11bps to EDSF +39bps and 2+yr AAA tightening 11bps to Swaps +49bps during the month.

CMBS spreads wider ahead of the upcoming new issues

CMBS spreads were noticeably wider across the entire credit curve during the month (Figure 8), as September saw over \$8bn in new supply enter the market, making it the most active month this year. BBB and BBB- spreads were the worst performers, both widening 26bps on the month. The prospect of a heavy new issuance calendar, due to some issuers trying to circumvent upcoming risk retention rules that come into effect in late-December, could continue to weigh on the market through year end.

Loan balance pay-ups begin to decline

Loan balance stories declined across most of the Fannie Mae and Freddie Mac cohorts in September (Table 15), ending a rally that began late-spring of this year. However, some Ginnie Mae loan balance pay-ups continued to rally, with 85K pools increasing 8 ticks for the 3.5% cohort and 4 ticks for the 4.0% and 4.5% cohorts. Pay-ups for the 4.0% <105 LTV were by far the best performing story types for Fannie Mae and Freddie Mac pools, increasing 34 ticks during the month.

We note that Agency MBS net issuance continues to be on track to surpass last year's levels, while non-agency MBS issuance is almost non-existent compared to levels before the crisis.

1.0 EUR CLOs outperform the broader sector

AAA CLO spreads tightened across the credit curve and regions in September, with EUR 1.0 AAA bonds ending the month 19bps tighter at L+97bps (Figure 7). US 1.0 BBB spreads were a modest 7bps wider on the month at L+330bps, while EUR 1.0 BBB spreads were 108bps tighter at L+288bps. We note that both EUR 1.0 AAA and BBB reached their tightest spreads over the past 12 months in September.

Non-agency spreads remain tight

Non-agency MBS spreads remained tight during the month, as the combination of the product's high yield relative to the broader fixed income market and technical pressures from anaemic issuance continue to bode well for the sector.

Bondholders of issues that are covered under the \$1.25bn Citigroup RMBS settlement are now likely to receive their settlement payments before year-end, as all of the necessary court approvals have now taken place.

Figure 7: US and European CLO AAA/BBB spread summary

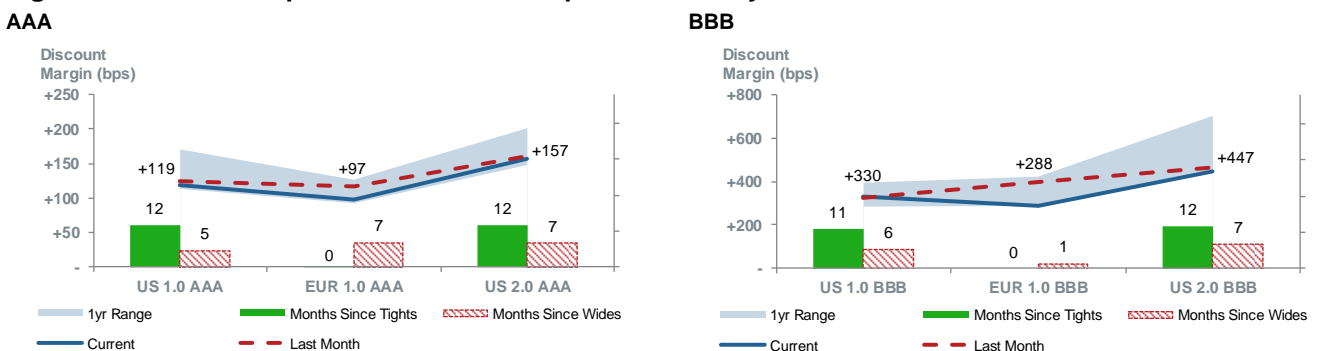


Table 15: September 2016 agency specified pools pay-ups in ticks (1/32 points)

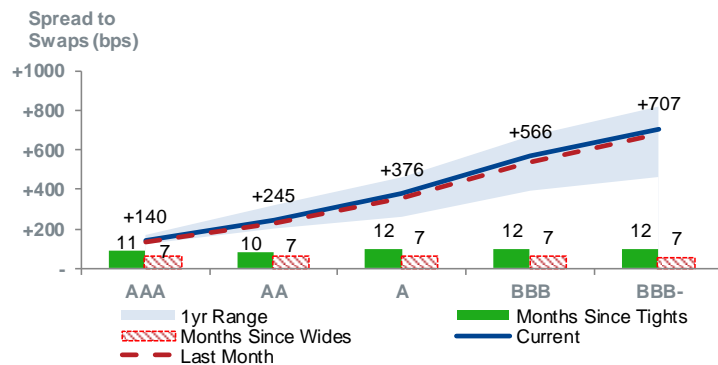
FNM/FHL 30Y Specified Pools Pay-ups						MoM Change				
Coupon	3	3.5	4	4.5	5	3	3.5	4	4.5	5
LLB (85K)	0-28	1-30	2-22	2-24	2-24	0-00	-0-03	-0-04	-0-09	-0-19
MLB (110K)	0-23	1-21	2-10	2-11	2-12	-0-02	-0-04	-0-07	-0-03	0-00
HLB (150K)	0-19	1-09	1-21	1-19	1-16	-0-02	-0-02	-0-05	-0-08	+0-01
New Prod	0-01	0-04	0-10	0-14	N/A	-0-01	-0-01	+0-02	-0-02	N/A
Low FICO	0-01	0-09	0-11	0-13	0-28	-0-06	+0-01	-0-02	+0-01	-0-03
Investor	0-06	0-07	0-10	0-13	0-20	+0-01	-0-02	-0-01	+0-01	0-00
MHA <90	0-06	0-08	0-12	0-12	0-17	+0-02	-0-01	+0-02	+0-01	0-00
MHA <95	0-07	0-08	0-12	0-27	0-23	-0-08	-0-01	-0-05	+0-03	+0-01
MHA <100	0-06	0-14	0-22	0-24	0-21	-0-05	-0-02	-0-02	0-00	-0-01
MHA <105	0-10	0-14	1-17	1-18	1-17	-0-01	-0-02	+1-02	+0-10	0-00
<125 LTV	0-06	0-30	2-11	2-11	2-03	-0-04	-0-06	+0-06	-0-04	0-00
125+ LTV	0-18	1-07	1-31	2-11	2-08	+0-03	+0-01	-0-01	-0-02	0-00

Source: IHS Markit

GNMA 30Y Specified Pools Pay-ups						MoM Change				
Coupon	3	3.5	4	4.5	5	3	3.5	4	4.5	5
LLB ₁ (85K)	0-23	1-29	3-08	2-12	1-31	-0-03	+0-08	+0-04	+0-04	0-00
LLB ₂ (110K)	0-18	1-12	2-16	1-22	3-10	0-00	+0-01	-0-02	-0-09	0-00
MLB (125K)	0-17	1-05	1-24	1-30	1-25	+0-12	+0-06	0-00	0-00	+0-15
HLB ₁ (150K)	0-13	1-02	1-29	2-16	2-18	+0-01	-0-03	-0-04	0-00	+0-14
HLB ₂ (175K)	0-17	0-27	1-06	1-06	1-06	+0-07	-0-01	0-00	0-00	0-00
New Prod	0-01	0-01	0-13	0-12	0-15	-0-02	-0-04	0-00	-0-04	0-00
PR Geo	0-22	1-18	2-13	3-06	2-12	+0-09	+0-08	0-00	0-00	+0-15

Source: IHS Markit

Figure 8: 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	+28	-1	+25	7/29/16	+58	3/11/16
4-5yr AAA US Swaps	+39	+5	+32	9/6/16	+71	4/18/16
US Credit Card - Floating-Rate						
2-3yr AAA US LIBOR DM	+27	-3	+27	9/15/16	+40	3/16/16
4-5yr AAA US LIBOR DM	+46	-8	+45	7/29/16	+96	5/16/16
US Prime Auto - Fixed-Rate						
0-2yr AAA EDSF	+19	-1	+19	9/30/16	+45	3/29/16
2+yr AAA US Swaps	+28	+7	+21	9/8/16	+60	3/29/16
European Prime Auto Loan - Floating-Rate						
AAA EUR LIBOR DM	+26	-	+24	8/22/16	+54	2/5/16
US Subprime Auto - Fixed-Rate						
1-2-yr AAA EDSF	+39	-11	+39	9/30/16	+84	5/12/16
2+yr AAA US Swaps	+49	-14	+49	9/29/16	+97	11/5/15
US Equipment - Fixed-Rate						
2+yr AAA US Swaps	+34	-	+33	9/22/16	+85	6/14/16
European Equipment - Floating-Rate						
A EUR LIBOR DM	+84	-6	+84	9/30/16	+174	9/7/15
US FFELP Student Loans - Floating-Rate						
2-4yr AAA 3mo US LIBOR DM	+111	+5	+68	7/29/16	+151	3/25/16
10+yr AAA 3mo US LIBOR DM	+140	+6	+128	7/29/16	+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

Salman Banaei
Head of US regulatory
affairs
+1 347-324-8818
salman.banaei@ihsmarkit.com

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