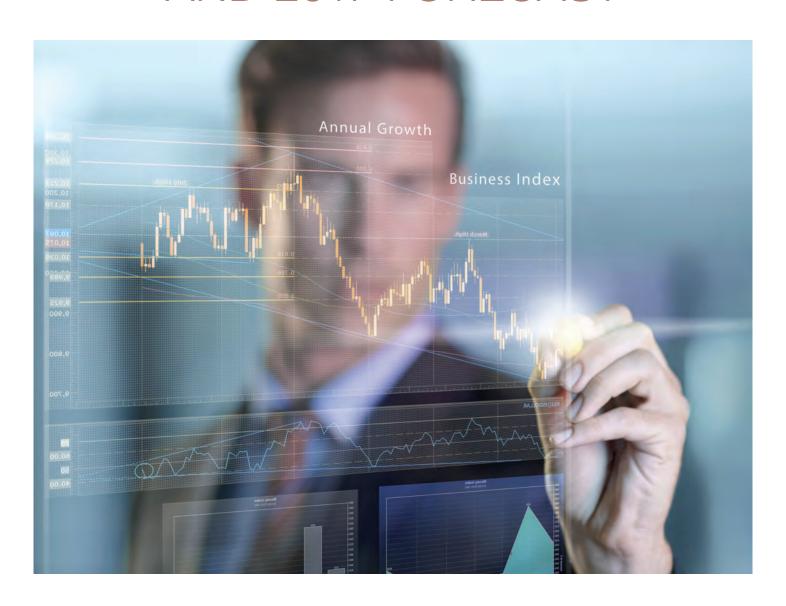
FOR INSTITUTIONAL AND CORPORATE CLIENTS ONLY

DEBT CAPITAL MARKETS 2016 REVIEW AND 2017 FORECAST



I YEAR-END REPORT FROM SG DEBT CAPITAL MARKETS AND SYNDICATE TEAMS I

SEE THE LAST PAGE OF THIS BROCHURE FOR A LIST OF SG DEBT CAPITAL MARKETS
AND SYNDICATE CONTACTS AND IMPORTANT DISCLAIMERS AND DISCLOSURE



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Executive Summary

"ARE YOU TRYING TO MANIPULATE ME? IT'S WORKING." — (Bridget Moynahan)

2016 has been another outstanding year for debt capital markets, with new records set particularly in EUR-denominated corporate issuance, and in USD-denominated issuance from financial institutions. In the EUR market, new boundaries were conquered in negative yields (up to 12 years on the German Bund curve) as well as in long-dated issuance, as illustrated by the debut 70 year benchmark issue launched by the Republic of Austria in October.

It has also been a difficult year to navigate, with many bursts of volatility fuelled by macro-economic shocks, monetary policy speculation and political uncertainties. In addition, financial issuers had to adjust to increasing capital requirements, persistent litigation risks, and regulatory uncertainty.

This extreme volatility is best reflected in the high-yield market, with most of the issuance concentrated to only five months (March-May and September-October). Emerging markets had a difficult start to the year as well, but became more attractive after the "Brexit" vote. Last but not least, corporate hybrid EUR volumes dropped by two thirds in 2016, paying the price of volatility as well as their non-eligibility to the European Central Bank's Corporate Sector Purchasing Programme (CSPP) announced in March 2016.

This combination of ultra-low rates, ongoing volatility and record volumes was already a driving theme in 2015. What makes 2016 different is that more than in any previous year, market participants have had to constantly revise their ability to anticipate market developments.

The unprecedented volatility at the beginning of the year, usually an excellent window used by frequent issuers to front-load their funding programme, caused the European corporate and high-yield markets to remain virtually muted until March. Although less affected by volatility, Sovereign issuers have also spread out their funding programme more evenly along the year.

The events that surprised market participants the most were of course the Brexit vote in June, the outcome of the US presidential elections in November and, more specifically, the unexpected dynamic of the financial markets in the days and weeks immediately following these headlines.

By further extending the scope of its quantitative easing programme in March 2016, the ECB has managed to manipulate market resilience and funding costs for European issuers. This has allowed borrowers, such as KFW and EIB, to attract multi-billion orderbooks from investors competing to invest at fixed negative yields in EUR for up to 7 years. But it also made financial markets more unpredictable as participants increasingly shift their focus to the potential tapering of quantitative easing in the eurozone.

2017 will be difficult to read, as the sentiment around interest rates and inflation seems to be reversing, notwithstanding the heavy political calendar and monetary policy potential adjustments. More than ever, identifying and seizing the first windows on offer at the start of the year may be a game changer for potential issuers.

Debt Capital Markets issuance volumes

DCM issuance volumes on EUR market

		Corporate	Bonds		Financial Bonds			SSA Bonds				Total	
In EUR bn	Investment Grade	High Yield	Hybrids	Total	Covered Bonds	Senior	Hybrids	Total	Sovereign	Agency/ Supra	Local Authorities	Total	Bonds
2013	196	55	21	272	101	157	28	286	924	217	62	1 204	1 762
2014	222	63	29	314	117	180	59	356	968	181	72	1 221	1 891
2015	239	55	26	320	154	182	42	378	947	164	59	1 170	1 868
2016 Expected	285	50	9	344	135	180	33	348	867	199	54	1 120	1 812
2017 Forecast	275	53	10	338	130	185	40	355	901	202	60	1 163	1 856
2017 vs. 2016	-4%	+6%	+11%	-2%	-4%	+3%	+21%	+2%	+4%	+1%	+11%	+4%	+2%

Source: SGCIB Analytics, Dealogic.

DCM issuance volumes on USD market

		Corporate	Bonds			Financial Bonds			SSA Bonds				Total	
In USD bn	Investment Grade	High Yield	Hybrids	Total	Covered Bonds	Senior	Hybrids	Total	US Treasury	Sovereign non-US	Agency non-US/ Supra	Local Authorities	Total	Bonds
2013	624	326	6	956	23	361	97	481	2 140	95	221	11	2 467	3 904
2014	644	312	8	964	10	452	135	597	2 206	97	240	13	2 556	4 117
2015	787	262	8	1 057	21	437	114	572	2 123	84	244	13	2 464	4 093
2016 Expected	775	220	3	998	17	500	105	622	2 321	122	277	27	2 746	4 366
2017 Forecast	780	250	4	1 034	18	500	115	633	2 426	128	276	29	2 859	4 526
2017 vs. 2016	+1%	+14%	+33%	+4%	+6%	+0%	+10%	+2%	+5%	+5%	-0%	+7%	+4%	+4%

Source: SGCIB Analytics, Dealogic.

DCM issuance volumes on GBP market

DOIVI 1000	Delvi locaci loc volatilos en abi manos											
		Corporate	e Bonds		Financial Bonds			SSA Bonds			Total	
In GBP bn	Investment Grade	High Yield	Hybrids	Total	Covered Bonds	Senior	Hybrids	Total	Sovereign	Agency/ Supra	Total	Bonds
2013	19	11	5	35	2	10	4	16	149	19	168	219
2014	19	10	3	31	7	8	10	25	126	22	149	204
2015	15	7	2	24	9	12	5	26	126	22	148	197
2016 Expected	18	6	1	25	6	12	3	21	128	23	150	196
2017 Forecast	18	6	1	25	7	12	4	23	132	23	155	203
2017 vs. 2016	+0%	+0%	+0%	+0%	+17%	+0%	+33%	+10%	+3%	+1%	+3%	+3%

182

136

87

155 150

Source: SGCIB Analytics, Dealogic.

DCM (in addition)

BOW (III addition)								
	CNH	RUB*						
In USD bn equivalent	ALL	ALL	In USD bn equivalent					
2013	61	45	2013					
2014	98	22	2014					
2015	52	26	2015					
2016 Expected	15	33	2016 Expected					
2017 Forecast	15	37	2017 Forecast					
2017 vs. 2016	+0%	+12%	2017 vs. 2016					

Source: SGCIB Analytics, Dealogic. *Source: Chonds.

156

240

190

205

230

Syndicated Loan issuance volumes in USD bn equivalent

	EMEA Loans		Americas Loans	Asia Pacific Loans	Total
In USD bn equivalent	Investment Grade	Total	Total	Total	Syndicated Loans
2013	697	1 056	2 599	779	4 434
2014	892	1 293	2 688	795	4 776
2015	890	1 293	2 492	737	4 522
2016 Expected	700	1 100	2 450	663	4 213
2017 Forecast	800	1 150	2 600	700	4 450
2017 vs. 2016	+14%	+5%	+6%	+6%	+6%

Source: SG CIB Analytics, Dealogic.

123

135

80

120

120

²⁰¹⁷ vs. 2016 +12% -3%
Source: SGCIB Analytics, Dealogic.

^{*} All International Public Issuance. Asia ex-Japan and Australia/New Zealand.

^{**} Source: Bondradar.

Debt Capital Markets

Corporates

- Across a wide variety of global bond markets, the temptation of ultra-low interest rates, the ongoing trend to disintermediate bank markets, as well as strong M&A refinancing activity provided significant support to issuance volumes throughout 2016.
- These supporting factors came amid a multitude of geopolitical and macroeconomic shocks, such as the slow-down in Chinese growth, falling energy and commodity prices, negative eurozone yields, rising tensions with Russia, and "Brexit". Total EUR, USD and GBP investment grade issuance volumes are likely to meet or marginally exceed 2015 levels, continuing the trend seen in 2014 and 2013.
- Central bank interventions have been a dominating theme in Europe this year, with both the European Central Bank (ECB) and the Bank of England (BoE) undertaking the purchase of eligible corporate bonds in secondary markets and, in the case of the ECB, primary new issue markets. And there is no playing down the impact of quantitative easing (QE) on corporate markets: in practical terms, aggregate corporate spreads in euros tightened by 50% from March levels.
- US markets have reflected and, in many instances, driven the direction of global markets. Supply levels remained high and are set to match the record levels of 2015. Several large scale M&A refinancing transactions, such as AB Inbev, have boosted volumes and continue to underscore the abundant liquidity of the US market.

- As the US economy continues to show signs of accelerating growth, the market awaits confirmation of a further interest-rate hike before the end of the year.
- 2016 has seen a marked decline in hybrid issuance volumes, which have dropped from EUR 26bn in 2015 to a mere EUR 8bn this year so far. This is partly due to lower levels of M&A activity, which often requires hybrid structures, but is also a reflection of the incredibly low absolute yields and spreads on offer in mostly ECBdriven senior issuance in euros – the traditional home of hybrid bonds.
- Despite a turbulent first half, impacted by many of the abovementioned macroeconomic themes, the highyield market has made a steady recovery going into the second half, with a healthy increase in volumes. The improving tone and sentiment have encouraged many issuers to take advantage of the low-yield environment, which in turn has piqued investor appetite for higher yielding assets.
- Finally, we saw a sharp rise in corporate liability management transactions this year in conjunction with corporate bond buying by the ECB, as issuers sought to rebalance their debt portfolios and take advantage of low-interest rates to refinance their upcoming redemptions, often ahead of time. The most prominent deals were carried out in the context of M&A activity, and included landmark liability management (LM) transactions, such as LafargeHolcim, KPN and SNAM.

Investment Grade

EUR MARKET

2016 review

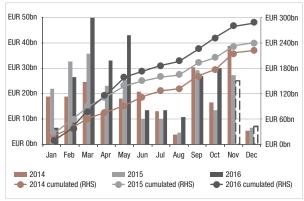
- After a record year in 2015, the investment grade (IG) corporate market again demonstrated its strength, with EUR 285bn of senior issuance expected by 2016 yearend (vs. EUR 239bn issued in 2015).
- This year was characterised by a rebalancing Chinese economy, oil price volatility, rising geopolitical tensions in the Middle East involving the US and Russia, and ongoing political discord in Europe (Brexit, Italian referendum, etc.).
- The year began with growing concerns over the state of the Chinese economy, crystallised by a worse-thanexpected drop in GDP data. This resulted in issuance

- volumes of only EUR 33bn in January and February versus a long-term average of closer to EUR 44bn.
- In addition, the unbroken drop of the oil price until mid-January (reaching a low of around USD 26 A barrel) contributed to a sharp spike in volatility, a widening of secondary credit spreads, and required new issue concessions which, in turn, drove issuers to postpone or cancel planned bond offerings.
- The real game-changer for EUR markets came on 10 March with the ECB's announcement of additional monetary policy measures to support the eurozone economy: a decrease in key refinancing measures and marginal lending rates, combined with an expanded asset purchase plan that includes corporate bonds.

- Credit markets responded immediately to the announcement to drastically tighten credit spreads, swap rates and most of the relevant indices. Unsurprisingly, primary market activity increased significantly in March 2016, as sentiment rebounded after a poor start to the year.
- Volumes surged in primary new issues, and March saw the most active month ever for IG issuance at EUR 50bn. Sentiment was extraordinarily high and issuers soon found the balance of pricing power very much in their favour with negative new issue premiums very common due to high over-subscription rates.
- Primary activity remained strong until the UK referendum on 24 June which resulted in the UK's decision to exit the European Union. This caught the market off guard and, unsurprisingly, volatility jumped considerably in the days following the vote.
- The impact on IG primary supply was limited, however, as we saw issuers able to access the market quickly after the result, as evidenced by Deutsche Bahn who launched their trade four days after the vote.
- The month of July saw better-than-expected volumes with EUR 13bn issued, topping July 2015 which saw EUR 10bn printed. The BoE measures following the Brexit vote also explain the market's good performance before the summer break. We reached a record first half-year in terms of volumes with EUR 173bn issued.
- Following a typically quiet August, the re-opening of the market in September began on a strong note in the IG primary market due to the relative absence of material news or events which could affect the market. Volumes picked up quickly as issuers who had delayed their funding because of the Brexit vote sought to capture the market window. In mid-September, the focus shifted to the financial sector after Deutsche Bank suffered heavy share price falls following the announcement of a possible EUR 14bn charge over the mis-selling of mortgage backed securities in the US, and other legal issues
- The return of interest-rate rise speculation also contributed to September jitters, as expectations of a fresh hike by the Federal Reserve moved to December. Despite these forces at play, September saw nearly EUR 27bn in supply from investment grade corporates, which was in line with the EUR 29bn issued in September 2015.
- Most issuance in 2016 came from the Chemicals & Pharma, Food & Beverage and TMT sectors, with EUR 45bn, EUR 37bn and EUR 33bn issued respectively, as well as on the long end of the curve (37% with a maturity higher than or equal to 10 years) where investors could find higher yields in this low-rate environment.
- Conditions in 2016 have been somewhat volatile, switching from difficult (as with January, February and June) to exceptional (March, April, May and September) in quick succession economic and political shocks, market conditions have generally been excellent.

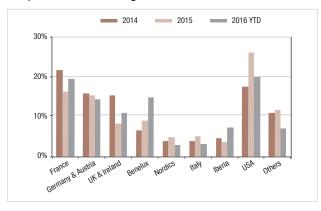
Indeed, 2016 will be remembered as a remarkable year for corporate issuers. We have seen credit spreads at their tightest, new issue premiums at negligible levels and investor appetite undiminished. These conditions are perhaps best reflected by the Sanofi and Henkel jumbo trades in September where both issuers were able to achieve negative yields on three- and two-year tranches respectively.

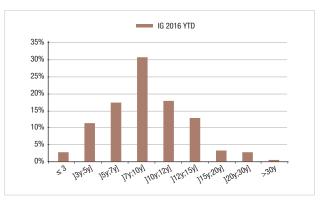
Monthly breakdown of EUR IG supply volumes in 2014-2016 (Nov. and Dec. forecasts)



Source: SG CIB Analytics, Bloomberg.

Fewer US corporate issuers on the EUR corporate market in 2016 and preference for the long end of the curve





Source: SG CIB Analytics, Bloomberg.

Regional focus

Western Europe

 Western European borrowers accounted for 73% of total EUR IG issues in 2016, a significant increase from 62% in 2015.

- AB InBev was the biggest European borrower, with EUR 13.25bn issued in 2016 year-to-date, followed by Daimler with EUR 10.50bn. As in 2015, Total remained the largest issuer in the hybrid capital format in 2016 year-to-date, with EUR 4.25bn raised across three tranches.
- In Western Europe, France and Germany remain the largest providers of primary volumes, with 26% and 21% respectively, representing 47% versus 51% in 2015. Benelux made up 21% of volumes, UK and Ireland issuers 15% and southern Europe 13%.

Americas

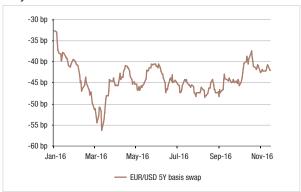
- Issuers from the Americas represented around 17% of overall supply this year in the IG euro-denominated corporate bond market versus 28% in 2015, EUR/USD basis swaps being unfavourable to these issuers. They suffered from the unfavourable EUR/USD arbitrage throughout the year.
- We saw large American blue chips coming into the EUR market, especially in the first half of the year.
- In terms of deal size, Honeywell International priced one of the largest EUR corporate bond deals in February with a EUR 4.0bn four-tranche transaction. Johnson & Johnson came in with a EUR 3.5bn deal in May also across four tranches.

Western Europe issuers were the most active in the EUR IG corporate market in 2016

Issue date	Issuer	Country	Ratings at launch	Deal value	Tranches
16-Mar-16	AB InBev	Belgium	A2/A-/A-	13 250	6
25-oct-16	Danone	France	Baa1/BBB+/NR	6 200	5
22-févr-16	Vodafone	UK	Baa1/BBB+/BBB+	6 000	4
14-Mar-16	Deutsche Telekom	Germany	Baa1/BBB+/BBB+	4 500	3
20-Jul-16	Teva Pharmaceutical	Israel	Baa1/BBB/BBB+	4 000	3
15-févr-16	Honeywell International	USA	A2/A/A	4 000	4
3-Mar-16	British Telecom	UK	Baa2/BBB/BBB+	3 900	3
11-May-16	Johnson & Johnson	USA	Aaa/AAA/AAA	3 500	4
1-Mar-16	Daimler	Germany	A3/A-/A-	3 500	3
26-0ct-16	Verizon Communications	USA	Baa1/BBB+/A-	3 250	3

Source: SG CIB Analytics, Bloomberg.

EUR/USD basis swap unfavourable to US issuers throughout the year



Source: Bloomberg.

2017 forecast

- SG CIB expects EUR 275bn in IG corporate supply in 2017, 4% below 2016 volumes. We expect the evolution of the EUR/USD basis swap to be less supportive for US issuers looking to tap the EUR market.
- One of the main factors should be the ECB policy regarding its QE programme (extension beyond 2017, tapering of the programme etc.).

USD MARKET

2016 review

- The Corporate IG market opened in January 2016 with a record USD 79bn supply compared to USD 43bn in 2015, and a running long-term average of USD 50bn for the previous three years. However, this figure was distorted by one transaction: AB InBev's USD 46bn jumbo acquisition-related financing. Barring this transaction, and compared to other global markets, supply was down -13% on January 2015 to a meagre USD 33bn, largely beaten down by volatility in commodity, equity and fixed income markets.
- This volatility, driven by China and falling oil prices, was transferred to corporate bond markets and kept many corporate issuers out of the market until mid-February when oil prices reached their nadir; the S&P slumped by 5% and treasury yields fell by 45bp.
- However, market sentiment turned soon after mid-February and investor appetite for credit improved substantially with levels of oversubscription to deals rising quickly. February ended with USD 80bn in corporate supply, a USD 10bn increase on the previous year.
- The month of May stands out, with USD 117bn of IG corporate supply printed, currently making it the biggest month year-to-date by USD 22bn. In terms of sentiment, it marked the high-water mark for the first half of the year. This prompted a number of corporates to tap the market to lock in funding as June approached, given the heightened sensitivity over possible Fed rate hikes over the summer, coupled with the uncertainly around the Brexit vote. Notable multi-tranche transactions in May included Dell (USD 20bn), Southern Company (USD 8.5bn), AbbVie (USD 7.8bn), Chevron (USD 6.8bn), and Mylan (USD 6.5bn).
- By the end of H1, IG corporate supply totalled USD 430bn, down 6% on USD 455bn in H1 2015. The slight reduction was driven by several factors, including lower M&A-related financing, Brexit uncertainties, weak commodity prices and an uneven outlook for global growth.
- Interestingly, the announcement of additional European QE and the ECB's corporate sector purchase programme (CSPP) in March led to a severe tightening in EUR spreads, which had the effect of reducing the price attractiveness of USD issuance for mainstream European issuers, thus reducing flow significantly.

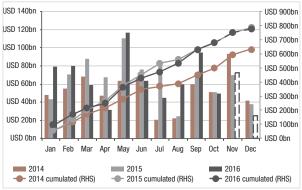
- In addition, there has been a notable change in the investor composition of the USD primary order books. With yields at an extreme low in Europe, overseas investors seeking yield have been increasing exposure to US corporate credit to benefit from higher yields and the stronger dollar.
- Looking at H2, as the post-Brexit dust settled, primary activity began to pick up, with August a typically slow month for corporate supply posting USD 59bn of supply, aided by Microsoft's USD 19.75bn M&A financing, compared to USD 25bn in August 2015. September followed suit with a further USD 95bn in IG corporate supply, compared to USD 69bn the previous year. Yet again, issuers sought to move ahead of a potential rate hike and US elections in November by adopting a "print when you can, not when you have to" attitude.
- Ultimately, 2016 is likely to be seen as one of the most eventful years in recent market memory. The oil price crash, Brexit, the Fed rate hike, European QE and the US elections have been dominating the headlines on a weekly basis. Such events have shaped companies' behavioural patterns and funding strategies in 2016, and will continue to do so as we head into 2017.

Top 10 largest USD IG corporate deals in 2016

Issue date	Issuer	Country	Ratings at launch	Deal value	Tranches
13-Jan-16	AB-InBev	Belgium	A3/A-	46 000	7
01-août-16	Microsoft	USA	Aaa/AAA	19 750	7
18-juil-16	Teva	Israel	Baa2/BBB	15 000	6
29-Jun-16	Oracle	USA	A1/AA-	14 000	5
2-Jun-16	Aetna	USA	Baa2/A	13 000	8
19-sept-16	Shire	USA	Baa3/BBB-	12 100	4
29-Feb-16	Exxon	USA	Aaa/AAA	12 000	8
16-Feb-16	Apple	USA	Aa1/AA+	12 000	9
8-Mar-16	Berkshire Hathaway	USA	Aa2/AA	9 000	7
19-May-16	Southern Co	USA	Baa2/BBB+	8 500	7

Source: SG CIB Analytics, Bloomberg.

Monthly breakdown of USD IG supply volumes in 2014-2016 (Nov. and Dec. forecasts)



Source: SG CIB Analytics, Bloomberg.

Regional focus

Western Europe

- European issuers accounted for 11% (approximately USD 69bn) of total volumes issued in the IG USD corporate space in 2016 year-to-date, versus 8% (approximately USD 30bn) in 2015 year-to-date.
- AB InBev executed the region's largest transaction in 2016 year-to-date and the second largest IG corporate transaction in history. To help fund their USD 123bn acquisition of SAB Miller, AB InBev issued USD 46bn across seven tranches, amassing a total order book of USD 105bn in the process – the largest in the history of debt issuance.
- However, the AB Inbev transaction (Belgian-listed)
 distorts volume statistics from the region, and without
 this transaction underlying supply fell by nearly one third.

Americas

- The dynamics of Americas issuers in the USD market remained much the same as in 2015, contributing 77% of all USD volume compared to 83% last year.
- Eight of the Top 10 trades this year were carried out by US issuers.

2017 forecast

- We expect year-on-year issuance in USD IG corporate to be flat versus USD 775bn in 2016.
- Several factors have the potential to influence bond markets in 2017. One of these should be the direction of interest rates. With the economic scenario of a rate hike firmly in place, the question now is how soon and to what extent? The first increase is widely anticipated for December 2016, thereafter we expect two further hikes in 2017.
- We also expect continued headline pressure from political events: a new US President in January, the United Kingdom formally triggering its two-year exit from the European Union by March, French and German elections, tensions with Russia and the ongoing evolution of the Chinese economy to find its equilibrium are all factors to watch closely.
- However, given the likelihood of US interest rates rising, the USD bond market may be less attractive to a wide variety of issuers who seek to take advantage of historically low borrowing costs.

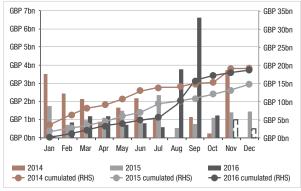
GBP MARKET

2016 review

2016 was a mixed bag for the sterling market. Indeed, after several years of far less favourable pricing dynamics compared to other currencies, many questions were raised as to whether sterling could still lay claim as a major funding market.

- The year started poorly, and volumes in the first half of 2016 pointed to the continued decline in volumes over the past few years, from a peak of GBP 36bn in 2012 to a paltry GBP 15bn in 2015.
- Primary activity remained very slow during the first half of the year with only 14 trades from predominately domestic names printed for a total GBP 5.1bn in volume.
- Undoubtedly, the announcement in February 2016 of the referendum on the UK's European Union membership contributed to the malaise in the sterling markets, as uncertainty and volatility began their inexorable rise until 24 June when the shock result of "Brexit" was confirmed
- However, since the referendum result the picture has been very different. Volumes picked up almost immediately, as gilts rallied by over 50% in a flight to quality and in expectation of a more accommodative monetary policy to ease the Brexit shock. Volumes for Q3 alone were GBP 11bn, more than double the entire volume of the first half of 2016.
- Corporate issuance found further support in August when the Bank of England announced that its post-Brexit stimulus package would include corporate bond purchases in secondary markets.
- We expect volumes to finish the year at GBP 18bn in corporate supply. Looking forward, the more favourable pricing conditions and accommodative monetary policy stance of the Bank of England seem set to provide a boost to volumes.

Monthly breakdown of GBP IG supply volumes in 2014-2016 (Nov. and Dec. forecasts)



Source: SG CIB Analytics, Bloomberg.

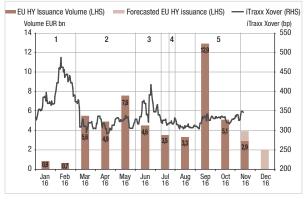
2017 forecast

- SG CIB expects the effects of Brexit to continue to dominate market conditions and pricing dynamics in 2017.
- With a scheduled date for the UK to trigger the process of leaving the European Union at the end of March 2017, we believe the BoE will need to continue to deploy highly accommodative monetary policy to ease any shocks, including the purchase of corporate bonds in secondary markets which will underpin tight credit spreads.
- That said, the collapse in the value of sterling is already filtering through to inflationary pressures in the economy, with inflation expected to soon overshoot the BoE's 2% target.
- The extent to which this limits BoE flexibility to keep rates low may impact the market. With this in mind, we forecast issuance at GBP 18bn, but note that this amount may be front-ended in Q1 2017 ahead of the start of formal Brexit negotiations.

High Yield

2016 European market overview

Year-to-date high-yield volume trends (Europe: EUR and GBP)



Source: Bloomberg

1. January - February 2016 - EUR 1.6bn eq. of volume

■ The European high yield (HY) market was heavily impacted by macroeconomic concerns focused on risks related to China's growth and falling energy prices, which have pushed volatility to record levels. Investors turned to safe-haven assets, and only six issuers came to market in January and February for total proceeds of EUR 1.6bn eq. (vs. 36 issuers for EUR 23.5bn in 2015).

2. March - May 2016 - EUR 18.1bn eq. of volume

• In March the market made a strong recovery thanks to the supportive measures by central banks. Primary volumes responded as issuers looked to make up for lost time and took advantage of the improved market conditions. We saw record inflows over 14 consecutive weeks into HY funds totalling +EUR 5.5bn in Europe.

3. June/early - July 2016 - EUR 5.6bn eq. of volume

■ Focus on the UK referendum and vote to exit the EU brought back volatility to the markets. As a result, the market saw no new issuance between 16 June and 11 July, with the iTraxx X-over above 400bp and investors stepping back.

4. Late July 2016 - EUR 2.4bn eq. of volume

■ In the aftermath of the Brexit vote, the market showed some encouraging signs of resilience in the second half of July. Fifteen issuers tapped the market in July and August for a total of issuance of EUR 6.8bn, dominated by single-B issuers (representing 56% of the volume issued during this period).

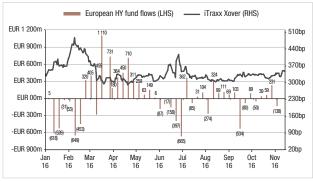
5. September - November 2016 - EUR 20.9bn eq. of volume

A rush of issuers accessed the market in September to seize the post-summer market window: 29 issuers came to market in September for total proceeds of EUR 16.5bn eg. as the market played "catch-up."

Full-year 2016 – EUR 57.3bn eq. of volume forecasted

■ The HY market has been marked by periods of volatility with limited but strong windows for opportunistic issuance. While investors maintain their appetite for lower-rated credits, they remain disciplined and continue to seek a premium for risk. Primary issuance has tracked significantly below 2015 with expected FY 2016 volumes down 11% year-on-year (following a drop of 14% in 2015).

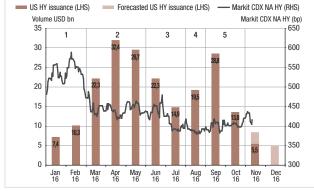
Year-to-date high-yield fund flows and CDS index (Europe)



Source: LCD, Bloomberg.

2016 US market overview

Year-to-date high-yield volume trends (US: USD)



Source: Bloomberg.

1. January - February 2016 – USD 17.7bn of volume

■ The US high-yield market picked up in 2016 where it left off the year prior, with ongoing macroeconomic concerns, considerable volatility and low deal volumes. By the end of January, new supply totalled only USD 7.5bn, down 61% year-on-year. However, market sentiment began to improve in mid-February on the back of a rally in oil prices and low interest rates driven by accommodative central bank policy.

2. March - May 2016 - USD 84.4bn of volume

Perhaps the strongest stretch that the HY market has seen on the primary side came at the end of the first quarter and into the second quarter of the year. April and May were two of the three highest months for issuance this year, and investors were looking to put cash to work after it seemed the lows in February were in the past.

3. June - July 2016 - USD 37.2bn of volume

Dominating the headlines in June was the uncertainty surrounding the Brexit vote. In the days leading up to the final referendum, the new issue market was put on pause and closed out the month with nine consecutive sessions of no new supply. However, the market shook with the news shortly after the final vote, and by late-July yields and spreads grinded to their tightest all year.

4. August 2016 - USD 19.5bn of volume

August, which has historically been the doldrums of summer for US HY, saw the highest volumes in four years with almost USD 20bn of new supply. The supply for the month was 90% higher than 2015 and 650% higher than August 2014.

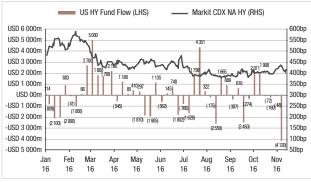
5. September - November 2016 - USD 48.1bn of volume

Once Labor Day was over in early September, the market caught fire and priced USD 28.3bn over 41 new deals to finish out the last three weeks of the month. October started with the same fervour, but tailed off as the US Elections drew closer. Another dynamic that was at work over this period was a desire to front-run a potential rate-hike from the Fed which many feel could come as early as December 2016.

Full-year 2016 - USD 220bn of volume forecasted

Over the course of 2016 the US high yield has made a decisive turnaround and has proven bullet-proof in the face of volatility surrounding a potential Fed rate-hike, the US presidential election, the state of the Chinese economy and commodity prices. The strength of the market can also be seen when looking at secondary levels, as yields are currently hovering at the tightest levels all year, i.e. some 400bp off the average highs seen in February. Going forward, issuance will remain opportunistic.

Year-to-date high-yield fund flows and CDS index (US)



Source: LCD, Bloomberg

Key themes

Exceptional volatility throughout the year on the back of major macroeconomic news:

- 2016 has been impacted by major macroeconomic events (China, commodity prices, Brexit) pushing up volatility (+196bp move in the iTraxx Xover between the highs and lows of the year).
- Uncertainty around Brexit delayed Capex and M&A in the UK and therefore likely GBP issuances. Over the year, the sterling market registered a drop in issuances with only GBP 4.4bn issued in 2016 year-to-date (vs. GBP 5.9bn over the same period last year). However, some GBP sectors are growing independently of Brexit, such as consumer loan financing (Cabot, Arrow Global, etc.).

Flight to quality from investors with an overweighting of BB issuances in H1 2016:

- A clear flight-to-quality sentiment dominated in H1 2016 with strong demand for BB issuers. BB credits represented 73% of total supply in H1 2016 versus 36% from July to date.
- Further quantitative easing in Europe pushed investors toward lower-rated credit issuers, the impact being a surge of single-B rated credit in the second half of the year (single-B rated issuers represent 58% of total supply from July to date). This segment of the credit spectrum was highly attractive to HY investors, as demonstrated by the fact that most of the deals priced in at the tight end of the guidance.

Sharp drop in non-corporate HY activity:

- Leveraged buy-out (LBO) activity remains muted compared to previous years, with sponsor-owned issuers representing around 14.0% of total supply (vs. 28.5% for the full-year 2015).
- The attractive pricing and flexibility of the institutional term-loan market (supported by strong technical factors and the imbalance between supply and demand) won favour with private equity companies, limiting the use of bond instruments to subordinated debt, the volume of which has dropped significantly.

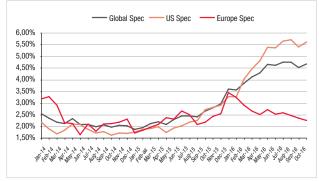
Post-summer rally with early signs of aggressiveness and excess:

- Following a volatile and disappointing first half of the year and the traditionally quiet holiday periods of late July and August, an exceptionally large number of issuers came to market in September.
- The flurry of high-yield bond deals has resulted in borrower-friendly conditions, including the return of aggressive structures such as PIK-toggles, with Schaeffler pricing the tightest-ever yield (2.750%) for the largest cross-border PIK-toggle notes on record (EUR 2.5bn). Total PIK issuance in September 2016 was EUR 4.5bn eq. versus EUR 2.1bn eq. for the full-year 2015.
- The market has also seen an increase in aggressive recaps, with Ziggo issuing a USD 3.5bn deal that paid a USD 3bn dividend. Another sign of aggressiveness in the market was the covenant features including portability close to opening leverage.
- However, investors kept their discipline and rejected overly-aggressive transactions, as best illustrated by the pulling of the PIK-toggle Verallia recap and the withdrawal of IT re-seller Daisy's refinancing over credit concerns.

High yield continues to offer return:

- The HY asset class is offering approximately 7.2% of return year-to-date in Europe versus 5.2% in IG, 5.1% in leveraged loans, and an attractive 12.8% (approx.) return in the US HY asset class (vs. approximately 7.6% in US IG).
- The continued quest for yield fuelled by central banks (CSPP programme in Europe) and the mild increase in global default rates explained this performance from the HY asset class. It is worth noting that the US spike observed in the graph below is attributed mostly to the underperformance in the Exploration & Production and Metals & Mining commodity sectors.

Trailing 12-month issuer-weighted speculative grade default rate



Source: Moody's.

Landmark deals in 2016

- IDH: On 22 July, IDH Finance placed the first sterling high-yield bond following the UK's Brexit vote. The company announced a GBP 425m offering of B2/B-rated first-lien secured notes split into a GBP 275m six-year (non-call 2) fixed-rate tranche, and a GBP 150m six-year (non-call 1) floating-rate tranche. The deal included a 6.25x portability provision to maximise investment and exit flexibility. The proceeds of the issuance of the notes, along with GBP 130m in privately placed second-lien secured notes, were used to i) to redeem the company's existing first-lien notes due 2018 and second-lien notes due 2019, ii) repay all amounts outstanding under the existing revolving credit facility (RCF) agreement, and iii) pay fees related to the offering.
- Intralot: On 16 September, Intralot priced a EUR 250m offering of B1/B-rated five-year (non-call 2) senior notes with Societe Generale acting as Joint Global Coordinator. The proceeds of the issuance, together with cash on balance sheet, were used for the redemption of the company's existing 9.750% 2018 notes in a tender offer in which Societe Generale acted as Dealer Manager. Following a three-day roadshow in London and Paris, the transaction attracted solid interest from real money investors. The price talk was released at 6.500-6.750% and the transaction priced at 6.750%. Pricing came at the wide end of yield guidance due to a softer market on the day following the fine imposed on Deutsche Bank in the US which weakened the market. This transaction allowed the company to extend its maturity profile and realise substantial interest savings.
- Groupe Fnac: On 21 September, Groupe Fnac S.A. priced an inaugural EUR 650m offering of Ba2/BB-rated seven-year (non-call 3) senior notes in order to refinance the bridge facility put in place to finance its acquisition of 100% of Darty's issued share capital, with Societe Generale acting as Joint Global Coordinator. At a wellattended two-and-a-half-day roadshow in Paris and London, the transaction attracted strong interest from European investors. The initial price talk was released early on Wednesday morning at 3.500-3.750% and then revised down to 3.375% on the back of strong book-building momentum. The transaction attracted more than 300 European investors and was largely oversubscribed. This allowed the issuer and the banks to price the transaction at 3.250%, the tight end of revised guidance and well inside initial price talk.
- **DEA:** On 30 September, DEA Deutsche Erdoel priced an inaugural EUR 400m offering of B+/BB(F)-rated sixyear (non-call 2.5) senior notes at par to yield 7.500%. As the first EUR denominated upstream E&P issuer in 10 years, DEA's debut bond offering is a significant milestone transaction for both the company and the European high-yield market. This is an excellent outcome for an issuer in a sector which is relatively unknown to European high-yield investors. In addition to acting as Joint Bookrunner on the bond transaction,

- Societe Generale was sole Rating Advisor to the company and played a leading role as Initial Lead Technical Bank, Coordinating MLA and Bookrunner when the company put in place its USD 2.3bn reserve base lending (RBL) facility in 2015.
- Sabine Pass Liquefaction, LLC: On 19 September, Sabine Pass Liquefaction, LLC priced a USD 1.5bn offering of Ba2/BBB- rated 10.5-year (non-call life) senior secured notes at par to yield 5.000%. SPL initially launched a USD 1.0bn transaction and in spite of the already USD 10.0bn of Sabine Pass outstanding bonds at the time, investor appetite for the transaction was strong and was met with positive feedback. The orderbook for the deal closed substantially oversubscribed, enabling the bookrunners to upsize the transaction to USD 1.5bn. Overall, the outcome was excellent and allowed SPL to capitalize on the positive momentum stemming from the Company's recent debt upgrade by Standard & Poor's (S&P) to Investment Grade (BBB-).

2017 forecast

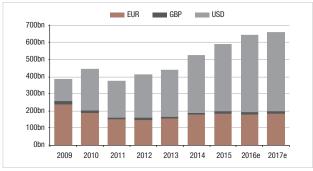
- We expect the European market to be slightly up in terms of volumes next year and to continue to be dominated by stronger credits and well-known issuers. The HY primary market should benefit from:
 - (i) a persistently low-rate environment (fuelling the refinancing trend);
 - (ii) higher redemption from heavy issuance in 2012-2014;
 - (iii) anticipated stronger M&A market and improved GDP in Europe (hence higher Capex);
 - (iv) probable rebalancing between overly-liquid leveraged loans and bond markets (higher amount of Floating Rate Notes and higher amount of unsecured HY LBO bonds).
- In the USD market, we expect the general trend to be in higher issuance volumes. There are a number of macroeconomic drivers this year namely, central bank activity and a pending rate rise from the Fed, US elections and lower growth expectations which could trickle into 2017, impacting issuers' ability to access the market. However, we expect increased activity in the Metals & Mining and Oil & Gas space, with oil prices stabilising to drive issuance volumes.
- In terms of our volume forecasts for 2017, we expect to reach:
 - (i) EUR 53bn in EUR-only issuance, slightly up from a projected EUR 50bn for full year 2016;
 - (ii) GBP 6bn in GBP-only issuance, flat from a projected GBP 6bn in full-year 2016; and
 - (iii) USD 250bn in USD-only issuance, up from a projected USD 220bn for full-year 2016.

Financial Institutions

- 2016 has been characterised by high volatility across markets as well as issuers' lower funding needs which have impacted the issuance patterns and volumes of financial institutions in the primary market.
- Overall funding needs have decreased, particularly in Europe, due to the cost-efficient funding offered by central banks, coupled with moderate lending growth. Focus of issuance plans has been on building up capital buffers to comply with regulatory requirements, but so far these requirements remain unclear, thus slowing down the issuance pace of subordinated debt.
- Sources of market volatility have been varied:
 - Central bank actions, such as changes to monetary policy, have been under significant speculation and scrutiny. Considering that the pace of economic recovery in Europe is lagging behind that of the US, the respective monetary policies are expected to reflect this – while the European Central Bank could possibly extend QE, the Fed's first rate hike is expected in the coming months;
 - Idiosyncratic risks, such as bank litigations, have caused notable turbulence in the global markets.
 For example, the record high USD 14bn proposed claim for Deutsche Bank increased risk aversion in September and affected the subordinated market as a whole despite being a very bank-specific event;

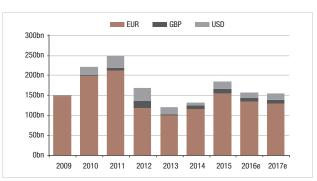
- In addition to the heightened political risks in the peripheral countries over the past years, this year political risks have also taken centre stage in the core Western countries. We have seen hurdles around the UK referendum in June, the US presidential election campaign and the election of Donald Trump in November, and more are coming in the form of the upcoming Italian referendum in December;
- Geopolitical risks and the related drastic oil price fluctuation also contributed to risk aversion.
- No asset class has been immune to the jitters. Financial institutions' funding activity has been particularly affected by the volatility in interest rates, currency exchange rates and of course credit spreads the relative attractiveness and suitability of different debt instruments and currencies has varied throughout the year. Volatile environment and consequently short issuance windows have demanded flexibility and readiness from issuers to swiftly move ahead when opportunity arose.
 - -We saw issuers adjusting their funding strategies and sequencing of trades by front running their covered bond issuance plans in H1 when market conditions were less favourable, while postponing less defensive formats until later when market stabilised.
 - Moreover, intraday execution strategies were preferred by frequent issuers when possible to mitigate execution risk.

Senior unsecured volumes (EUR bn eq.) expected to increase again in 2017



Source: SG CIB Analytics, Dealogic. All issuers, amount > EUR 250m eq., maturity > 18 month.

Covered bond volumes (EUR bn eq.) slowly contracting



Source: SG CIB Analytics, Dealogic. All issuers, amount > EUR 250m eq., maturity > 18 months.

Senior unsecured market

EUR MARKET

2016 review

Increasingly strict regulation and higher capital requirements for financial institutions have been the dominant theme over the past few years, and 2016 was no different. For banks, the Minimum Requirement for Own Funds and Eligible Liabilities (MREL) and Total Loss-

Absorbing Capacity (TLAC) requirements will play a central role in their capital and funding planning, and 2016 was spent in anticipation and speculation of the final framework and required levels (expected by end of-the-year 2016).

EUR senior unsecured issuance volumes have been affected by the regulatory uncertainty as, according to expectations, limited or none of the senior unsecured stock may account towards the buffers required by

MREL or TLAC. In the search of cost efficient ways to build up capital buffers, we have seen an array of "Tier 3" instruments being planned, structured and some already issued (e.g. Nykredit's Senior Resolution Notes).

Quantitative easing, in the form of TLTRO 2, CBPP3 and CSPP from the ECB and the Term Funding Scheme (TFS) in the UK, has also directly reduced financial institutions' long-term funding needs. Moreover, the low-yield environment has led to growing deposit bases and increasing cost of holding liquidity reserves for banks. Consequently, funding plans have been adjusted downward to minimise excessive liquidity.

In addition, market volatility affected the amounts of senior unsecured issuance, since we experienced brief market closures (or periods of sub-optimal issuance conditions) at times of heightened risk aversion.

Overall, senior unsecured issuance volumes from operating companies (OpCo) were slightly down from 2015, but including the holding company (HoldCo) senior unsecured debt which has replaced some of the OpCo debt, the total 2016 volumes are slightly up versus 2015 in all major currencies (2016e total: EUR 180bn, USD 500bn and GBP 12bn) with fairly unchanged proportions of the market. North American issuers dominated both the USD and EUR markets with 49% and 25% market share respectively. The second most active regional group to issue in EUR were the French (19%), and the UK was the most active European country to issue senior unsecured in USD (10%).

Regional focus

Western Europe

- While the overall volumes in 2016 year-to-date are expected to be slightly up from 2015, regional trends have varied: US, French and German issuers increased issuance while other regions reduced it. Heightened volatility and risk aversion reduced supply from the UK (fears of the consequences of the Brexit vote) and Italy (e.g. UniCredit and MPS related turbulence, the upcoming referendum). Reduced volumes from Swiss issuers can be explained by the return to (historically) normal levels of issuance after the peak in 2015 induced by change in capital regulation.
- ECB QE has both had an impact on eurozone issuers' funding needs as well as the EUR senior unsecured spread levels. TLTRO 2 provided banks with a second round of cheap liquidity (with 4-year maturity) which replaced some long-term funding. Extension of the ECB's buying programme to insurers and corporates via the CSPP in Q2 2016 led to a significant tightening in spreads for the sectors.
- We have seen a shift in issuance of Operating Company (OpCo) senior unsecured debt to TLAC-eligible Holding Company (HoldCo) senior unsecured from issuers to whom this structure is feasible (mainly UK and Swiss issuers). As an example, SG CIB managed an inaugural

- HoldCo senior unsecured issue for Belgian bankinsurance group KBC.
- Maturity-wise, the longer end was clearly more preferred in 2016 compared to 2015, with the proportional issuance of 5-10 year and 11-15 year bonds going up versus last year (53% to 57% and 2% to 8% respectively)

North America

- US issuers were extremely active in EUR in 2016 year-todate with EUR 31.3bn in total issuance:
 - to fulfil their natural EUR funding needs;
 - to diversify funding;
 - to build out their respective credit curves further;
 - and to take advantage of the attractive all-in rates (fixed or floating) as they swap back to 3-month US Libor.
- Canadians relied more on the USD market and less on EUR for their senior unsecured issuance, as they focused funding in EUR on covered bonds.
- Related to the anticipated TLAC requirements, a form of callable senior unsecured debt emerged in 2016. US issuers issue senior unsecured debt out of their Holding Companies which makes the debt TLAC-eligible. However, the TLAC-eligibility of this debt starts to drastically reduce at two years of remaining maturity and the bonds lose their TLAC-eligibility entirely for the last year of their lifetime. This has encouraged the addition of issuer's call option one year ahead of maturity, first to USD-denominated issues in August 2016, but more recently in EUR as well. This was well received by the investor community.

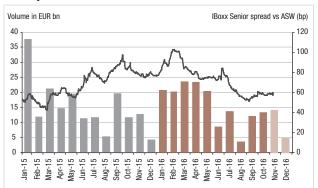
2017 forecast

On the whole, we expect the market themes in 2017 to continue similarly to this year with regulatory changes and central bank policies driving market sentiment. The former will continue to impact financial institutions' capital planning and funding needs while the latter will continue to impact the market environment and cost of funding. Total volumes for next year are expected to increase by 3% (up to EUR 185bn).

- Due to gradually improving economic fundamentals in Europe, we expect lending activity to pick-up and, consequently, ECB's TLTRO 2.3 and 2.4 next year to be well participated. This will likely have a contracting impact on senior unsecured volumes for next year.
- Clarification in the regulatory environment, i.e. TLAC and MREL requirements as well as in national insolvency laws (expected sometime in late 2016 or early 2017), is likely to give a further push to "Tier 3" issuance; which is bound to replace some senior unsecured and Tier 2 issuance.
 - Significant volumes of "non-preferred senior" (NPS) debt are expected from France once the change in legislation is finalised and the documentation of French issuers amended accordingly.

- Shift from OpCo to HoldCo senior unsecured is expected to continue, especially from Swiss and UK issuers where the holding company structure is more commonly used.
- Likewise, the recent trend of callable senior unsecured bonds from US issuers is expected to continue.
- Lower (OpCo) senior unsecured supply and a potential layer of "Tier 3" instruments enhancing credit quality should support spreads. However, the potential widening pressure on "Tier 3" due to higher supply and on covered bonds due to gradual tapering of CBPP3 might also have an impact on senior spreads.

Monthly issuance volumes were more balanced in 2016 vs. 2015



Source: SG CIB Analytics, Markit iBoxx, Dealogic.

USD MARKET

2016 review

The US presidential elections on 9 November 2016 and the preceding electoral campaigns dominated the headlines for months and were an important driver of market sentiment throughout the year.

In the meantime, the state of the US economy has been gradually improving and the timing of the Fed's first rate hike had been as speculated as the probability of Donald Trump becoming the next president of the United States. The increased political and market uncertainty caused by Trump's surprise win could, however, delay the first rate hike until next year.

The EUR/USD currency basis swap has played a role in issuers' choice of issuance currency for senior unsecured and its development will be closely followed next year as well.

Meanwhile, the Money Market Reform which came into effect in October 2016 has moved the rates as well as the cross-currency basis swaps. The reform, intending to make the prime money market funds safer, will effectively reduce the size of the USD commercial paper (CP) and certificates of deposit (CD) market, decreasing the available short-term funding for banks. The funds, which typically invest approximately 60% of their assets in CPs and CDs issued by banks and corporates, are required to build up liquidity buffers and have already started to reduce their purchases.

The rise in 3-month USD Libor could potentially increase the appetite for floating-rate notes. In addition to the movement in rates, we foresee an impact on US banks' funding activities as part of the short-term funding, which is likely to shift to long-term funding.

Senior unsecured volumes overall are expected to total USD 500bn in 2016, up from USD 437bn last year.

Regional focus

Western Europe

- European issuers have slightly increased their issuance volumes in USD this year (USD 109bn 2016 year-todate vs. USD 99.5bn 2015) due to attractive basis swap dynamics.
- UK issuers have been particularly active in preparation to comply with rather hefty MREL requirements, which has intensified the replacement of outstanding OpCo senior unsecured bonds with new HoldCo issuance. HSBC is expected to face high required volumes for MREL-eligible liabilities and took the opportunity to issue in large volumes in the USD market with good market depth.
- Nordic issuers increased their annual volumes as well, replacing some EUR senior unsecured issuance by USDdenominated bonds, taking advantage of the relative cost efficiency.
- Meanwhile, Swiss issuers reduced their volumes to historically more normal levels from the 2015 peak numbers (driven by regulatory change).
- Investor appetite for HoldCo senior issuance has been good and investors are looking forward to potential NPS issuance out of Europe.

North America

- 49% of the total USD senior unsecured primary volumes in 2016 was issued by North American issuers. This is lower than the 57% in 2015 and 55% in 2014. This is due to increased issuance in other currencies, such as EUR, to satisfy needs in the respective currencies, as well as diversification.
- Since August 2016, we have seen issuance of callable structures in senior unsecured, both fixed and floating rate notes (FRN), in increasing volumes as banks are building their TLAC-eligible buffers. Additionally, the maturities (e.g. 11NC10) of the floating rate callable notes have been longer than typically seen for the format, and consequently the notes have not fitted the traditional FRN investors' mandate/preference (up to five years) as well. This has increased volatility in FRN spreads.

2017 forecast

Volumes in the USD senior market increased in 2016, but we expect the trend to flatten in 2017 and issuance to reach similar levels to 2016 (USD 500bn), supported by broadly the same factors which drove issuance this year:

- TLAC/MREL-incentivised HoldCo/NPS issuance is expected to continue supporting senior volumes overall as banks build up their buffers;
- The aforementioned money-market reform is likely to shift US banks' funding activity from short- to longterm financing which is expected to increase senior unsecured issuance.

We expect some volatility around the Fed's first rate hike, but as this will be overall a positive development in the market and a sign of a reviving economy, market impact should remain contained.

GBP MARKET

2016 review

This year's sterling senior unsecured primary volumes of GBP 12bn (expected annual total) are in line with both the 2015 volumes as well as the five-year average for annual total issuance. The limited market depth in GBP continues to make it a target for sub-benchmark size opportunistic issues.

- Volatility rose significantly around the June referendum vote, but investor appetite recovered quickly after the vote and issues in July-August were twice oversubscribed.
- In 2016 we saw more long-dated (10Y+) tenors versus last year. The UKT 10-year yield hit its historical low of 0.605% in August and this has impacted issuers' maturity choice - longer tenors offer yield pick-up, improving the attractiveness of the bond from investors' perspective.
- Building up TLAC and MREL buffers is a central theme in the GBP market as well and we have seen an uptick in Senior HoldCo issuance this year at the expense of OpCo issuance.

Regional focus

Western Europe

- In 2016 domestic UK supply accounted for 52% of the market, which is more in line with the historical average than the 30% seen in 2015. Only 22% was issued by other European issuers, with Nordics issuing the bulk of it (10%). Swiss and French issuers followed with 4% share each.
- 29% of domestic senior unsecured issuance in GBP has been issued out of holding companies.
- The Term Funding Scheme (TFS) by the Bank of England's Monetary Policy Committee (MPC) provides funding for UK banks at an attractive rate and has, to an extent, replaced some of the public issuance volumes out of the UK.

North America

Northern American supply was only 19% this year in contrast to 26% in 2015, 20% in 2014 and 10% in 2013.

2017 forecast

Political uncertainty in the UK regarding "Brexit" and its potential implications remains high and is likely to dominate headlines in 2017 as well. We expect issuance in GBP to remain opportunistic and senior unsecured volumes to stay at the levels seen in 2016.

The cable rate is approaching its historically lowest point (1.158 in December 1984), having declined since early September and experienced a significant plunge after the referendum vote. Theoretically, this could improve the attractiveness of GBP issuance to foreign issuers swapping back to EUR or USD, for example. We would expect the impact on issue volumes to be marginal, however.

As in EUR and USD, we expect HoldCo senior unsecured issuance to continue to partially replace OpCo paper for TLAC/ MREL purposes.

Covered bond market

EUR MARKET

2016 review

The EUR covered bond market had a very strong start to the year with impressive H1 volumes. However, primary volumes in H2 2016 have disappointed and we expect the total annual volumes to come well below the 2015 total (EUR 135bn vs. EUR 154bn). In 2016 EUR covered bond redemptions totalled EUR 148.6bn and it is unlikely that the new supply will be enough to compensate.

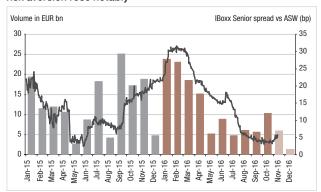
As discussed above, stricter excess liquidity management and overall lower funding needs have impacted issuers' covered bond volumes this year. The uneven distribution of volumes over 2016 is linked to risk sentiment: risk aversion rose significantly in early H1 and banks used the window to front run their covered bond issuance plans while waiting

for a more conducive window to issue riskier assets. Following the same logic, in H2 we saw issuers using the opportunity of the improved market sentiment to focus issuance on TLAC/MREL-eligible debt.

- ECB's CBPP3 continued to provide a backstop as a buyer in the covered bond market to the benefit of spreads but to the detriment of secondary market liquidity. Secondary trading volumes have reduced from low to very low and the focus of investors as well as CBPP3 has been on the primary market. As the primary volumes fell in H2 so did the weekly purchases by the CBPP3.
- Squeezed spreads coupled with the very low-rates environment led to the new phenomenon of negative coupons of covered bonds. While real money investors

reduced their participation as yields fell below zero, bank treasuries continued to buy, as they gave more importance to the relative value of covered bonds to sovereign paper.

Covered Bond supply was heavily focused on H1 in 2016 when risk aversion rose notably



Source: SG CIB Analytics, Markit iBoxx, Dealogic.

Regional focus

Western Europe

- Germany and Austria, the Nordics and France continue to be the main regions for EUR covered bond issuance, representing 58% of the year-to-date total volume (vs. 40% of 2015 total).
- Southern European issuers on the other hand have reduced their relative issuance amounts considerably from 2015 – down to 16% from 26%.
- This year we saw the inaugural EUR-denominated covered bond out of Poland, issued by PKO Bank Hipoteczny, the mortgage subsidiary of the largest Polish bank PKO Bank Polski, enabled by the amended Polish statutory covered bond framework (SG CIB bookrunner).

North America

- 100% of the Northern American activity in the EUR covered bond market came from Canadian issuers taking advantage of the lower cost and deeper market compared to the USD market. Total volumes were slightly higher compared to previous year (USD 9.75bn 2016 year-to-date vs. USD 9.35bn 2015 total) and the relative market share increased from 9% to 10%.
- Canadian issuers continue to benefit from strong demand for EUR-denominated non-CBPP3-eligible paper.

APAC

While Australian and New Zealand banks lowered USD issuance, they have increased euro-covered bond issuance from EUR 4.5bn in 2015 to EUR 6.5bn in 2016. The overall volume in APAC increased to EUR 7bn, thanks to inaugural transaction from Singapore's UOB in the euro space.

2017 forecast

In the past, the redemption profile of covered bonds was a good indicator of possible supply, as issuers often seek to roll over their maturing bonds but, as seen in 2016, it is now more complex than that. For example, the uncertainty as to whether or to what extent issuers will participate in the upcoming TLTRO 2.3 and 2.4 causes uncertainty in terms of covered bond supply. It should also be noted that covered bond issuance peaked in the post-crisis years, which boosts redemption volumes this year and next (approximately EUR 130bn in 2017).

Furthermore, the ECB buying programme will not last forever and there are rumours of CBPP3 tapering already in the market. Spreads may widen as the ECB withdraws its support. That being said, we are optimistic about the underlying real demand for EUR covered bonds and expect the market to remain supported, especially considering the current negative net supply.

We forecast a moderate 4% decrease in EUR covered bond supply next year. We could, however, potentially see new issuers in the market, for example from Poland, following PKO's lead. This would offer diversification opportunities to investors.

USD MARKET

2016 review

After strong volumes in 2015, USD covered bond primary activity reduced by a fifth this year to USD 17bn. Incentives to issue in the USD covered bond market have reduced in recent years – while the USD market still offers some funding diversification, the Euros offer a deeper and a cost-efficient market.

- Canadians dominated the market with 59% (vs. 45% in 2015), while Nordic issuers were completely absent, having issued actively the year before.
- Interestingly, German supply accounted for 17% of the supply.
- The most popular choice of tenor continues to be 5-year with 67% of all bonds, while a few issuers opted for a 3-year, and just one for 4-year maturity.
- Secondary spreads experienced a strong tightening trend in H1 2016 during which relative spread differentials between issuers narrowed. H2 has seen stabilisation at these new low levels and secondary activity has been limited.

Regional focus

Western Europe

- German issuers doubled their issuance volumes in the USD covered bond market this year (to USD 2.65bn). In addition to diversification, an important incentive to issue in the USD market for German issuers was to achieve a positive coupon, while the equivalent in euros would have been negative, making USD-denominated bonds much more attractive from investors' perspective.
- Swiss and Nordic issuers were absent from the market this year which is the second consecutive year for the Swiss, while we saw three Nordic benchmarks in 2015.

North America

- Canadian issuance volumes in USD covered bonds have remained at 2015 levels – USD 9.25bn in 2016 year-todate versus USD 9.35bn 2015 total.
- Despite the tightening in spreads in H1, the USD market continues to provide optically much higher coupons which are attractive to investors.

APAC

■ The USD covered bond market volume of USD 3.75bn in 2016 is below 2015's volume of USD 7.5bn. Issuance came from Australian and Korean issuers. It is worth noting that while Australian are the historical issuers in this market, after the inaugural covered bond out of Korea in 2015, Korean issuers are becoming a regular player in this asset class. We have also witnessed the first ever green covered bond in the market issued by Bank of China. In this case, it is worth noting that the notes are not covered bonds in the strictest sense, as they do not constitute "covered bonds" pursuant to any law or regulation in any jurisdiction, but share some characteristics of typical covered bonds.

2017 forecast

We are expecting an increase of 6% in volumes in 2017 versus 2016 driven by:

- Returning issuers, such as Nordic banks, who were absent from the market this year, to maintain their presence in the market should 2017 prove more supportive for primary issuance than 2016;
- Further issuance from German issuers who trade at very tight levels in the EUR market;
- New issuers from Asia where the covered bond activity is only developing.

However, absolute levels of issuance will remain modest – we expect USD 18bn of issuance. As banks continue to be flushed with liquidity and the EUR market remains the cost-efficient alternative, we do not foresee a long-term upward trend in the USD market.

GBP MARKET

2016 review

The sterling covered bond primary market experienced a notable slowdown in 2016 with only GBP 6bn of issuance versus GBP 9bn in 2015 or GBP 7bn in 2014. Nine out of 13 issues (63% of volumes) were launched in Q1 2016, and only three have come to the market post the Brexit vote.

- While the number of issues was lower than in 2015, the geographical split was more diverse: in addition to UK, Nordic, and Canadian issuers, we saw a German and Australian issuer in the market.
- The preferred format in the GBP covered bond market continues to be a 3-year floating rate note (80%) with a size of GBP 250-500m.

Regional focus

Western Europe

- The sterling market is typically dominated by domestic issuance, but this year UK issuers were neck-to-neck with Canadian issuers (37% vs. 39%). While volumes issued by the Canadians have been in line with previous year's, volumes from the UK have halved just GBP 2bn issued in total by Lloyds Banking Group, Nationwide Building Society and Santander UK. Lower secured funding from UK issuers is linked to asset encumbrance considerations and reduced funding needs due to TFS.
- Nordic issuers were quiet this year with just one issue from Nordea's Norwegian covered bond entity compared to the five bonds issued in 2015 which was, however, a particularly active year.

North America

 Canadian issuers maintained their pace of issuance in GBP with six new covered bond issues from five different issuers.

2017 forecast

We expect a slight increase in issuance in 2017 to approximately GBP 7bn which represents the three-year average.

- We expect the domestic supply levels of GBP covered bonds to remain stable or decrease moderately as issuers will continue to enjoy cheap liquidity via Bank of England's TFS and simultaneously continue to monitor their asset encumbrance levels.
- Additionally, we expect to see opportunistic issuance from non-domestic jurisdictions – mainly Canadian and potentially some Nordic and Australian issuers – depending on developments in the basis swap and currency exchange rate.

Public Sector

OVERVIEW

The SSA (Sovereigns, Supras and Agencies) market experienced volatility in 2016 on the back of macroeconomic, monetary and political events. Central banks (ECB, the Fed, and BoE) continued to dominate the markets with their actions or inactions having wide-ranging repercussions over the markets.

- In the EUR market, we saw the prevailing of a "risk-off" mode during most of the year. In this context, lowerrisk SSA signatures have been performing well, as real money investors seek safe-haven assets to put their money to work. For instance, we saw 10-year Bund yields reaching all-time lows (crossing the zero mark to reach a new record low of 0.189% in July). The primary SSA market remained open thanks to PSPP buying and large amounts of liquidity available to investors. The sweet spot in EUR was on the long end, reflecting a desire to lengthen the duration of debt at these recordlow yields. Moreover, ultra-long dated bonds became an important asset class by matching investor's demand for yield and duration. Market participants remain cautious and sensitive, however, to headline risks on the horizon (i.e. elections in Europe in 2017, QE tapering and fiscal easing, etc.) that could shift market sentiment going forward.
- In the USD market, SSA bond yields were also affected by global market volatility and uncertainty around the Fed's monetary policy. However, with further signs of US economic resilience, investors remained active in the USD SSA bond market in the face of riskier and volatile credit markets. Moreover, US Treasuries continued to offer attractive yield pick-up compared to other major bond markets. The USD market also benefited international SSA issuers as cross-currency spreads widened, offering advantageous funding costs on the short end of the curve.
- The GBP SSA bond market remained driven by domestic supply, with the UK Debt Management Office (DMO) remaining the most important issuer. We saw the gilt yield plunge after the UK voted to leave the EU on 23 June, and investors continued to be eager for long-dated supply to reach their targeted yield level. The UK DMO took advantage of investors' appetite for duration to secure very long-term funding at attractive costs.

EUR MARKET

2016 review

Lower SSA primary supply in a context of budgetary consolidation, but agencies and supra remained active.

Overall, sovereign issuers have been less proactive on supply than last year on account of lower funding needs, driven by lower deficits of sovereigns, such as the Netherlands and Belgium, which, this year, entered into an important phase of budgetary consolidation. Moreover, ultra-low rates and cheap funding costs have become the new norm for issuers, with PSPP on track until March 2017 (at least), leading sovereigns to spread their funding across the year.

However, agency and supra issuance remained active on the back of higher 2016 funding needs (EUR 492bn eq. vs. EUR 442bn eq. in 2015, mostly in EUR) and increased EUR needs. Overall, and despite negative yields, supras and agencies issuance volumes shifted from 35% in EUR last year to 38% this year by 24 October.

EUR public sector issuance volumes 2016e vs. 2015

Sector	Issuance volumes in 2015 (EUR bn)	Expected realised issuance volumes in 2016 (in EUR bn)	2015-2016e evolution (%)
Sovereigns	947	867	-8,5%
Agencies & Supranationals	164	199	21,4%
Local authorities	59	54	-7,5%
Total Public Sector	1 170	1 120	-4,3%

Source: Based on Societe Generale Cross Asset Research, DCM Forecasts and Dealogic.

A weaker tone loomed over the market in Q1 on the back of market turmoil in China, continuously falling oil prices and uncertainties surrounding the world economy. Nevertheless, the primary market remained positive.

- Despite some softening linked to concerns over China, falling oil prices and uncertainties surrounding the world economy, the SSA primary market remained supportive thanks to PSPP buying and large amounts of liquidity available to investors. The weaker tone was generated mainly by the primary market rather than secondary flows, which remained calm overall. We saw investors participating mainly in primary versus secondary business, finding more liquidity in new trades and trying to lock-in some premium.
- In this context, we saw European SSA launching very large-sized tranches, such as in Spain (10-year EUR 9bn / 30-year EUR 5bn, SG CIB as bookrunner for the latter), Italy (30 year EUR 9bn), Ireland (10-year EUR 3bn, SG CIB as bookrunner), Belgium (10 year EUR 5bn, SG CIB as bookrunner), Portugal (10-year EUR 4bn, SG CIB as bookrunner) and Austria (dual tranche 10-year and 30-year EUR 5bn, SG CIB as bookrunner).
- The ECB's announcement of new stimulus measures (expansion of the PSPP and CSPP details publication) on 10 March was welcomed by the market, and we have seen a good tightening of spreads and EUR SSA curves overall. For instance, after the ECB meeting in March we saw the 10-year Bund yield increase by more than 15bp to reach 0.152% at the end of Q1.

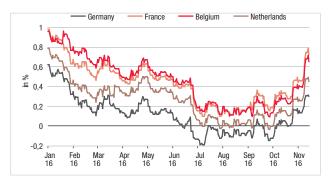
The primary market activity slowed down as we approached the Brexit referendum in Q2. The market experienced high volatility on the day of Brexit results.

- Markets remained in good shape at the beginning of Q2, with European and US equities extending gains following the ECB QE extension programme.
- Despite oil prices trading at a six-month high at the end of May (USD 49.8/barrel), the market switched from a risk-on to a risk-off sentiment due to hawkish statements from Federal Reserve chair Janet Yellen and as the UK referendum vote drew near. As a consequence, we witnessed softer market conditions across the board, although the move was moderate in the SSA space.
- Regarding the primary market, we saw a sustained pace of issuance thanks to solid demand from cash rich investors, and new issues have been well received with small new issue premium. Sovereign supply remained heavily skewed to longer maturities. Leveraging on the strong demand seen on the ultra-long end of the curve, some sovereigns, such as France (EUR 3bn), Belgium (EUR 3bn) and Spain (EUR 3bn), successfully issued their new 50-year benchmark on the back of a large array of high-quality institutional investors, large redemption flows in Q2 and attractive pricing (SG CIB acted as joint bookrunner in all three transactions), while Belgium and Ireland issued 100-year paper in smaller private placements.
- As we approached the Brexit referendum, we saw the primary market activity slowing down, and liquidity remaining very limited in the secondary market, the common goal being to limit exposure ahead of the vote. In this context, the 10-year Bund yield crossed the zero mark in mid-June to reach a new record low at -0.189% (8 July).
- On the day of the Brexit vote results, the market experienced high volatility, the traditional risk-off move kicked in at full stream and Bund yields tightened by 15bp in 10-year.

The post-Brexit environment has been dominated by a flight-to-quality trend in the broader markets in Q3.

- The market regained traction after a few sessions, and core and peripheral signatures returned to pre-Brexit levels. As the risk-on sentiment dominated the market during most of the month of July, equity markets hit post-Brexit highs on nearly all major stock exchanges.
- After several days of low activity on the primary market following the ECB meeting in September, we saw the EUR market return to life with top-rated SSA signatures issuing despite the BoJ and Fed announcements in September. After the ECB meeting we saw a relatively strong move in yields. Following an initial increase, the 10-year Bund yield went back down to 0.12% at the end of Q3. In the SSA sector, most activity came from the PSPP in the secondary market, keeping spreads at tight levels and rendering asset swap curves relatively flat.

Euro area 10-year benchmark yield performance in 2016





Source: Bloomberg.

Risk aversion continued to rise across the markets in Q4 on the back of QE tapering rumours and German banking sector concerns, with equities falling again and European Government Bond (EGB) yields rising. Nevertheless, the primary market continued to outperform.

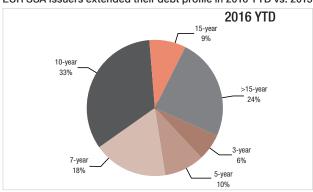
- The correction in yield following the unofficial talks of the ECB tapering QE (purchase targets could begin to be lowered sometime in H2 2017), and the concerns regarding the German banking sector have resulted in an upward move in EGB yields of approximately 10-12bp in the first week of Q4.
- Nevertheless, the new issue market continued to outperform, as witnessed by the successful transactions such as the inaugural AfDB EUR 750m 10-year benchmark and the IBRD's first syndicated EUR 1bn 16-year benchmark this year (SG CIB acted as joint bookrunner on both transactions). Investors also continued to display strong appetite for SSA signatures, although we noticed some accounts being more selective in terms of credit and prices.
- On the sovereign side, the sweet spot remained on the long end and ultra-long end, as issuers continued to capitalise on historically low interest rates to extend their maturity profile. Italy joined the ultra-long borrower club, attracting more than EUR 18.5bn of demand for its first ever 50-year syndication (issue size of EUR 5bn). Austria also priced a new 70 year benchmark transaction (issue size of EUR 2bn), extending considerably beyond RAGB due in 2062 issued in 2015.

In a context of high volatility, investors further extended their duration.

■ We witnessed extended maturity across the SSA sector this year compared to 2015, as investor demand partly shifted towards longer tenors thanks to the extremely low-yield environment. Issuers took advantage of investors' hunt for yield to secure long-dated financing at attractive funding costs. As such, issuance in the >15- to 70-year range was around 24% in 2016, compared to 12% the year before.

As mentioned previously, sovereign supply has been heavily skewed to longer maturities. Following the successful 50-year benchmark transactions of France, Belgium, Spain (SG CIB acted as joint bookrunner in all three transactions) and Italy, ultra-long dated bonds became an important asset class by matching investor's demand for yield and duration. Moreover, Austria extended its bond duration by successfully issuing 70-year benchmark transaction in Q4, the longest fixed maturity duration product in the EGB markets, and is the first 70-year EGB ever launched.

EUR SSA issuers extended their debt profile in 2016 YTD vs. 2015



2015

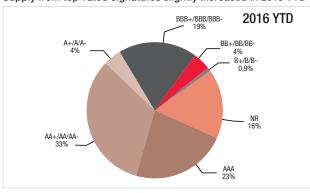
10-year
17-year
14%

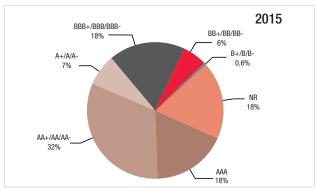
7-year
16%

Source: SG CIB DCM Analytics.

As a consequence of the risk-off approach prevailing during most of the year, we saw an increase in the supply coming from AA- or higher rated issuer this year (56% in 2016 YTD vs. 50% in 2015). In the low-rated basket, we saw a slight decrease in the supply coming from BBB+ or lower rated issuers this year (24% in 2016 YTD vs. 25% in 2015).

Supply from top-rated signatures slightly increased in 2016 YTD vs. 2015





Source: SG CIB DCM Analytics.

The inflation-linked market faced some headwinds throughout 2016.

- EUR inflation-linked bonds issuance volumes (excl. retail bonds) should reach almost EUR 46bn at the end of 2016, below the 2015 issued amount of EUR 50bn.
- EUR linkers suffered this year from the fall in commodities prices at the beginning of the year (crude oil reached its lowest level in January), disappointing inflation expectations, lower real rates as well as from a drop in market liquidity. Inflation breakeven rates reached historical lows.
- In terms of syndication we saw:
 - France return to the market in September with its first syndicated inflation linked OAT inflation linker in more than three years, drawing a hefty order book despite concerns over deflation in the eurozone. France sold its long-anticipated new EUR 4bn 30-year OATei at 16bp over the real rate of the existing OATei 2040 linker after attracting a final book over EUR 8.6bn, made up of over 110 accounts.
 - Italy priced a 6-year EUR 3bn inflation-linked in May at 19bp over the real yield of the 2.1% September 2022 inflation-linked BTPei, at the tight end of guidance.

■ We expect further activity to pick up in the inflation-linked market in 2017, driven by much better demand of inflation linked product alongside PSPP. Reduced overall issuance in EUR inflation-linked sector in 2016 will increase investor appetite, and after months of "low inflation" talk, inflation is expected to start printing higher on the back of energy base effects. SG economists expect inflation to peak temporary at 1.7% in early 2017 and average 1.5% in 2017.

2017 forecast

2017 SSA issuance programme

EUR public sector issuance volumes 2016e vs. 2017e

Sector	Expected realised issuance volumes in 2016 (in EUR bn)	Estimated issuance volumes in 2017 (in EUR bn)	2016e vs. 2017e volumes (%)
Sovereigns	867	901	4,0%
Agencies & Supranationals	199	202	1,4%
Local authorities	54	60	11,4%
Total Public Sector	1 120	1 163	3,9%

Source: Based on SG CIB Cross-Assets Research, DCM Forecasts and Dealogic.

2017 major market trends in EUR

For 2017, we anticipate a 3.9% increase in the total issuance volume in EUR from public sector issuers compared to 2016.

- We anticipate an increase (+3.9%) in the total issuance volume from public sector issuers in 2017 compared to 2016, as we expect sovereigns to have higher funding needs. Indeed, we expect total EUR sovereign issuance volumes to reach EUR 901bn in 2017 versus EUR 867bn expected in 2016, representing an increase of approximately 4.0%.
- On the other hand, we forecast total issuance volumes from agencies and supras and local authorities to increase by 1.4% and 11.4% respectively in 2017 compared to 2016.
- The ECB will continue to play a decisive role in the markets to sustain the economy and reassure investors. The PSPP programme is likely to be extended beyond March 2017, though the monthly purchases of EUR 80bn should be tapered.
- In the short term, SSA issuers will probably continue to approach the USD market to capture investor demand on short maturities and fully utilise the attractive funding levels, especially if EUR/USD cross-currency spreads remain attractive. We believe that this should be the case, in particular after the Fed rates hike and the decoupling of the US and eurozone monetary policies.
- In the long term, we expect the EUR market to continue to offer good funding opportunities on the long end of the curve next year. Cash-rich investors' demand for yield should benefit longer-dated bonds. Longer-

- dated bonds would lengthen the average duration and help meet strong demand from yield-hunting real money investors.
- In addition, we expect a pick-up in the EUR inflationlinked market next year on the back of positive forecasts for eurozone inflation.
- In terms of EUR SSA bond redemption flows, we expect EUR 1,158bn outflows in 2017, i.e. 1.3% lower (sovereigns +2.2%, agencies and supras -6.1%, local authorities -11.2%) than 2016.

Public sector EUR bond redemption flows in 2016e and 2017e



Source: SDC Platinum, Bond Radar, Dealogic and SG CIB DCM Analytics.

USD MARKET

2016 review

Remained the most active market

- The tone in the USD debt capital market was positive this year on the back of encouraging macroeconomic data. US Treasuries and USD bonds continued to offer attractive yield pick-up compared to other major bond markets, which has driven investors to put money into USD credit space, allowing issuer to price aggressively with minimum new issue concessions.
- In this context, the USD market continued to be the most active market for the largest share of the global issuance activity. Total volumes from public sector issuers in the USD market reached USD 2,090bn (excluding US agencies) by mid-October, posting an increase (+3%) on last year. This increase is mostly due to higher redemption flows (+14%) compared to last year.
- On the non-US sovereign side, issuance volumes are expected to increase to USD 122bn from USD 84bn in 2015. This is mainly due to the drastic increase of emerging and Middle Eastern countries' primary activity (including Saudi Arabia's USD 17.5bn three-tranche jumbo issuance). On the supra and agencies side, the USD market was the most active throughout the year. Indeed, European issuers took advantage of the favourable EUR/USD basis to print USD transactions. Overall, supras and agencies issuance volumes shifted from 45% in USD last year to 49% by 24 October this year.

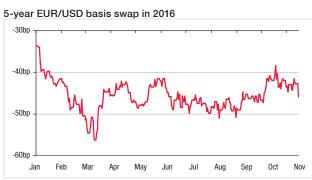
USD public sector issuance volumes 2016e vs. 2015

Sector	Issuance Volumes in 2015 (in USD bn)	Expected Realized Issuance Volumes in 2016 (in USD bn)	2015-2016e evolution (%)
US Treasuries	2 123	2 321	9,3%
Non US Sovereigns	84	122	44,7%
Non US Agencies & Supranationals	244	277	13,4%
Local authorities	13	27	103,1%
Total Public Sector	2 464	2 746	11,5%

Source: Based on Societe Generale Cross Asset Research, DCM Forecasts and Dealogic.

EUR/USD cross-currency spreads widened sharply, benefiting European SSA issuers.

- EUR/USD basis swap spreads widened significantly in 2016, going from -33.6bp in January to 56.3bp in March in the 5-year tenor. The 5-year basis swap spreads mostly stayed in the -50bp to high -40bp area most time of the year. This move is mainly driven by the excess liquidity in the eurozone following the implementation of QE, and a stronger dollar as the US economy continued to improve in 2016.
- Some European SSA issuers took advantage of this opportunity to tap the USD market at very attractive levels. As such, we saw Belgium and Sweden launching a total of USD 6bn in August and October. On the supras and agencies side, we witnessed EIB, KfW and CADES issuing a total amount of USD 71bn this year. We also saw French agencies, like SNCF Réseau, launching its debut USD transaction to diversify its investor base with greater liquidity and visibility in the market (SG CIB acted as bookrunner).



Source: Bloomberg.

Several episodes of volatility supported USD market issuance during 2016.

- The market turmoil in China, the continuous fall in oil prices and concerns about the banking sector brought volatility to the global bond and equity markets in the beginning of the year. Even the US market has been impacted by external headwinds despite a resilient labour market and positive internal growth. As a consequence, we witnessed strong sell-off on US equities, the UST 10-year yield dropping by around 50bp since the beginning of the year to trade below 1.8%, credit spreads widening, and deflation pressures. However, issuers continued to have good access to funding on the primary market, especially on the short-medium part of the curve where we have witnessed strong interest from bank treasury desks and central banks.
- Uncertainties over Brexit referendum dominated market sentiment throughout the first half the year, resulting in volatile market conditions. In the end, the UK electorate voted in favour of leaving the EU, causing immense concern around the world. Markets responded with instability, led by a strong rally in Treasuries (reaching the all-time low 1.358% in July) along with investors' flight-to-quality. However, markets started to stabilise as the Fed's dovish stance erased investors' concern over the uncertainty of a future interest rate hike.
- In September, as the Fed confirmed market expectations of no hikes (more economic data was required to justify a hawkish policy), the markets, from safe-haven assets to the riskier equities, all rallied strongly. However, later in the month, the Fed's minutes showed that the decision to keep rates unchanged was a close call. This added to recent talk of QE tapering in Europe and maintained the pressure on rates to move higher. Markets firmly placed their bets on a rise in December, the November meeting taking place too close to the elections.
- With a higher USD rates level, several SSA issuers approached the USD market to capture investor demand for safe-haven investments with relatively high yield. In addition, non-European SSAs took advantage of wide levels of EUR/USD basis swaps to lock in attractive opportunistic funding.
- In Q4, SSA issuers continued to show a willingness to complete their year-end funding sooner rather than later so to avoid any potential volatility linked to headline risk. In particular, the short end continued to offer attractive funding level to core SSAs.
- The combination of growth and the rise of headline inflation gives the Fed the green light to raise rates in December. Indeed, recent comments from Fed officials have added to momentum for a quarter-point rate hike in December.

2017 forecast

2017 SSA issuance programme

USD public sector issuance volumes 2016e vs. 2017e

Sector	Expected Realized Issuance Volumes in 2016 (in USD bn)	Esimated issuance volumes in 2017 (in USD bn)	2016e vs. 2017e volumes (%)
US Treasuries	2 321	2 426	4,5%
non US Sovereigns	122	128	5,0%
non US Agencies & Supranationals	277	276	-0,2%
Local authorities	27	29	7,0%
Total Public Sector	2 746	2 859	4,1%

Source: Based on Societe Generale Cross Asset Research and DCM Forecasts.

2017 major trends in USD

- In terms of issuance volumes, USD volumes should be up by 4.1% overall across segments (excluding US agencies) according to our estimates, in particular on the back of an increase in US Treasuries (+4.5%).
- In addition, we expect non-US sovereigns to continue to enter the USD market as a way to diversify, hedge their liquidity risk and capitalise on investors' appetite for higher yield. We expect non-US sovereign issuance volumes to reach USD 128bn in 2017 versus USD 122bn expected in 2016, representing an increase of approximately 5.0%.
- USD activity from agencies and supras should be in line with previous year, as the USD market may continue to provide attractive funding levels and provide yield to investors in a context of potential rate hikes. These issuers should continue to rely on this market, especially if EUR/USD cross currency spreads remain attractive, and if treasuries continue to offer attractive yield pick-up compared to other major bond markets.
- We expect that easy monetary policy has reached its limits, and that further monetary stimulus will have little benefit for the US economy.
- In terms of the economy, we expect moderate economic growth in 2017. Inflation readings should increase in the coming quarters due to higher gasoline prices following recent oil price gains, and core inflation measures are more likely to stabilise in 2017.

GBP MARKET

2016 review

The GBP bond market remained driven by the UK DMO.

- The UK DMO was the most active issuer in 2016, accounting for almost 70% of the total syndicated SSA supply in 2016.
- Regarding supra and agency activity, issuance volumes remained stable in 2016. The European Investment Bank (EIB) remained the most active issuer as the supra created one new line and increased outstanding issues tenfold for a total amount exceeding GBP 6bn.

GBP public sector issuance volumes 2016e vs. 2015

Sector	Issuance Volumes in 2015 (£ bn)	Expected Realized Issuance Volumes in 2016 (£ bn)	2015-2016e evolution (%)
Sovereigns	126	128	1,8%
Agencies & Supranationals	22	23	2,2%
Total Public Sector (excl. LA)	148	150	1,8%

Source: Based on Societe Generale Cross Asset Research and DCM Forecasts and Dealogic.

Investor appetite remained focused on the long and ultralong part of the curve.

- In 2016, investors continued to be eager for long-dated supply because of the plunge in gilt yields since the UK voted on 23 June to leave the EU. The desire for more long-dated assets became clear on 23 August when the Bank of England's bond buying programme stuttered as it attempted to buy paper with maturities of 15-years or over.
- In this context, we saw investors extending their duration to the long and ultra-long parts of the curve. As such, the UK DMO benefited from investor appetite to explore long-term tenors (from 2046 to 2065) for a total issuance amount of more than GBP 32bn. These transactions represent 32% of the total issuance volume in 2016 (vs. 29% of the total issuance volume in the previous year).
- On the other hand, non-domestic sovereign issuers that approached the GBP market this year have rather explored shorter maturities in the 3- to 5-year segment, taking advantage of some opportunistic windows to diversify their funding portfolios. The cross-currency swap market has played a key role in this activity, particularly for EUR-denominated currency issuers.

5-year GBP/EUR basis swap in 2016



Source: Bloomberg.

• In general, domestic investors have represented the bulk of the demand. International investor appetite for GBPdenominated transactions remained limited to official institutions investing in the British currency to top up their foreign exchange reserves, and some asset managers invested in GBP as part of their diversification strategy.

The GBP market experienced some volatility.

- The GBP market outperformed during the beginning of the year following heavy redemptions. Moreover, core SSA issuers preferred to have recourse to the GBP market to benefit from favourable basis swap levels (5-year EUR/GBP basis swap was at 46.6bp by 11 March from 29.8bp by end of 2015).
- However, the GBP supply faded after high redemptions and as fear of the EU referendum loomed. Market attention was largely focused on the referendum, with strong volatility building up ahead of the vote. As the risk-off sentiment took over the market during the month of June, we witnessed GBP supply drying up. The outcome of the referendum sent a shockwave across global capital markets, with investors seeking comfort in safe-haven assets.
- In August, the Bank of England delivered the expected 25bp cut to its bank rate and announced that it would extend its QE programme in the form of gilt purchases (GBP 60bn) and corporate bond purchases (GBP 10bn). In this context, we saw the 10-year gilt reaching its lowest at 0.501% in mid-August. Following the BoE meeting, we saw the GBP market returning to life with top-rated SSA signatures, with this market continuing to offer arbitrage opportunities for some issuers at the short end of the curve.
- In Q4, sterling continued its slide and hit new lows, although the currency tried to recover following the UK's government announcement that parliament would be part of the Brexit discussions. In the meantime, 10-year gilt bounced back to 1.079%, a 58bp increase since its lowest level in mid-August. This whopping rise was caused by a plunge in the currency and inflation concerns (in addition to the negative impact of a hard Brexit on the British economy).

2017 forecast

2017 SSA issuance programme

GBP public sector issuance volumes 2016e vs. 2017e

Sector	Expected Realized Issuance Volumes in 2016 (£ bn)	"Estimated Issuance Volumes in 2017	2015-2016 evolution (%)
Sovereigns	128	132	3,0%
Agencies & Supranaturals	23	23	1,0%
Total Public Sector (excl. LA)	150	155	2,7%

Source: Based on Societe Generale Cross Asset Research and DCM Forecasts.

2017 major market trends in GBP

- In terms of supply, we anticipate the GBP public sector issuance to be higher in 2017 to reach GBP 155bn on the back of a higher redemption flow (GBP 84bn expected in 2017 compared to GBP 76bn in 2016). The UK DMO will continue to be the key player in the GBP market with total gross bond issuance (excluding bills) expected at GBP 132bn during the next year.
- We expect agency and supra primary activity to remain stable at GBP 23bn, which should represent around 5-6% of these issuers' funding needs next year.
- The GBP activity market will start to be affected from two key influences Article 50, which is likely to be triggered before the end of March 2017, and the Brexit uncertainty shock, which is likely to last for a while still on the market.
- Non-UK SSA issuers will remain dependent on window openings, mostly driven by the dynamics in the crosscurrency swap. European issuers will take advantage of the favourable EUR/GBP basis to print GBP transactions, enabling top-rated agencies and supras to approach this market for opportunistic and/or diversification purposes.
- Domestic investors will dominate the demand for GBP-denominated assets. In particular, liability-driven investment accounts will continue the search for longterm duration and inflation protection. Highly rated securities in the short-/medium-term will continue to be purchased by official institutions and central banks for their foreign exchange reserves.
- The twin effects of a base effect from commodity prices and the recent Brexit-driven fall in the pound should push up inflation, benefiting the index-linked sector.

Emerging Markets

APAC

- Despite a slow start in 2016, volumes jumped in Q3-2016 post-Brexit, fuelled by low rates and reasonably well-contained credit spreads due to the accommodative QE from Central banks in the US and Europe. Even the US election results did not alter the primary market activity more than a day. All told, we witnessed an active year in the APAC debt capital market, with overall international public issuance expected to reach USD 205bn equivalent for Asia (excluding Japan, Australia and New Zealand), modestly above the volume expected at the beginning of the year. The volatility in China at the beginning of the year affected the overall Asian market until the start of the summer. On the other hand, we witnessed the development of the green bond market for financial institutions across the board - with China leading the pack - and for corporates.
- 2016 followed the same pattern as 2015, with Chinese issuers remaining the key component of the Asian offshore debt capital market (half of the continent's volume) while facing volatility and regulatory uncertainly that are inherent to emerging markets. In the meantime, we witnessed increased activity in South East Asia and in developed jurisdictions, such as South Korea (volume up 20% at year-to-date) and Hong Kong.
- On the currency front, Asian issuers are still taking advantage of the low-rate environment in Europe. As such, we witnessed a steady level in EUR-denominated issuance, mostly from Chinese banks and few Asian corporate across the board.
- However, the CNH bond market has not recovered from the RMB depreciation back in August 2015, with very few issuers hitting the market since then. In 2016 uncertainty on the RMB trend, a very deep domestic market for RMB bonds and the development of the panda bond market weighed heavily on the issuance volume of CNH bonds. Volumes are expected to decrease by more than 50% compared to 2015.
- Greater China represents 49% of overall volumes for Asia in 2016 year-to-date and should remain the same in 2017. We believe the trend will amplify and cause China volumes to rise to close to 20% in 2017 and to 12% overall across the region. This is supported by:
 (i) increased volumes of M&A-related financing, on the back of large transactions such as the USD 43bn acquisition of Syngenta by ChemChina; (ii) significant volumes of redemption of 3Y bonds issued in 2014, the year of the sharpest increase in offshore bond issuance by Chinese issuers (+100%); (iii) an increase in first-time issuers as disintermediation is progressing in China from second-tier corporate issuers, regional state-owned

and privately-owned enterprises (SOEs and POEs); (iv) a sharp increase in volumes expected from Chinese Banks in regulatory capital issuance, AT1 and T2, driven by regulation constraints; (v) increased volumes from leasing companies; and (vi) a sharp increase in the volume of green bonds from the private sector, as China intends to remain a world leader in this field.

Corporates

INVESTMENT GRADE

USD MARKET

- 2016 has been a difficult year for corporate credit markets to read. With a poor start led by China growth concerns and a collapsing oil price, January and February were very trying months in Asia. However, the issuers took advantage of a relatively quiet summer and we witnessed the highest volume ever out of Asia for a quarter in Q3 2016.
- In the APAC region, 2016 primary USD bond issuance volumes stood at USD 92bn, in line with the USD 99bn volume for full-year 2015. Chinese corporates confirmed their increasing activity in the offshore capital market, as they accounted for a large percentage of issuance: over 40% of corporate volumes in APAC, versus 43% last year. Due to the collapse of the oil price, there has been a limited number of jumbo deals from the Chinese energy champions - only Sinopec accessed the USD market with jumbo deals for a total of USD 6bn. However, this trend has been compensated by the issuances from SOEs backed by local government, including companies from Tier 2 and Tier 3 cities later in the year, highlighting the willingness of investors to invest in riskier Chinese credit while hunting for yield. The green bond asset class continued to develop in China, with Geely Motors pricing a USD 400m green bond. The overall volume for Chinese issuers will be in line with or slightly below the issuance of 2015, notably due to cheaper funding costs onshore. In the later part of the year, we have seen the market reopen to high-yield bonds from property developers.
- South East Asia and India have had diverging trends in 2016: while issuance from Indian corporates remained steady, with issuance levels in line with 2015 levels, the South East Asian overall volume decreased to USD6bn from USD13.3bn for full-year 2015. Issuance volume has been affected by the lack of jumbo deals from the energy sector, as well as concern on some Singaporean corporates.

Among developed jurisdictions, we have witnessed a strong increase in volumes in South Korea and Hong Kong, from USD 5.6bn and USD 4.0bn to USD 8.9bn and USD 10.2bn respectively. Both are in line with or above their 2014 levels, following a sharp drop in 2015 led by forced deleveraging in South Korea. While Japan remains stable with issuance at USD 15bn in line with 2015, we saw a sharp drop in issuance volumes from Australian issuers. Indeed, no jumbo transactions were priced and the electricity grid privatisation programme has been delayed, with bond refinancing only expected to hit the market in 2017 (TransGrid and Ausgrid).

EUR MARKET

- The 2016 APAC corporate euro bond supply fell sharply, only reaching EUR 8.6bn versus EUR 22.1bn for full-year 2015.
- Chinese corporates, which were the biggest growth drivers in 2015 issuance volumes, reduced their activity in the euro market to a mere EUR 2.3bn compared to EUR 8.9bn in 2015. Indeed, volatility in the Chinese market as well as the lack of acquisition refinancing and jumbo multi-currency deals were the main factors of this decrease.
- Similarly, Australian corporates only issued EUR 2.4bn in 2016 compared to EUR 6.4bn in full-year 2015 due to the lack of financing needs from commodity players.
- Issuance volumes have been very low in India and South East Asia, with no public transactions taking place. This was also the case for Japan, with no corporates tapping the euro market.
- On the other hand, CK Hutchison Holding in Hong Kong was active in the euro market, issuing EUR 3bn, as well as Temasek (AAA/Aaa) with a EUR 1.1bn double-tranche transaction.
- In 2017, following the jumbo-sized privatisation of an Australian State power grid as well as M&A refinancing deals, we expect issuances to pick up in EUR and thus diversify away from the USD and AUD market.

Emerging currencies: CNH

2016 review

■ The CNH market remained very quiet in 2016, having not fully recovered from the RMB depreciation in August 2015. We only had five transactions in the CNH market from corporates, all from China. The total issuance volume stood at CNH 4.625bn compared to CNH 16.4bn in 2015. In this challenging environment, Haikou Meilan Airport was able to issue a launch a tap of their existing CNH bond after the summer.

2017 forecast

- We expect to see a redemption volume of CNH 63bn in 2017 in the corporate space compared to CNH 52.7bn in 2016, as 2014 was the record year in the dim sum market with mostly short-dated transactions. However, almost all the redemptions are from Chinese companies, and the cheaper funding cost onshore may have a negative impact on the total refinancing volume.
- The expected Fed rate hike and concerns on mediumterm RMB devaluation are still weighing on investor demand and the overall CNH market. A stabilised FX and macro environment in China are pre-requisites for this market to re-open, but presently, we believe volume will stay low in 2017.

HIGH YIELD

■ In the APAC region, the high yield issuance volume is slightly up but is still far from the record levels of 2013 and 2014. Total volume reached USD 22.4bn eq. compared to USD 22bn eq. a year earlier. While we saw lower volume in Japan, it was compensated by issuances from India, Australia and New Zealand. Chinese issuers and in particular real estate developers took advantage of the stable environment in Q3 to access the market with 60% of the yearly volume issued in three months. The APAC high-yield market remains almost entirely USD denominated (over 85% of total issuance volume).

Financial Institutions

SENIOR UNSECURED MARKET

USD MARKET

- As for corporate, USD remained the key currency in the region for financial institutions' funding with over 90% of the overall issuance volume. We witnessed over USD 115bn of senior unsecured supply so far in 2016 year-to-date, which sets a new record. 2016 issuance is already well above the USD 81.3bn issued in 2015 and the previous record of USD 86.5bn issued in 2014.
- China confirmed its position as a key jurisdiction for financial institutions' bond supply. Volumes have increased exponentially in the past few years from USD 4.3bn (2013) to USD 17.5bn (2014), USD 26.6bn (2015) and USD 34.6bn in 2016 year-to-date. We expect the trend to continue on the back of new regulations and the willingness of political leaders to promote the internationalisation of the Chinese economy. For instance, in 2016, we have seen increasing issuance from the overseas branches of China's Big Four banks, as well as issuance from second-tier banks, asset management companies and leasing companies. For instance, International and Commercial Bank of China (ICBC) and Bank of China (BOC) issued USD 5.1bn and USD 4.25bn respectively out of five and two of their overseas branches respectively. It is also worth noting the further development of green bonds among financial

- institutions with the issuance of a multi tranche USD 3bn eq. green bond by BOC in three different currencies.
- On the back of TLAC requirements, Australian and Japanese banks significantly increased their total volume to USD 33.5bn and USD 37.5bn respectively, well above 2015's volume of USD 22.9bn and USD 24.0bn respectively. In other jurisdictions, such as South Korea, India and South East Asia, overall volume is up slightly.

EUR MARKET

- Supply in 2016 for APAC reached EUR 7.9bn, up on EUR 5.75bn in 2015.
- After last year's first transaction from Chinese banks, only BOC accessed the euro market in 2016, and this with a green bond.
- Japanese banks lowered their issuance to EUR 1.5bn, only from SMFG, compared to EUR 2.3bn in 2015.
- Australian banks remain the biggest and most regular issuers in the euro senior space. All frequent issuers, such as ANZ, NAB, CBA and Westpac, issued EUR transactions for a total amount of EUR 5.9bn above the EUR 2.15bn issued in 2015.

Emerging currencies: CNH

2016 review

- In line with the corporate market, the CNH space for financial institutions has been very quiet with only ICBC, China Construction Bank (CCB) and BOC trying to revive the market with a total of five transactions and only RMB 5.8bn issued.
- The Formosa market in CNH also experienced a strong decrease with only CNH 7.7bn issued in 2016 compared to CNH 34bn in full-year 2015.

2017 forecast

Looking ahead to 2017, with the development of panda bonds and the subdued CNH market, we expect volumes to remain extremely low.

Public Sector

- The public issuance volume in the Asian SSA space continued on its upward trend, USD and EUR issuance reached USD 59bn and EUR 8bn respectively compared to USD 47.5bn and EUR 2bn for full-year 2015. The increase in euro issuance in particular was spectacular, the key drivers being China and Indonesia.
- Regarding APAC sovereign issuers, the Republic of Indonesia issued its longest and largest EUR bond during the summer. This transaction was the only EUR-denominated benchmark issued this year out of the APAC region. In addition, on the agency side, Chinese agencies are becoming regular issuers in the euro market, with China Exim Bank accessing the euro market for the first time while China Development Bank have already issued EUR 2.5bn via three different transactions.

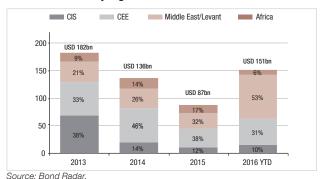
- On the USD front, in Asia, in addition to the regular issuers in the international market such as Malaysia, Philippines and Indonesia, we have seen again emerging countries accessing or re-accessing the international capital market. Among these we can mention Mongolia, with a 5-year USD 500m bond. Pakistan and Sri Lanka, similarly to past years, launched USD bonds of up to USD 1.5bn. Also, Papua New Guinea met investors during a non-deal roadshow.
- Among agencies, the USD activity is still dominated by the region's development banks and agencies of the likes of Kexim, Chexim, Korea Development Bank, Japan Bank for International Cooperation and Development Bank of Japan – all issuing between USD 2.5bn and USD 9bn during the year – as well as the Asian Development Bank which, alone, issued USD 15.5bn of public bonds of which USD 1.3bn in green format. It is worth noting the strong activity from China Development Bank in 2016 with over USD 4.5bn in bonds issued during the year compared to a mere USD 1bn in 2015.
- In the CNH space, similarly to other asset classes, SSA issuers did not issue in the dim sum market and volume decreased dramatically, with only the Chinese Ministry of Finance (MoF) trying to revive the market with a CNH 3bn transaction. In the coming year, we believe SSA will be more focused on the panda bond market. Issuers such as the BRICS New Development Bank, the Republic of Poland and British Columbia all accessed the market in 2016 with a RMB 3bn transaction.

Emerging markets: hybrid capital

- From the APAC region, volumes remain stable with USD 20bn in 2016 compared to USD 20.9bn in 2015 full-year with the vast majority in USD. The spectrum of issuers was more balanced among jurisdictions, while Chinese mega banks and Japanese insurance companies took centre stage last year. In the current low-rates environment, we have witnessed some remarkable deals, such as DBS printing the tightest ever coupon for a AT1 transaction globally (3.60%). In terms of size, the biggest transaction came from China Cinda Asset Management with a USD 3.25bn AT1 transaction. Due to regulatory constraints, we believe supply from Chinese second-tier banks and asset managers will increase in the coming years. In the medium term, Chinese and Indian banks will have huge needs in terms of regulatory capital (USD 500-1000bn in China and up to USD 100bn in India, by 2022).
- While 2015 was all about CNH for foreign issuers, we have seen more activity in the Formosa market in 2016. We have witnessed USD 1.7bn of subordinated bond issued in the Formosa format both from Asian and non-Asian banks.

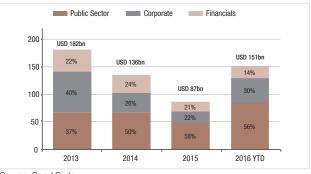
CEEMEA

CEEMEA volumes by region



- During the first half of the year, the Central & Eastern Europe, Middle East and Africa (CEEMEA) primary market was adversely impacted by elevated market volatility, emerging market (EM) growth concerns, a weak commodity price environment and geopolitical developments.
- Following the Brexit vote in June, which led to increased uncertainty and volatility in Europe, a more positive and constructive sentiment towards emerging markets arose, supported by the major central banks' continued accommodative policies and increasing oil prices, amongst others. We have seen substantial inflows into EM bond funds (more than USD 28bn since July as of the date of this report) which triggered a significant spread tightening in the secondary market and increased primary market activity after the summer break.
- In general, public sector issuers and more particularly sovereigns remained by far the most active asset class in the region, as was the case in 2014 and 2015.
- Issuers from the Middle East/Levant led the primary volumes (53% of the supply) throughout the year with multi-tranche transactions such as the record USD 17.5bn jumbo offering by Saudi Arabia. CEE issuers (also led by sovereigns) have been another major provider of supply in 2016 (31%).
- Despite sanctions still in place and geopolitical newsflow, we saw healthy Eurobond supply out of Russia, especially during the second half of 2016. Some issuers managed to price deals not only flat to the curve and at the same rates as before, but also with negative premium and cheaper than before the sanction were imposed. Outside of Russia, economic weakness in Azerbaijan and Kazakhstan, the other two main contributors to CIS supply, hampered primary activity, with Russian placements accounting for 85% of total CIS issuance.

CEEMEA volumes by type



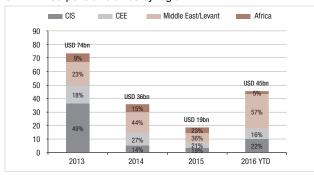
Source: Bond Radar.

- In 2017, we expect CEEMEA Eurobond supply to amount to c. USD 150bn, slightly lower compared to expected USD 155bn issuance for 2016. While high volumes of redemptions will spur refinancing activity, we expect the increasing USD benchmark rates and hence higher public borrowing costs in the most popular currency of the region to result in supply figures reduced year-on-year.
- For domestic RUB bond market, the environment in 2016 was overall very supportive: clear downward trend in rates, increasing liquidity surplus, depressed corporate and retail lending, and moderate government borrowings have all contributed to improved backdrop and increase in issuance.
- The Russian government made a decision to again freeze the accumulative pension contributions in 2017. This step will allow savings of approximately RUB 390bn of budget expenses next year, but will limit the availability of long-term money in the economy.
- The key factor influencing RUB bond yields (besides CBR key rate) becomes the Ministry of Finance's policy on the budget deficit management. Thus, if the average amount of weekly borrowing through OFZ bonds by the Ministry of Finance in 2017 increases from current RUB 20bn to RUB 40bn (according to the current plan), the level of market liquidity will be negatively affected and the decreasing yield trend will slow down. So, we could observe worsening conditions for RUB bonds issuance due to increased borrowing from the government.
- However, should oil prices hover above USD 55 per barrel level, it would provide substantial support to the government budget and consequently increase market liquidity available to Russian credits and support the overall RUB corporate bond market.

Corporates

2016 review and 2017 forecast

CEEMEA corporate volumes by region



Source: Bond Radar.

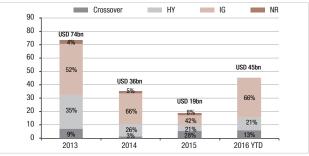
CEEMEA corporates volumes by currency



Source: Bond Radar.

- In 2016 CEEMEA corporate issuance split by region has been distorted versus previous years due to the jumbo USD 15bn transaction executed by the Israeli pharmaceutical company TEVA to finance part of the acquisition of Allergan's drug unit. This particular transaction represented almost 50% of the corporate volumes this year.
- The CIS region is the second most active this year, representing 22% of the volumes. Compared to 2015 where we only saw six syndicated deals from CIS corporates, 2016 was marked by the return of Russian corporates to the international bond market, with few issuers returning to the Eurobond market for the first time since 2013 (e.g. Polyus Gold, Lukoil, NLMK, Domodedovo, etc.)
- CEE and Middle East corporate volumes remain the laggards (16% and 7% of total corporate volumes for 2016 respectively). The lack of corporate bond offerings from these regions is explained by access to attractive local currency funding and syndicated loans, as well as limited funding needs across the board. The overall EM and global macro lacklustre environment, combined with regional political uncertainties have also put M&A and Capex to a minimal.
- As usual, USD remained the currency of choice for corporate issuers. EUR-denominated volumes were more limited than in 2015 (only 19%).

CEEMEA corporates volumes by rating



Source: Bond Radar.

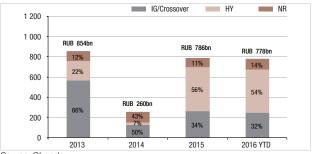
- Investment grade corporates represented 66% of the CEEMEA supply in 2016, broadly in line with 2013 and 2014. The multi-tranche transaction from TEVA played a big role in the fact that investment grade issuers represented such a big portion of corporate volumes this year.
- On the other side, high-yield issuers mainly came from the CIS region, given the non-investment grade status of the region (versus limited corporate activity in Turkey or Africa).
- In Africa, 2016 was marked by ongoing low commodity prices, negatively impacting Oil & Gas (O&G) and Metals & Mining (M&M) companies and consequently limiting primary market activity.

Emerging currencies: RUB

2016 review and 2017 forecast

- Since the beginning of the year government bond yields have dropped by 1-2% (from 11-12% in January to 9.50-10% levels in October for first-tier issuers), which facilitated RUB bond issuance for corporates. The decline in the long-term part of the curve has been greater than in the short-term part, leading to a flat/ slightly inverse curve.
- In 2016 the primary market was opened end of February-beginning of March and experienced several periods of lifted demand for new placements throughout the year (April to September). Illustrative of improving economic conditions and government bond curve tightening, high-rated corporates were able to access the markets for longer tenors compared to previous years.
- Due to favourable market conditions, market supply from corporates increased by 67% (ca. RUB 750bn for 9M 2016 vs. ca. RUB 450bn for 9M 2015).
- In 2017, we anticipate on average the same magnitude of corporate RUB bond issuance volumes (including financial institutions) as in 2016 – ca. RUB 1.7-1.9tr.

RUB Corporate volumes by rating

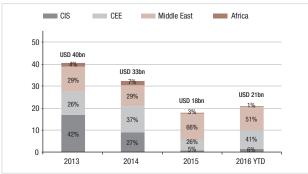


Source: Chonds

Financial Institutions

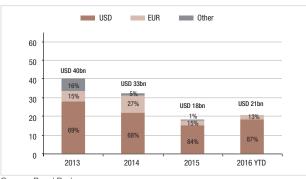
2016 review and 2017 forecast

CEEMEA FIG volumes by region



Source: Bond Radar.

CEEMEA FIG volumes by currency



Source: Bond Radar.

CEEMEA FIG volumes by type



Source: Bond Radar.

■ In the financial space, 51% of the primary volume came from the Middle East in 2016 year to-date amid still relatively subdued activity. CEE financial institutions also accounted for 41%, with the vast majority of transactions coming from Turkey. This is in line with 2015 but contrasts with 2014 which was much more balanced between the Middle East, Turkey, CEE and CIS. Russian financial institution (FI) supply saw a slower recovery compared to corporate. However, in H2 16 we saw issuers returning to market as well (including senior deals for Otkritie and Credit Bank of Moscow, and the first Basel 3-compliant AT1 transaction from Alfa-Bank). It led to CEEMEA FI volumes slightly higher (17%) than

the previous year but still very low compared to historical standards.

- From 2013 to 2016, FI primary volumes decreased sequentially from a record year of USD 40bn to reach USD 18bn last year and USD 21bn this year. This can be explained in part by diminished asset growth across the CEEMEA region.
- USD remained the currency of choice for CEEMEA FI issuers in 2016 (86% of issuance in 2016), exacerbated by the dominance of Middle East and Turkish issuers.
- Senior unsecured bond supply from the CEEMEA region increased by 34% this year (from USD 14bn in 2015 to USD 18bn in 2016 year-to-date).
- As Basel 3 is being implemented in most of the CEEMEA countries, issuers are adjusting their capital structure to the regulatory requirements, leading to an increase of subordinated Tier 2 or AT1 transactions this year too.
- The covered bond segment was opened this year in Turkey by Vakifbank and in Poland by PKO-BH. We expect additional Turkish and Polish financial institutions to follow the same path in 2017.
- While sluggish EM growth, low commodity prices, heightened geopolitical issues and Fed rate hike(s) will again be the main challenges for the CEEMEA region in 2017, financial institutions will also face regulatory pressure around Basel 3, MREL, IFR9, etc., forcing them to align their capital and funding structure with international peers.

Emerging currencies: RUB

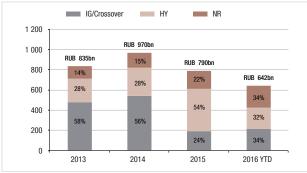
2016 review and 2017 forecast

- In 2016 the primary market was opened end of February-beginning of March by Rusfinance Bank (RUB 5.0bn with 1.5x oversubscription). Then Toyota Bank (RUB 3.0 bn with 6.3x oversubscription), and Gazprombank (RUB 5.0bn with 3.0x oversubscription) experienced several periods of lifted demand for new placements throughout the year (April to September).
- In 2016, the Bank of Russia (CBR) continued to tighten investment requirements in relation to both banks:

 (i) higher risk weights in capital adequacy ratio for underwriting FX loans,
 (ii) higher reserve requirements for attracting FX deposits, and
 (iii) tighter adjustment ratios for non-market assets used as collateral against Bank of Russia loans.
- The regulatory pressure on the banking sector as well as continuing defaults/payment moratoriums from third-tier banks such as Vneshprombank ('B+' before difficulties), Finprombank ('B3' before difficulties), Peresvet ('B+' before difficulties) have led to lower investor risk appetite for high-yield FI sector (primary market placement volumes were more or less unchanged at ca. RUB 570bn for 9M 2016, but the share of investment-grade FI

placements increased from 31% to 52% of the total rated FI issuance over the same period).

RUB FI volumes by rating



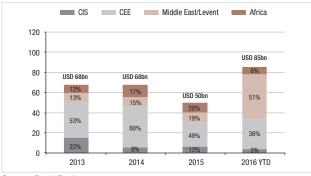
Source: Chonds.

- In 2017, the CBR will continue to sanitise the financial sector, appointing a provisional administration and revoking banking licenses of troubled banks, with a view to consolidate the industry.
- We suppose that the regulatory pressure on banking sector will continue to shift investor demand towards corporate issuers and first-tier financial institutions (BBrated and higher).

Public Sector

2016 review and 2017 forecast

CEEMEA public sector volumes by region

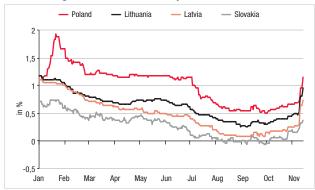


Source: Bond Radar.

- The accommodative policies from the Fed and the ECB benefited CEE issuers over the year while the sharp drop in commodity prices impacted several countries in Africa and the Middle East.
- Indeed, issuance from Middle East countries sharply increased in 2016 year-to-date versus 2015, supported in particular by jumbo deals from Abu Dhabi (USD 5bn), Qatar (USD 9bn) and Saudi Arabia (USD 17.5bn), notably to fund budget deficits as oil prices plummeted.
- As a result, issuance from CEEMEA public sector issuances increased by 70% in 2016 year to-date versus

- 2015 (USD 50bn eq. in 2015 vs. USD 85bn eq. in 2016 year-to-date).
- Starting with the CEE region, sovereign issuers continued to favour the EUR market, with more than 80% of total issuance taking place there. Indeed, the ECB's accommodative policy, the "euroisation" of their economies and the lack of arbitrage in favour of the USD market led CEE sovereigns to continue to be active in EUR.
- Furthermore, CEE sovereigns took advantage of the very low-rate environment (see graph below) to launch long-dated syndicated transactions during the year: Poland issued new 30-year EUR 500m, 20-year EUR 750m and 12-year EUR 750m, Slovakia launched a new 15-year EUR 1bn, Romania issued a new 12-year EUR 1bn and tapped its 20-year for EUR 500m, Latvia priced a new 20-year EUR 650m and Lithuania re-opened its 20 year for EUR 450m. In addition, Slovenia executed several buy-back transactions of their USD bonds while issuing long dated EUR syndicated bonds (raised a total amount of EUR 4.9bn via six syndicated transactions).
- In 2017, CEE sovereign volumes are likely to remain stable versus 2016. Poland, Romania, Slovakia and Slovenia will probably remain the most frequent issuers, as the EUR market is either their domestic market and/or an essential source of funding. The USD market is likely to continue to be an opportunistic source of funding depending on the arbitrage versus EUR.

CEE sovereign EUR 10Y benchmark yields trend in 2016



Source: Bloomberg.

■ In the Middle East/Levant, sovereigns were very active since the beginning of the year (USD 43bn in 2016 year-to-date vs. USD 9.5bn in 2015). Indeed, the drop in oil prices pushed several issuers to launch debut transactions in the international capital markets to fund budget deficits. Saudi Arabia followed this route and launched the largest ever deal by an EM borrower. The country launched a jumbo syndicated transaction reaching a total amount of USD 17.5bn across three tranches: 5-year, 10-year and 30-year. Additionally, Oman came back to the market for the first time since 1997 with a dual tranche 5-year and 10-year transaction for a total amount of USD 2.5bn, tapped a few months later for an additional USD 1.5bn. Although not an

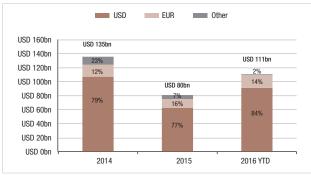
- inaugural issuer, Qatar came back to the international markets after five years of absence, issuing a hefty USD 9bn through 5-year, 10-year and 30-year benchmarks.
- In 2017, Middle East sovereign issuers are likely to continue accessing the international markets to fund on-going budget deficits, as commodity prices are expected to remain low. Therefore, sovereign supply is also expected to remain high next year.
- In Africa, we only saw a limited number of issuers: South Africa, Ghana and Tunisia (US AID). Secondary levels started to recover at the turn of the summer and more African Sovereigns are expected to take advantage of
- these attractive conditions by the end of the year or early next, especially as several countries will have to refinance part of their debt in 2017.
- Finally, Russia re-emerged into international markets with a USD 1.75bn 10-year transaction in May 2016, marking the first Sovereign USD placement since 2013. The new issue was subsequently tapped in September 2016 for USD 1.25bn. Russia has already communicated its preliminary international borrowing budget for 2017 of USD 7bn eq., including up to USD 4bn of existing Eurobonds exchanged and the remainder as new borrowings.

LATAM

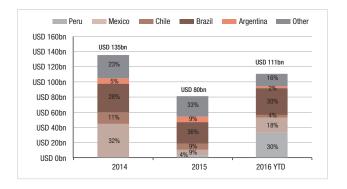
- After a bleak 2015, 2016 saw a strong increase in primary volumes from Latin American issuers. Overall issuance is expected to reach up to USD 120bn equivalent (vs USD 80bn for 2015)
- 2016 was marked by the word "return". After only one transaction in 2015 from the Brazilian sovereign and one from Petrobras, Brazilian companies started to hit the market again and many took advantage of the still-depressed prices to optimise their existing bond curves via Liability Management exercises.
- Most importantly, this year marked the return of the Republic of Argentina to the capital markets. After the much-awaited conclusion of the legal battle between the Argentinean government and the hold-outs. The sovereign hit the market with a record inaugural transaction of USD 16.5bn, amassing demand reaching USD 67bn. This opened the way to many corporates and provinces to tap the USD market.
- Most of the international issuance was done in USD. The vast majority of Latin American issuers are USD functional. In addition, North American investors have a better grasp of the region compared to European

- investors. This, coupled with the basis swap made it expensive for issuers to tap the single currency market. Only large issuers looking for diversification away from USD investors knocked on the door. There were a few transactions done in euros, with a couple of sovereigns and a select list of Mexican corporates.
- In 2017, the market expectations on what will be the pace of the rate hikes from the Fed will continue to drive demand for LATAM paper. From a political standpoint, the market will be closing monitoring the potential renegotiation of the NAFTA treaty and any protectionist measures the Trump administration may implement. This, coupled with expectations of a higher US deficit and therefore higher rates are already casting a shadow on the appetite for the region's paper. In addition, the stability and direction of the oil price will also be a key driver of supply from the large Latin American producers. The same can be said with metal/mining issuers.
- In terms of volumes for 2017, we expect the same levels of issuance as 2016 at around USD 120bn.

LATAM supply by currency and country



Source: Bondradar.



Corporates

INVESTMENT GRADE

2016 review

USD MARKET

- In LATAM, primary supply of USD denominated bonds is expected to reach USD 23bn, still well below the record number of 2014 at USD 39bn.
- Refinancing existing debt was the philosophy used by companies this year as fears of a rising US dollar tempered the moods for increased leverage.
- The combination of low supply and US treasury rates standing at record lows for a large part of the year triggered an outstanding secondary performance for the asset class. This phenomenon was even more noticeable for O&G state-owned enterprises.
- 2016 marked the return of Brazilian corporates to the international markets. After a couple of visible transactions from Petrobras and the Brazilian sovereign in 2015, no other Brazilian corporate had accessed the market that year.
- With months of instability, the conclusion of the political saga in Brazil provided more clarity towards the path to follow for the largest economy in Latin America. The most visible issuer was mining company Vale, who was able to come to the market twice due to high demand for its paper. Other Brazilian companies like Votorantim & BRF tapped the market with successful trades.
- However, the largest transactions came from the usual suspects. Mexican O&G company Pemex followed the traditional sequence, printing its largest trade of the year, a multi-tranche USD 5bn in January, after the USD trade from UMS.
- In September, the Mexico City Airport Trust was able to issue USD 2bn in green bonds in 10-year and 30-year, which became the largest transaction in this format from LATAM. The transaction gathered an outstanding USD 8bn in demand, a testimony of the potential for this format.

EUR MARKET

 Supply in 2016 was far below the record year of 2014, reaching only EUR 4.75bn versus EUR 8bn. Few Latin

- American corporates have EUR needs and generally tap the market for diversification purposes.
- All three issuers coming to the EUR market were from Mexico. The telecom company America Movil tapped the EUR market in early March, and it was quickly followed by Pemex days later. A couple of weeks later, consumer company FEMSA printed its inaugural EUR trade after a successful pan-European roadshow.
- Although the market continues to prove a source of investor diversification, many issuers bear in mind the costs of swapping the proceeds back to their local currencies.
- Brazilian issuers abstained themselves from tapping the market as the investor community in Europe continues to lag their North American counterparts in increasing exposure to Brazilian risk. In fact, Votorantim Cimentos bought back part of their EUR bonds outstanding with the proceeds of newly issued notes in USD as the cost of funding was significantly lower.

HIGH YIELD

2016 review

- With close to USD 21bn eq. year-to-date, 2016 saw an increase of supply compared to 2015 and we are expecting to finish on top of the levels of 2014 when USD 22.5bn were printed.
- The recovery in primary supply came mainly from Argentinean and Brazilian companies tapping the market. As expected, the largest transaction came from Petrobras who was able to print a 5-year and 10-year of around USD 7bn combined in May. Demand was so strong that the issuer was able to tap these bonds less than two months later, adding USD 3bn extra.
- After Brazilian issuers, Argentinean companies were the second largest contributors, bringing USD 4bn to the market after the sovereign trade gave them access to international capital markets again.
- Cemex was the only Latin-American issuer to access the EUR markets this year with a EUR 400m with an 8NC4 in June. And interestingly, YPF, the Argentinean national O&G Company, issued a CHF transaction in September.

2017 forecast

- For 2017 we expect the usual frequent issuers to tap the international markets. The euro market continues to be seen as the second largest source of liquidity available. As such, issuer with large funding plans will continue to use it as a pressure relief valve against the US dollar market.
- We expect the US dollar and the euro market to diverge during the first half of the year, mainly due to the rates expectations in the US and in Europe. This should present a good opportunity for US dollar based issuers to tap the European market.
- With a favourable EUR/USD basis swap, we would expect additional issuers to tap this market, just like we witnessed in H1 2014. We therefore see a slight increase in issuance in euros versus 2016.
- As for the US dollar market, as for other type of issuers, the volume of appetite for EM paper will be dependent on the pace of the rate hikes announced by the Fed and the Trump's administration foreign trade policies. Under the base case scenario we see supply remaining at similar levels as of 2016. With this we see 2017 totalling around USD 50bn eq.

Financial institutions

SENIOR UNSECURED MARKET

USD MARKET

2016 review

- As for corporates, USD dominated issuance in the region for financial institutions. Supply was muted after Brazilian issuers were shut out of the market in 2015. We saw little more than USD 4bn coming to the market this year. The most significant transactions were Tier 2 bonds coming from Banco de Bogota and Bancomext.
- We did not see any transactions coming to the EUR market as issuers have small EUR portfolios while the basis swap is against them at the moment.

2017 forecast

- We expect to see a pick-up in supply, coming mainly from further clarity on the implementation of Basel III for Chilean and Mexican banks.
- Chile is indeed getting closer to implementing a Banking Act that would allow its banks to be in compliance with Basel III. If this takes place in 2017, the largest banks will have to raise capital to meet the new standards. We are estimating this quantum to around USD 2bn to USD 4bn.
- There is less clarity regarding the situation in Mexico as presidential elections will take place in 2018. In addition, with the recovery we have been witnessing in Brazil, we see supply slowly coming back and expect some issuers to tap the international markets.
- In total, we see around USD 8bn to USD 10bn of supply coming from Latin-American issuers in 2017.

Public sector

USD MARKET

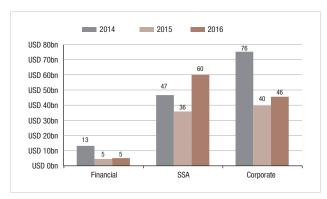
2016 review

- It has now been a couple of years that we see the United Mexican States opening the market for Latin American issuers in early January. In 2016, however, we saw the Republic of Chile to take this role with a dual-currency transaction (10-year in USD and EUR). UMS followed the next day with a USD trade.
- The year was marked by the return of the Republic of Argentina to the capital markets in April. After years of negotiation and a new, business friendlier government, the country was able to reach an agreement with the hold-outs that was impeding its access to the international capital markets. The sovereign was preceded by the Province of Buenos Aires which was able to print USD 1.25bn and was therefore the first Argentinean SSA to issue in 2016.
- The much-awaited sovereign transaction came after an international roadshow in the US and Europe. The transaction was marketed at USD 10bn to USD 15bn.

The issuer printed a USD 16.5bn 4-part (3-, 5-, 10- and 30-year) which was the largest single emerging market transaction at the time. The deal was met with so much demand that the IPTs/pricing compression was up to 85bp in the long tranche. The final order book was heard at USD 67bn. Interestingly, after this inaugural trade, the sovereign returned to the USD market in June with nonconventional maturities 12- and 20-year. Many Argentine provinces followed the sovereign and total supply stood at USD 6bn.

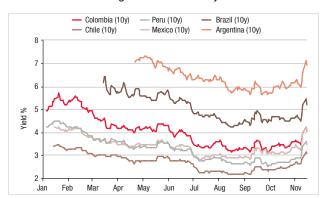
- Another turnaround story was Brazil. The issuer was absent from the international markets since September 2014. Investors were reluctant to put their money in the country while the political situation was uncertain. The Republic of Brazil came to the market before the impeachment of Dilma Rousseff was consummated in March, with a USD 1.5bn 10-year that gathered close to USD 6bn in demand and reopened the long end in September with a new USD 1.5bn 31-year.
- We saw an uncommon transaction in 2016: Peru issued USD 471m eq. 12-year in PEN denominated notes to retire some of the issuer's USD and PEN bonds in an effort to promote the internal market. The issuer relaunched the transaction the following day, upsizing from PEN 800m to PEN 1.6bn with the book size heard at PEN 11bn.

LATAM supply by type of issuer (2016 YTD)



Source: Bondradar.

LATAM IG & HY sovereign USD benchmark yields trend in 2016



Source: Bloomberg.

2017 forecast

- We expect to see less supply coming from sovereigns. For instance, the Argentinean government does not need to repeat the record size from 2016 next year and we do not see any other issuer replacing such quantum. Brazil is likely to keep the deficit in track with austerity measures, and with manageable redemptions in 2017 we expect the country to tap the markets for around USD 3.5bn eq.
- Mexico is also keen to send a message of austerity after being put in negative watch by Moody's and S&P due to the fall in oil prices that increased significantly the primary deficit. With only one bond maturing in 2017, we expect supply to be limited in the international markets.
- The only uptick in supply might come from Peru and Colombia. For Peru, the new government elected in 2016 has signalled many times its wishes to develop the infrastructure of the Andean country.
- For Colombia, investors have been eyeing carefully the peace negotiations between the government and the FARC. A cessation of violence is expected to trigger more economic growth and investors' appetite.

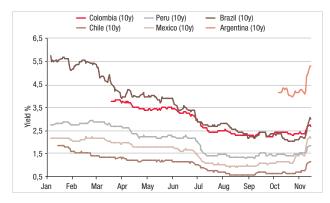
EUR MARKET

2016 review

- We have seen more than EUR 10bn in supply this year from SSA issuers. Many decided to tap the EUR market instead of the USD market altogether. Peru issued its second EUR bond in February, extending its EUR curve to 2030. Colombia tapped this market for the first time in 15 years in March with a EUR 1.35bn 10-year transaction.
- Mexico continued adding points of reference in its EUR curve with a successful dual tranche 6- and 15-year that provided the issuer with EUR 2.5bn in new funding. The transaction was launched in February during the most volatile time of the year; however, a small window and the lack of supply from EM issuers allowed UMS to print a successful transaction. The issuer is one of the busiest EM issuers in this market, with more than EUR 11bn outstanding.

■ The Mexican sovereign also took advantage of the positive momentum in their spreads in October, prior to the US presidential elections to issue a new EUR 1.2bn 9-year and tap the 2031 bonds with EUR 700m.

LATAM IG & HY sovereign EUR benchmark yields trend in 2016



Source: Bondradar

2017 forecast

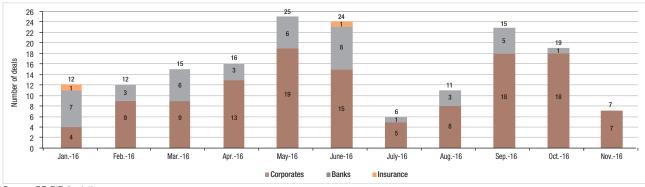
- We expect supply to be linked with the EUR/USD basis swap. With Mexico prefunding its only EUR 2017 redemption this October, we see little chances of a new EUR transaction as a diversification play.
- Brazil has a ca. EUR 400m bond maturing in June 2017. These bonds were issued in 1997. We see Brazil as a potential issuer given its small debt outstanding in the single currency market, the recent compression in spreads and its long absence from this market.

Liability Management

Overview

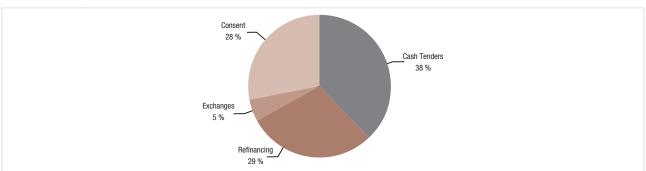
- The liability management (LM) market continued to be busy in 2016, with 170 transactions executed in the European markets in 2016 year-to-date, compared to around 145 transactions for the same period last year.
- LM activity remains correlated to primary market activity following a quiet period in Q1 2016, we saw a significant uptick in LM exercises in Q2 2016 on the back of the CSPP announcement, and in September following the summer break and post-Brexit volatility.

LM remained strong in 2016, led by corporates, but also with solid activity from FIs



Source: SG CIB Analytics.

Cash tenders represented the bulk of LM deals, driven by FIs targeting "OpCo" debt and corporates deleveraging following disposals and capital raising



Source:SG CIB Analytics.

Corporates

2016 review and 2017 forecast

- Corporates continued to dominate LM activity in Europe in 2016, accounting for 73% of the total number of deals done this year. There has been a total of 125 corporate LM transactions in 2016 year-to-date, compared to 95 for the same period last year.
- Repurchases of EUR-denominated bonds continued to experience a good average take-up of 31% (vs. 32% in 2015), despite the entry of the ECB as an alternate buyer via the CSPP – these exercises have taken the form of refinancing more than cash tenders.
- Following the ECB CSPP announcement in March, secondary spreads tightened significantly across the board for European issuers, and a number of bonds started trading at close to zero or even negative yields:
 - As a result, several issuers floored the tender levels at a 0% yield, representing minimal or negative premiums, and resulting in below average take-up.
 - Subsequently in May, we saw the first ever tender offer with a negative tender yield on a senior unsecured corporate EUR bond, following which, we have seen several negative yield tender offers in the EUR market. These have, unsurprisingly, resulted in an above average take-up of 40%.

- Since the announcement of the CSPP, primary markets have also generally been in great shape (with the exception of the post-Brexit volatility and summer break), which has encouraged issuers to pro-actively refinance upcoming redemptions and optimise their interest expense, while extending their average maturity at the same time. There have been 58 refinancing transactions year-to-date across various formats (tenders followed by new issue, new issue followed by tenders, exchange offers, intermediated offers) versus 31 such transactions during the same period last year.
- Additionally, there have been 38 cash tender offers, mainly driven by issuers in the metals and mining sector (ArcelorMittal, Rio Tinto, Anglo American, Glencore) who have undertaken significant deleveraging this year on the back of asset disposals or capital raising, following the sector volatility at the beginning of the year.
- Corporates have continued to employ consent solicitation exercises for a variety of reasons, with 29 such transactions executed this year. The most prominent exercises were carried out in the context of M&A activity, where issuers generally targeted all of their outstanding bonds to gain bondholders' approval of the M&A transaction (AB InBev on EUR 13.4bn, SNAM on EUR 8.6bn, Areva on EUR 4.8bn) and/or seeking waivers of related terms and conditions.
- We expect this strong trend to continue into 2017 for corporates, with the low-yield environment and M&A activity as the main drivers for LM.

Financial Institutions

2016 review and 2017 forecast

- Financial institutions (FI) have remained in step with activity in 2015, with 45 LM exercises in 2016 year-to-date compared to 49 in 2015. Banks accounted for almost all of these transactions, notably in relation to reducing "OpCo" debt.
- Cash tender offers and consent solicitations were the most commonly used forms of transactions, targeting all asset classes across the capital structure:
 - Subordinated: some banks continue to optimise their regulatory capital positions by repurchasing old-style or grandfathered Tier-1 and Tier-2 bonds (UniCredit, Lloyds), but these have remained relatively low profile compared to other types of activity.
 - Senior: senior debt LM was the key theme for financials in 2016. UK banks (Barclays, RBS, Santander UK), in particular, executed multiple cash tender offers on TLAC-ineligible senior OpCo bonds, while other issuers sought to optimise their funding mix and reduce interest expense, in the light of cheaper liquidity available via the ECB's TLTRO II programme (Bank of Ireland, Standard Chartered).
 - Covered: we continued to see consent solicitations on "hard-bullet" covered bonds to modify them to "soft-bullet" covered bonds (Credit Agricole, UBS), while there were also a few transactions in the context of group reorganisation (Credit Suisse, Nordea Bank Finland).
- Insurers were not very active in the LM space in Europe, although there has been good activity elsewhere.
- For 2017, we expect LM activity to remain steady for FIs as they continue to optimise their capital structure with respect to not only Basel-III/CRD IV, but also TLAC and MREL requirements.

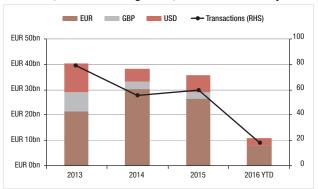
Hybrid Capital Market

Corporates

PRIMARY MARKET ACTIVITY

2016 review

Lower European corporate hybrid supply due to volatile market conditions, lower refinancing needs, and less M&A activity

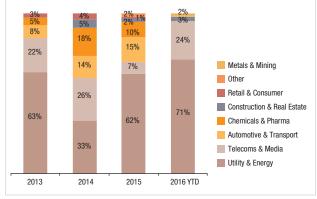


Source: SG CIB Analytics, Dealogic.

- 2016 saw limited corporate hybrid issuance volumes due to market turbulence during the first half of the year, lower hybrid refinancing needs and less M&A activity.
- In Europe, the market remained closed until May when Total took advantage of recovering market conditions post the ECB CSPP announcement in March to come back to the market. The ECB's announcement of the programme contributed to a tightening of the average subordination premium by 100bp between 4 March (preannouncement of CSPP on 10 March 2016) and 22 April.
- With rates and corporate bond spreads remaining at historically low levels, hybrids continue to offer a very attractive yield pick-up for investors.
- In 2016 year-to-date, European corporates have issued EUR 11bn eq. in hybrids. We see limited scope for further hybrid issuance before year-end.
- 2016 major trends can be summarised as follows:
 - 2016 issuance has been dominated by the utility and energy sector, illustrated by Total's EUR 1.75bn single tranche in May and EUR 2.5bn two-tranche in September, and the EUR 1bn equivalent two-tranche issuance from EnBW in September (issued as replacement for EnBW's April 2017 call of EUR 1bn).
 - All hybrids with first call dates in 2016 were redeemed, but none was replaced. While S&P generally requires replacement capital issuance prior to a hybrid redemption, issuer-specific circumstances often lead to a call without replacement:
 - On 16 November, Finnair redeemed its remaining EUR 38.3m of hybrids (after an LM exercise in

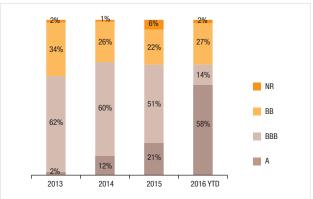
- September 2015) as an unrated issuer, Finnair is not subject to any replacement intention or obligation.
- On 14 September, Siemens called both of its EUR 900m and GBP 750m hybrids at the first call date without replacement, despite the replacement intention language in the documentation.
- On 5 August, Rexam called its EUR 750m 2067NC2017 hybrids under the "Change of Control" call option, one of the exceptions to the replacement intention.
- On 31 May, Linde called its EUR and GBP hybrids, with its senior upgrade since issuance (from BBB+ to A+) exempting it from replacement.
- On 31 March, non-investment grade rated Lottomatica/IGT redeemed its remaining EUR 45.5m, after an LM exercise in December 2014 in the context of the IGT acquisition.

In 2016, corporate hybrid supply came primarily from the utility and energy sector $\,$



Source: SG CIB Analytics, Dealogic

In 2016, highly rated corporate hybrids dominated the primary market (instrument rating)



Source: SG CIB Analytics, Dealogic

DEVELOPMENTS IN THE HYBRID SPACE

IASB Research project on classification of financial instruments

- While the primary motivation for hybrid issuance is rating agency equity credit, the accounting classification is also of importance for many issuers, in particular unrated corporates. However, the possibility to classify hybrid bonds as International Financial Reporting Standards (IFRS) equity is currently being challenged and might disappear in the long term.
- As part of the research project "Financial Instruments with Characteristics of Equity" launched in 2014, the International Accounting Standards Board (IASB) is developing a new approach on the accounting classification and presentation of instruments as 'liability' or 'equity' under IAS 32 "Financial Instruments" see table below:

	IAS 32 (current)	Possible Approach
Principle	Liability: contractual obligation to deliver cash or another financial asset to another entity. Equity: contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities.	Liability: obligation (i) to transfer economic resources at particular points in time other than at liquidation or (ii) for a specified amount independent of the economic resources; Equity: obligations (i) to transfer economic resources only at liquidation and (ii) for a residual amount.
Assessment of hybrid features	 Perpetual tenor: there is no final maturity; any repayment is at the option of the issuer. The issuer has full discretion to avoid payment of coupons: the issuer may at any time decide not to make a scheduled coupon payment. No obligation to settle deferred coupon payments: deferred coupons accrue but must only be settled if the issuer decides to repay or make a payment on junior or pari passu instruments (excluding any mandatory payments under the terms of the instruments). 	 Perpetual tenor: there is no final maturity; any repayment is at the option of the issuer The issuer has full discretion to avoid payment of coupons: the issuer may at any time decide not to make a scheduled coupon payment No obligation to settle deferred coupon payments: deferred coupons accrue but must only be settled if the issuer decides to repay or make a payment on junior or pari passu instruments (excluding any mandatory payments under the terms of the instruments). Fixed principal amount: in liquidation, the investor has a claim for the full principal amount, including any accrued interest and deferred coupon payments, and has no claim for any residual amount.
Resulting classification of perpetual hybrid	Equity	Liability

- This project came on the back of certain IAS 32 shortcomings raised by a number of market participants who explicitly called for a more accurate instrument classification in light of new forms of financing, such as hybrids.
- In June, the IASB conducted a meeting on the proposed approach with investors and preparers and received favourable feedback.
- A discussion paper should be published during H1 2017.

2017 forecast

- In 2017, we expect corporate hybrid issuance volumes to be largely M&A-driven (e.g. Bayer plans to issue hybrids to finance the Montsanto acquisition). Replacement ahead of upcoming redemptions will play a limited role, as some issuers of hybrids callable in 2017 have already created replacement capital (EnBW and arguably RWE) or have been upgraded (BG Group acquired by Shell). We expect the following issuance volumes:
 - In EUR, a total of EUR 10bn of issuance, 11% higher than 2016 expected;
 - In USD, a total of USD 4bn of issuance, 33% higher than 2016 expected;
 - In GBP, a total of GBP 1bn of issuance.

Financial Institutions

REGULATORY ENVIRONMENT

Banks

Increased focus on the risk of AT1 coupon restriction in light of Pillar 2 requirements

- On 6 January, the European Central Bank (ECB) published a note on the interactions between Pillar 2 and combined buffer requirements, mirroring the stance previously taken by the European Banking Authority (EBA) in an opinion released on 18 December 2015: Pillar 2 requirements should sit below combined buffer requirements when assessing the Maximum Distributable Amount (MDA). This clarification increases the risk of coupon suspension on Additional Tier 1 (AT1) instruments.
- In this context, there was a general call for less automaticity in distribution restrictions and greater protection of AT1 bondholders. In March, the European Commission (EC) proposed to divide Pillar 2 requirements into two parts: a requirement for which a breach would trigger MDA restrictions, and a guidance for which a breach does not trigger MDA calculation. In mid-July, the EC met the expert working group to discuss amendments to the Capital Requirements Regulation (CRR) and Directive (CRDIV) in order to implement the new Pillar 2 framework suggested in March.

Implementation of MREL and TLAC

- On 7 July, the EC proposed to amend the existing CRR/ CRDIV legislation to introduce the MREL standard alongside the Financial Stability Board (FSB) TLAC standard as an integrated regime into EU law in 2016 ("CRRII/CRDV" legislative package and BRRD). The final public proposal is expected in November.
 - —A clear distinction is made between global systemically important banks (G-SIBs) and non-G-SIBs: the requirements of eligible liabilities are not the same and subordination is not mandatory for non-G SIBs. For G-SIBs, MREL/TLAC requirement will be set at the high end of the FSB proposed range, i.e. 18% of risk-weighted assets or 6.75% of the leverage exposure. For non-G-SIBs, the MREL/TLAC requirement will be set at the discretion of the resolution authority based on the loss absorption and recapitalisation amounts required in resolution.
 - Part of MREL/TLAC could be communicated as a 'guidance', a breach of which would not trigger any severe measure (recurrent breach would however lead to an upwards revision of the MREL/TLAC requirement).
 - Any breach of the 'requirement' portion of MREL/ TLAC should trigger an assessment of whether the bank is failing or likely to fail, as well as restrictions on distributions (including AT1).

- On 19 July, the EBA published a consultation paper on its interim report to the European Commission on the implementation and design of the MREL. Key provisional recommendations were:
 - The change of the reference base from total liabilities and own funds to risk-weighted assets, with a leverage ratio backstop;
 - The stacking of capital buffers on top of MREL to remove double-counting;
 - The amendment of the current framework to clarify the implications of a breach in MREL and the introduction of a minimum MREL requirement.

Insolvency regimes harmonisation and French NPS law development

- As a reaction to the different models for bank insolvency regimes introduced by Germany, Italy and France, the EC is expected to submit a proposal on harmonisation of bank creditor hierarchy in November.
- France's insolvency hierarchy reform provides for the creation of a new category of senior debt, ranking junior to existing senior unsecured debt but senior to subordinated debt, 'non-preferred' senior (NPS). This new category of debt should provide French G-SIBs with a less expensive solution than regulatory capital to meet TLAC requirements. The new legislation (part of the Sapin II law package) may still be adopted before year end 2016, but the first issuance of an NPS instrument may not emerge before early 2017.
- The issuance by Nykredit of two Senior Resolution Notes in June and July helped build a basket of comparables alongside UK and Belgian banks' Senior "HoldCo" instruments.

CRR / CRD IV / BRRD Reform

We expect the EC to publish by the end of the year a legislative proposal for "CRRII/CRDV" and "BRRDII" implementing changes to the MDA framework, as well as the TLAC requirement. Implementation and transposition of the new legislative package is expected to take up to two years.

Insurance

ICS update

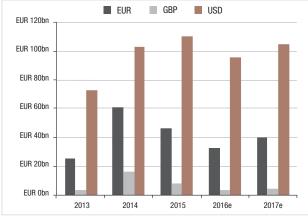
On 19 July, the International Association of Insurance Supervisors (IAIS) published a consultation paper on the risk-based global insurance capital standard (ICS). The ICS incorporates valuation principles for assets and liabilities, definition of capital resources and a risk-based capital requirement. The ICS will apply to insurance groups designated as Internationally Active Insurance Groups (IAIGs). A first version of the standard is scheduled for adoption in mid-2017, with a second and final version planned for adoption in late 2019. The ICS follows a two-tier approach for capital resources, focusing on five key principles: loss absorbency capacity, subordination, availability to absorb losses, permanence, absence of encumbrances and of mandatory servicing costs.

PRIMARY MARKET ACTIVITY

2016 review

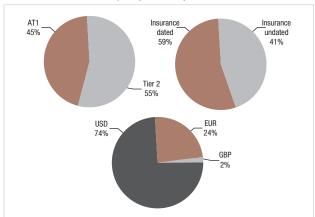
- The financial hybrid market has been continuously changing over the past four years in response to the evolving regulatory environment. 2016 saw lower primary supply of capital instruments than 2014 and 2015 mainly due to market volatility (in particular in Q1 2016), political uncertainty in the UK and in Italy, and some namespecific credit news (Deutsche Bank, Monte Paschi, UniCredit).
- Capital issuance remains driven by the evolving regulatory environment (MREL and TLAC, capital buffers, Pillar 2).
- In light of Pillar 2 CET1 add-on requirements, we expect banks to continue filling their AT1 and T2 Basel 3 buckets.
- The upcoming implementation of the TLAC/MREL standard led to the emergence of a new asset class with Nykredit issuing two EUR senior resolution notes in June and July.

Lower supply in 2016 (vs. 2015) given more volatile market conditions and Brexit uncertainty



Source: SG CIB Analytics, Dealogic.

Characteristics of 2016 (YTD) bank capital instrument issuances



Source: SG CIB Analytics, Dealogic.

EUR MARKET

Euro-subordinated volumes (banks and insurance) fell sharply from EUR 47bn in 2015 to EUR 29bn in 2016.

- We saw lower supply from both banks and insurance companies. Banks accounted for EUR 22bn of supply (vs. EUR 33bn in 2015), while insurance companies issued EUR 6bn (vs. EUR 13bn in 2015).
- In terms of split between AT1 and Tier 2, we saw EUR 4bn of AT1 and EUR 17bn of Tier 2 issuances.
- Most transactions came from core countries (France, Netherlands, Germany, UK, etc.), although we saw some activity from peripherals (almost 30% of overall supply from Iberia and Italy).

USD MARKET

In the USD subordinated market, the volume of issues decreased from USD 122bn in 2015 to USD 97bn in 2016. This still represents the most active segment with 76% of volumes for banks and 65% for insurers overall.

- In terms of regional split, 42% of the supply came from European firms while 35% came from US issuers, with the 23% remaining being split between the APAC region, the Middle East and South America.
- The split in terms of AT1 and Tier 2 was fairly even, with USD 41bn of AT1 and USD 38bn of Tier 2 supply.

GBP MARKET

Volumes in the sterling market followed the overall trend in EUR and USD and were significantly below 2015's volumes. We saw GBP 2bn of issuance in 2016 versus GBP 6bn last year. The majority of the supply came from banks.

2017 forecast

- On the financial institutions side, we expect the focus to definitively shift to MREL/TLAC and Tier 3/NPS. With many banks having mostly filled their AT1 and T2 Basel 3 buckets, these additional TLAC/MREL requirements are expected to drive the hybrid market supply in 2017. We forecast the following volumes of subordinated debt for EV 2017:
 - In EUR, a total of EUR 40bn of issuance or an increase of around 21% versus 2016 full-year expected;
 - In USD, a total of USD 115bn of issuance or an increase of 10% versus 2016 full-year expected;
 - In GBP, a total of GBP 4bn of issuance compared to GBP 3bn 2016 full-year expected.

Asset-Backed Products Securitisation & Distribution

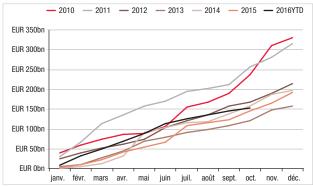
EUROPEAN MARKET

2016 review and 2017 forecast

Unexpected momentum from the Expanded Asset Purchase Programme (EAPP) in 2016 but is this enough to maintain an ongoing public market?

We are struck so far this year by the positive momentum of the asset-backed securities (ABS) market in Europe despite the relentless headwinds on securitisation.

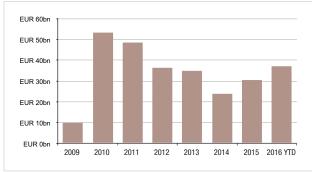
European ABS cumulated volumes (in EUR bn) (public + retained)



Source: SG cross Asset research/rates.

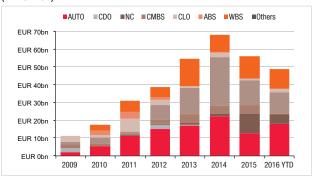
- Year-to-date volumes (both retained and public) are at around EUR 155bn as of 25 October 2016. This level is remarkably stable compared to the volumes reported over the last five years.
- The split between retained and publicly placed has been also quite stable in the last two years with a rough 50/50 split, and we expect this to be the case again this year.
- Active submarkets are RMBS (mainly UK, as evidenced last year already), consumer ABS (both secured with Auto ABS and unsecured) and arbitrage-managed collateralised loan obligation (CLO) markets.

European RMBS cumulated volumes (in EUR bn)



Source: SG Cross Asset research /rates.

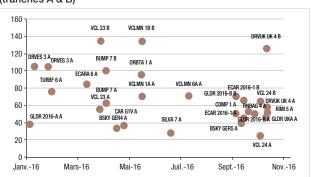
European ABS cumulated volumes by asset class (excl. RMBS) (in EUR bn)



Source: SG Cross Asset research /rates

- The spreads on all asset classes have been continually tightening over 2016, to reach a level that can be expected to be a floor (in Q3-16 Italian SME senior class (Voba 6) were issued at 58 bp).
- Q3 2016 saw the first issuances above par (GlobalDrive Auto 2016, Bavarian Sky Germany 5, E-Carat 9, R&B Auto Germany 4).
- Indeed, Auto ABS usually price at the tightest end of the ABS spectrum. In the current environment of negative rates, several transactions hit the floor of 0% coupon as the Euribor index was increasingly negative. Although we don't expect the ECB to take interest rates any further into negative territory, it is unclear when interest rates will bottom out and it could be in a long time still. As a result, Auto ABS investor asked for higher facial margins on their coupons compared to the effective discount margin at which priced the deal. This resulted in a number of tranches (most likely senior tranches) being priced above par at issuance.

Nominal coupon margins in Auto ABS deals YTD (in bp), (tranches A & B)



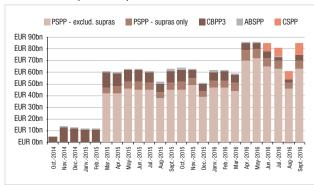
Source: Societe Generale Cross Asset Research/rates.

- Despite the Brexit vote that has created market uncertainty, RMBS origination volumes grew due to: (i) the gradual pick-up in economic growth and (ii) the increasing number of housing sales and low interest rates. The UK and the Netherlands remain by far the most active markets in the European RMBS space, followed by Spain. Year-to-date, auto loan and lease ABS primary market activity in Europe has been strong by number of transactions brought to market, with captives dominant. A higher number of auto ABS transactions have typically come from countries that show stronger economic performance, (e.g. Germany), with a higher proportion of these transactions being placed with investors. Meanwhile, in other European nations with relatively weaker economic performance (e.g. Spain), there has been a revival of primary auto ABS issuance, mainly structured for ECB repo purpose.
- Overall, Europe Middle East & Africa (EMEA) SME ABS activity in H1 2016 remained moderated. Primary market activity will continue to be focused on Italy and Spain. In Italy 90% of SME ABS deals are retained for ECB repo/TLTRO2. The European Investment Fund (EIF) and the European Investment Bank (EIB) along with Cassa Depositi e Prestiti (CDP) and KfW play a key role for supporting the market, as they are very active investors or guarantors. In addition, a call for interest was published in October 2016 for the SME initiative, an innovative intervention programme sponsored by the European Investment Fund (EIF) on SME ABS aimed at further supporting the Italian SMEs (EIF/ EIB/Italian Government set up a guarantee scheme for Junior Notes of ABS SME RegCap deals). Finally, many Italian legislative initiatives taken in the last two years will help streamline the insolvency process and improve loan recoveries, a key factor in the credit quality of securitisations of SME and RMBS non-performing loans (NPLs).
- Beyond Italy, in Spain the SME sector will benefit from funding options via crowdfunding platforms. Also noteworthy is that in Q2 2016, the first peer-to peer/ market place lending securitisation occurred in Europe, SBOLT 2016-1 DA, a UK SME deal comprising loans funded through the Funding Circle platform, and the first Russian SME securitisation.
- After a relatively active 2015 for European CMBS, with an increase in new issuance volumes and further diversification both in terms of asset classes and jurisdictions, 2016 has been calmer and has so far seen only two public CMBS issuances. Both deals were collateralised by real estate in Germany, retail in one case and a mixed portfolio (mainly office) in the other.
- The European CLO market has been quite active compared to the US market. Year-to-date issuance volumes (end of September 2016) reached USD 11.84bn which tops last year's USD 10.33bn (source: S&P, LGD Global CLO Report) year-on-year. The number of transactions reached 29 at the end of September 2016,

- up on 26 year-on-year. The market was particularly active between March and July 2016, after a slow start during the first two months and with only one transaction concluded in August 2016 (Chenvari's Toro European CLO 2 transaction). The slow start can, however, be explained to some extent by the very active year-end 2015 and the spill-over effect of rising spreads from the US. Spreads tightened to approx. 115bp to 125bp, in particular during the summer, down from 145bp at the beginning of the year. It is noteworthy to add that the number of managers this year is equal to that of full-year 2015. Risk retention financing is now a topic for all asset managers trying to get away from a CLO warehouse and CLO issuance-related refinancing to a more permanent form of refinancing. We expect this positive trend to continue until year end, as the pipeline of forthcoming transactions is quite busy.
- Aiming at making securitisation more appealing by consolidating the current patchwork of securitisation rules, the EU Regulation substance is still set to change. Currently, the proposal awaits the rapporteur's report to the European Parliament, where a committee vote is scheduled for November 2016. Following Parliament's adoption of the report, negotiations between the Commission and Council (Trilogues) will start in January 2017 and the new securitisation framework is not likely to come into effect before mid-2017 or even 2018.
- The first regulation creates a new category of simple, transparent and standardised (STS) ABS and ABCP, and will harmonise rules on risk retention, due diligence and disclosure across investors. Eligibility criteria will include homogeneous underlying assets (resecuritisation ineligible). However, these restrictive eligibility criteria could prevent SMEs from benefiting from ABS transactions. In addition, the recommendation of the European Parliament to increase the retention rate to 20% would be highly detrimental to all securitisation asset classes. At the moment, the STS designation process is being reviewed to see whether it will include authorised third-party certification or involve selfreporting by originators and sponsors only. The level of due diligence that investors are expected to conduct is still to be fine-tuned, but again the ability to undertake due diligence depends on the availability of the relevant data and for SMEs in particular this will often not be the case.
- A second STS Regulation (CRR Regulation) is under development, which will implement the revised Basel framework, and sets outs the framework by which credit institutions can receive a more favourable capital treatment for their STS securitisations positions. Despite strong performance of AAA and AA-rated ABS, the risk-weights are intended to be increased significantly (a minimum RW of 10% for senior AAA STS positions is proposed), along with a new method for determining capital charges in the proposed amendment to the CRR. Although this is lower than the Basel Committee's current proposal, coming into effect in 2018, it is still

- higher than the currently applicable minimum RW of 7% for AAA rated positions held by IRB institutions, and clearly too high compared to other unsecured sources of funding (covered and corporate bonds).
- While the ECB has been very active in terms of extraordinary monetary policy, the purchases under the ABS Purchase Programme (ABSPP) remain very much unchanged. The ECB implemented the third phase of its Extended Asset Purchase Programme (EAPP) which started in June this year, but ABS purchases remain particularly limited. As of end-September, the cumulative amount was EUR 20.7bn, compared to the Covered Bond Purchase Programme (CBPP3) cumulative holding at EUR 194bn which is close to 9.4 times this amount.

EAPP volumes (in EUR bn)



Source: Societe Generale Cross Asset Research/rates, ECB.

- Clearly the development of the programme is not satisfactory from a monetary policy view point, which stigmatises the product somewhat. This also contradicts the ECB's communication on the topic of securitisation and the institution's willingness to redevelop this market in Europe. A slightly encouraging sign though is the increase - albeit small - of the share of ABS being bought on the primary market, acknowledging the fact that more new transactions are being structured in order to be ABSPP-compliant, which means that rules are now better understood by the market. In addition, the EAPP provides indirect support to the ABS market by squeezing interest rates overall and the liquidity in certain individual markets, such as that of covered bonds, thus pushing investors towards the ABS market and boosting the relative value of ABS in general.
- However, we don't expect the ABSPP to pick up in the future as there seem to be opposing views within the ECB regarding appetite for this paper. The market continues to trade and price new deals, irrespective of what the ABSPP is doing. Spreads tightened in the third quarter as ABS were cheap in relative value against other markets. Furthermore, investors have been crowded out by the EAPP program either directly, as is the case for covered bonds, or indirectly in the loan market as well. Corporate significantly reorganised their funding to issue bonds instead of loans (the latter volumes are down 34% compared to last year) as the former are being bought en masse under the Corporate Sector Purchase

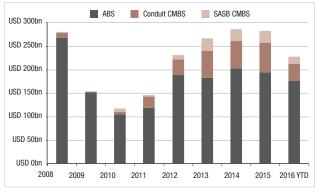
- Programme (CSPP) (currently between EUR 8-9bn per month).
- As a conclusion, the resilience of securitisation is effectively explained by the accurate toolkit it represents for balance sheet management operations. Banks and other types of sponsors/originators are using it whenever needed. However, it is not easy to determine if the market better off as a result. First, over the last three or four years we have been dealing with a fairly unchanged regulatory environment, at least in terms of Basel regulatory capital treatment. This is likely to take a turn for the worse in the coming years. Second, while the figures of annual ABS volumes are not falling, they are not rising either. The market still relies on a few active sub-sectors which is a sign of potential weakness should any of them significantly slow down in the future.
- The future could also bring some good news as we expect, for example, a significant increase in volumes from the sales of Italian NPLs ABS transactions next year following the recent implementation of the GACS by the Italian government (Guarantee on Securitisation of Bank NPLs). Only one so far has been reported this year, with Banca Popolare di Bari EUR 150m notes. The amount of underlying which could be securitised is huge, as end-of-2015 figures reported EUR 200bn in bad loans and an additional EUR 160bn in impaired loans, even if the exact amount effectively securitised is difficult to determine. Either way, securitisation is part of the equation which highlights the crucial role it plays and has to play in the future of the financial markets.

US MARKET

2016 review and 2017 forecast

■ The US ABS market continues to be a viable source of funding for issuers of a variety of asset classes, as can be exemplified by the continued steady supply, year-after-year, since the market rebounded post-crisis. Year-to-date (as of 3 November) issuance volume stood at USD 176bn, in line with full-year 2015 issuance (approx. USD 190bn) and full-year 2014 issuance (approx. USD 200bn).

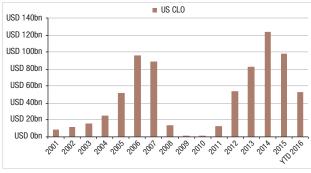
US ABS & CMBS volumes a viable source of funding for issuers (in USD bn)



Source: SIFMA, Bloomberg

- Asset classes on the US ABS markets are dominated by auto transactions (44%), while credit card deals are notably higher than last year. Heavy demand from investors in the second half of the year was supported by consistently widening swap spreads. Student loans, consumer loans, rental car, timeshare and PACE bond deals are on the rise as well, confirming the appetite for more esoteric asset classes as yield hungry investors look to expand their investment horizon.
- Non-US issuers are also active, particularly in auto and credit cards transactions. Issuers are certainly taking advantage of the low interest rate environment in the US ahead of expectations that the Fed will start raising interest rates later this year or early 2017.
- Wider swap spreads in the short end of the curve have been drawing investors into short term ABS versus short term corporate. This heavy demand has not discouraged issuers from entering into crowded markets. Even throughout record-setting weekly volumes, spreads have tightened given investor demand. Prime auto loan and credit card bonds have been able to tighten the most when compared to more esoteric classes, as investors have sought out transactions with higher perceived liquidity.
- The non-agency CMBS market sees decreased issuance since last year. Approximately USD 51.5bn has priced to date for private-label CMBS, of which USD 37bn was in the form of conduit transactions. As a comparison, 2015 year-to-date figures were around USD 72.13bn and USD 51.04bn respectively. Despite this decrease in supply, investor demand for both conduit and single-asset/single-borrower transactions remain strong. Issuance is expected to remain robust through to year-end, as bank originators are incentivised to maintain velocity and price transactions shortly after origination, instead of holding the risk on the balance sheet for extended periods of time.
- With decreased volumes and widening swap spreads, we have seen conduit spreads tighten throughout 2016. The AAA-rated, 30% subordinated, 10-year "Duper" class is currently pricing in the +115-120 bp area while it priced as wide as +173 bp in March; the BBB- classes are now in the +615 bp area while they priced as wide as +830 in January.

US CLO volumes a slowing market in 2016 (in USD bn)



Source: S&P Global Market Intelligence, Bloomberg.

- While the CLO market has been active in both primary issuance and refinancing transactions, it has been unable to match 2014's record year and 2015 issuance of USD 124bn and USD 98bn, respectively. Year-to-date issuance volume is USD 53bn versus a larger 2015 year-to-date issuance volume of USD 85bn. Issuance was considerably slower in Q1 2016, but picked up throughout the rest of the year. Given the challenging conditions surrounding upcoming risk retention requirements, new issuance is expected to be a bit sluggish in the near term.
- Liability spreads have moved tighter over the past few months given the diminished supply. The tightening is most evident in the lower mezzanine spread levels. Generally speaking, pricing for frequent CLO issuers has decreased 10-15 bp for AAA-rated notes and 100-200 bp for BB-rated notes.
- Growing investor concerns about the ability of managers to comply with the pending US risk retention rules that come into effect at the end of 2016 have prompted some managers to issue US risk retention compliant transactions, and have limited the entry of new managers to the market. There already exists a smaller universe of managers issuing deals; 67 unique managers have issued thus far in 2016, versus 84 at this point in 2015. Similarly, the average deal size has shrunk to USD 451 million, compared to USD 537m a year ago.

Syndicated Loan Market

2016 review

Syndicated loans in EMEA in the first nine months of 2016 totalled USD 701bn (source: Dealogic), down 8% on the same period in 2015, mostly due to a significant drop in investment grade corporate refinancing.

Corporate high grade Western Europe

■ In the first nine months of 2016, pricing conditions stabilised for IG companies while room for further margin decrease for non-investment grade (NIG) has strongly reduced. Brexit hasn't had any notable impact on the syndicated loan market so far which remains favourable to borrowers. Indeed, liquidity remains strong due to ongoing sustained competition between banks, underused balance sheets and ECB measures to favour debt issue. Since the summer, the European loan market is driven by acquisitions: M&A volume is up by 17% overall versus end of Q3 2015 whereas corporate investment grade volume through Q3 2016 is down by 27% compared to the first three quarters of 2015.

CEEMEA

- CEEMEA 2016 volumes are in line with 2015 levels, with Middle East representing already more than 45% of the total primary market. If we exclude last year's jumbo transaction in Israel for Teva, syndicated lending for the first nine months was at its highest level since 2008, with activity buoyed by increased lending activity to cashstrapped Middle Eastern borrowers.
- The third quarter was however quieter as the activity in GCC reduced following the strong deal flow in H1. Indeed in some countries such as Oman, bank limits are coming under pressure which may have restricted/will restrict a few new money transactions.
- The Turkish market remained quiet across the year except for loans for regional banks that regularly tap the market with short term transactions. The recent rating downgrade is also having a negative impact on new deal flow.
- Africa has been particularly slow as the deal flow is often driven by O&G capital expenditure which has been low due to the low oil price. This has also led to deterioration

- of the overall credit profile in a number of African countries making lending difficult.
- In CEE, syndicated loan market has remained very liquid across 2016, with strong competition among banks in a context of limited deal flow. The most active markets however have been Poland and Czech Republic, which have continued to offer attractive terms especially for local currency borrowing.
- The Russian market is showing signs of improvements with the potential return of international lenders (including Japanese banks who had exited completely), not only for structured trade finance, but also for unsecured transactions.

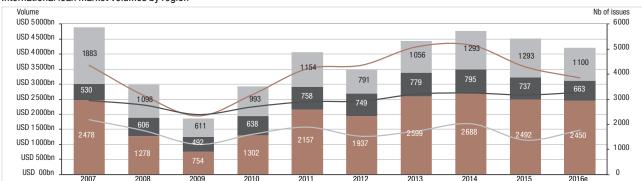
Americas

- US syndicated lending reached USD 1.33 trillion through the first nine months of the year, 11% down from this time last year and the lowest nine-month total since 2012. After declining 20% in 2015, leveraged loan volumes stabilised for the first nine months of 2016 compared to the same period in 2015 despite a significant drop in M&A activity. Investment grade loan volume, however, is down 7% for the first nine months of 2016 as high grade M&A loan activity fell by 21%. As a result, leverage loans comprise 27% of total US loan volume versus 21% for all of 2015.
- Investor demand for both high grade and below investment grade loans is high with investors complaining about lack of new money deal flow. This strong demand has fuelled a surge in opportunistic deals, particularly repricings of leveraged loans.

APAC

- The Asia Pacific syndicated loan market volume for 2016 is expected to reach ca. USD 663bn, which would be a decrease of ca. 10% versus 2015's USD 737bn. This significant volume reduction can be broken down into two very distinct markets: Japan, where volume is mainly driven by Japanese domestic lenders, and APAC (excl. Japan), which is a much more international market.
- The volume originated in Japan is holding up reasonably well in 2016, with an expected increase of ca. 13% to USD 241bn. However, the loan volume in APAC (excl. Japan) is expected to fall by ca. 19% to USD 422bn (vs. USD 524bn in 2015). As of end Q3 2016, Japan represented ca. 36% of the overall APAC volume.





Source: Dealogic.

Regional focus

Western Europe

Corporate

- The European Loan market has slowed down in the first nine months of 2016. Investment grade volumes decreased by 27% versus the end of September 2015 in Western Europe and Nordics countries. However, since the summer, thanks to acquisition financing (33% of total financing), some reverse trend was noticed since at the end of May 2016, volumes were down 49%. This overall declining trend is explained by the fact that most of European companies took advantage of favourable pricing conditions offered in 2014 and 2015, hence have already refinanced their syndicated facilities. Volumes decreased significantly in the Netherlands (-64%), Italy (-68%), the UK (-48%), France (-30%) while the reduction was lower in Spain (-5%). The acquisition of Monsanto by Bayer explains the significant increase in volumes in Germany (+69%).
- Pricing for investment grade borrowers has stabilised since the beginning of the year, as returns have reached very low levels. The vast majority of large IG corporates have already refinanced their transactions over the last three years, so we are seeing an increasing share of companies in the "BB" category in the current deal flow as they seek to take advantage of the available liquidity and attractive market conditions.
- Whereas currency premiums have disappeared in RCF transactions, we have noticed during the summer the return of premiums for USD term loans in recent large acquisition packages (acquisition by European companies of American targets).
- M&A is driving the European Loan Market (Investment Grade acquisition volume increased by 17% compared to the same period in 2015) thanks to big transactions such as the USD 66bn acquisition of Monsanto by Bayer announced beginning of September, financed with a USD 57bn facility; Danone's buy-out of the American White Wave Foods with a USD 13.1bn debt package in July 2016 and Chemchina's acquisition of Syngenta for CHF 43bn in April 2016.

Leverage

- Following a swift start in January 2016 with more than 20 deals in the market, new-issuance volume slowed in February and March on the back of challenging macroeconomic conditions (Q1-16 volume stood at EUR 13.8bn, down 35% vs. Q1-15). Market conditions picked up again from April and remained borrower-friendly during Q2. Following a short break in issuance post-Brexit, the market quickly reverted to favourable conditions for borrowers (EUR 18.4bn of total loan volume raised in Q3-16, up 10% from Q2-16).
- M&A-related transactions dominated the market in the first half of the year (more than 70% of H1 2016 transactions). Post summer, the thin flow of newmoney deals, coupled with a strong liquidity, witnessed

- increasing levels of opportunistic deals coming to the market (repricings and dividend recaps), representing ca. 40% of Q3 2016 volume (vs. ca. 25% last year), and putting real pressure on pricing, with the average margin cut through repricing this year of about 105bp, almost twice the average levels seen in 2015 (ca. 57bp).
- In terms of leverage ratios, first-lien leverage levels have continued to climb with an average 4.4x for the 9M 2016 (vs. 4.3x in 2015). Leverage levels through the second-lien reflect a similar trend, increasing by 0.1x (at 4.6x) versus 2015.
- Cov-lite transactions have now become increasingly common in the European market, reaching 57% of year-to-date Q3 2016 institutional volume versus 49% in the same period last year. Cov-lite deals are now becoming market standard for large deals (i.e. more than EUR 300m debt package), and we note an increased pressure during deal structuring to consider cov-lite for smaller companies (with an EBITDA below EUR 100m).
- Although it was more prominent during the second half of the year, the second-lien market has remained relatively quiet during 2016 with all second lien facilities being preplaced since January. This relative lack of second lien opportunities combined with a number of repayments has fostered the liquidity coming from second lien providers, and their direct dealings with sponsors.
- We witnessed a definitive repricing trend at the beginning of 2016 versus Q4 2015 with a clear bifurcation in terms of pricing conditions between borrowers with strong credit profiles versus those with a chequered/ challenging history. However, in the second half of the year, we have seen a significant improvement in the primary and secondary market. From September onwards, there has been a downward pressure on pricing due to the combination of relatively thin deal flow and the consistent strong appetite from investors. As of beginning of Q4-16, for typically B/B2 rated LBO transactions, EUR pricing stood in the 425-475 bp (0% floor) context, with little difference displayed between cov-loose and cov-lite pricings due to the strong imbalance in the market. Nonetheless, in a more balanced market context we would have expected a pricing differential, especially taking into account currency and credit quality.
- On the GBP side, although the Brexit vote created some uncertainty on pricing, we have seen a handful of deals successfully closing their GBP-denominated transactions. That said, as very few large and liquid transaction has tested the market since then, there are not enough meaningful price points on GBP which enable us to draw a clear pricing trend.
- With regards to cross-border issuance, we have seen a number of large deals (among other the jumbo Ziggo refinancing during the summer 2016) testing the relative strengths of the US and European markets. Q1 2016 saw an imbalance in favour of Europe, with EUR denominated

- tranches pricing tighter than USD. However, market conditions improved in Q2 2016 rebalancing the pricing differential between USD and EUR term loans. The number of US borrowers financing solely in the European loan market increased this year, with ca. EUR 2bn of pure European deals from US investors.
- On the liquidity front, institutional investors' appetite remains robust for leveraged loans in Europe. While most CLO managers remained hostage to challenging market conditions at the beginning of the year (only two CLOs in two months), an improved sentiment across credit markets created a window to price transactions, with more than 10 transactions priced during Q3 (including the largest CLO Blackstone/GSO at EUR 558m). Although the CLO market was expected to print at a slower pace following the UK referendum, the favourable technical conditions eventually boosted the number and volume of issuances in July. Following a slowdown in August and September due to a relative lack of new money transactions, CLOs have been printing at a faster pace during Q4 2016. The last guarter was also marked by the tightening of the senior liability spreads hitting post-crisis lows. Full-year 2016 issuances exceed last year's (with EUR 13.5bn in 2015).
- On the arranging side, appetite has not decreased as banks have consistently shown a strong willingness to put their balance sheet at work on leveraged loans. Competition continues from direct lenders and unitranche providers as they dedicate increasing levels of capital to each deal. The largest unitranche in Europe was done this year in Italy by GSO for ca. EUR 550m eq.

Project Finance

- The European project finance market experienced a strong H1 2016 with loan volumes reaching ca. USD 50bn, an increase of 13% from this period last year (ca. USD 44bn)¹. This trend is contrary to the global market where total volumes have reduced by 41% from H1 2015, the largest year-on-year decrease on record².
- Oil & Gas volumes have come under pressure, there has been strong deal flow in the renewables sector, particularly offshore wind in UK and in Continental Europe. We expect this trend to continue over the coming years through new deals and the refinancing of those which have already been constructed. As could be expected, this activity has been coupled with a significant tightening of margins over the last 18 months. However, as banks' exposure to the sector increases, funding costs rise and 'Brexit' for UK deals, this trend has shown signs of a reversal for GBP deals.
- The infrastructure PPP (Public-Private Partnership) market has remained slow as the deal flow has reduced for greenfield projects. The main deals have been the refinancing of operating highways, new broadband infrastructure and the acquisition of operating

- infrastructure assets (e.g. gas/electricity distribution, airports).
- An interesting market trend from a liquidity perspective has surrounded the vast inflows of liquidity from Chinese banks to the EMEA loan market with these institutions increasingly seeking leading roles in complex, long term financings. They have succeeded in plugging shortfalls in transactions including those where international sanctions have prohibited the participation of EMEA & US investors.
- Liquidity for commercial real estate debt continues to be strong across Europe and in respect of the UK, we are seeing investors who paused immediately after the UK Referendum vote, since returning to the market. Margins have continued to be aggressive for prime deals in France and Germany, and are stabilising across Italy and Spain. In the UK, margins for core deals have modestly increased since the UK Referendum, with lenders struggling to find suitable deals due to lower volumes of investment transactions compared to 2015. We notice generally that investors have significant capital to deploy and targets to meet.
- The asset-backed market has remained strong with a steady flow of aircraft and LNG vessel financings coming to market, many aggressively bid by a pool of 30+ international European banks.
- Shipping market segments are in the low part of the cycle though LNG vessels are still being financed.
- In H1 2016, EMEA oil and gas loan volumes totalled USD 41bn down by a little over half vs the USD 87bn we saw during H1 of last year as commodity prices remained weak1. In particular, the upstream finance and oil services related deals have been very slow although those with the strongest banking relationships (e.g., Det Norske) have managed to raise large debt financings.

CEEMEA

- Russia: We have seen improved sentiment towards Russian borrowers in 2016, with a growing number of international banks looking to resume lending to nonsanctioned entities. We have also seen some issuers returning to unsecured lending, though this is only available for the largest corporates with the most active banking relationships. Second tier issuers are also willing to take advantage of this renewed appetite for Russia but still on a secured basis for the moment.
- Central Europe: CEE activity should pick up during last quarter and into early next year, supported by a busy corporate acquisition market in coming months. A particularly large deal will be to support a bidder seeking to acquire the CEE-based assets from brewing giant AB Inbev who is disposing of a few of the local businesses from its the recently acquired SABMiller. Polish M&A market is also active as two large transactions have emerged recently with Allegro and Multimedia Polska.
- Middle East: As a result of a sustained first half activity in the Middle East (up ca. 40% on last year year-on-

¹ ProjectWare (Dealogic)

² Source: Global Project finance review H1 2016: Dealogic

year even when excluding Saudi Arabia jumbo deal), banks' lending capacities have shrunk and international lenders are now close to their country limits in some of the countries such as Oman. Fourth quarter is expected to be subdued. However, given the volumes already generated, we can confirm 2016 full-year activity in the Middle East should be at its highest level since 2008.

- Turkey: Turkey was again the most active country in the Central & Eastern Europe region, accounting for 44% of the volume, as its top-tier banks continued to dominate the market with their traditional annual refinancing. However, given political context, pipeline remains light for the fourth quarter especially on corporate side. The failed coup in July resulted in a more cautious approach to the country's loan market, and nine-month volumes fell 40%. We see primary volumes in Turkey to close behind 2015 figures.
- Africa: Africa pipeline remains weak while low oil prices prevent CAPEX and liquidity is under pressure from international banks due to overall exposure on oil & gas transactions. Activity is expected to be low in 2016 after encouraging signs of increased appetite in 2014 and 2015.

Americas

Corporate

- At USD 580 billion, investment grade lending is 7% below the first nine months of 2015 (USD 624 billion).
- Of that amount, just USD 117 billion (20%) was related to M&A activity compared to USD 148 billion for the same period last year. The outcome of the Brexit vote and uncertainty surrounding the US elections are likely impacting M&A activity, which is not expected to rebound in the fourth quarter.
- Pricing has remained relatively flat over the course of the year and 5-year tenors continue to be the norm for the majority of corporate revolving credit facilities with no impact to pricing or structures observed from the outcome of the Brexit vote.
- As banks are preparing for the finalisation and implementation of Basel 4, many are performing 12-month look backs on their respective relationships, evaluating the profitability of each and potentially exiting those relationships with low returns.
- However, the higher focus on return on capital has not translated into higher pricing due to the important liquidity available in the market and pricing has remained stable since the beginning of the year. Rather, it has led to more volatility in the composition of bank groups and less predictability on banks' behaviour on any given transaction.
- Lending preferences have started to shift away from funded terms with a majority of banks saying they prefer unfunded revolvers for clients where they have a strong relationship, in part due to rising funding costs among many banks.

Leverage

- Despite a 12% decline in leveraged M&A volume, leveraged loan volume, which has totalled USD 359 billion for the first nine months of 2016, is up 2.5% compared to the same period last year resulting from a surge in opportunistic refinancing activity that was up almost 40% year over year and exceeding any comparable period since 2007.
- Cross border leveraged loan volume increased 9% to USD 51.5 billion for the first nine months of 2016 with 75% of this volume syndicated to US investors and 25% syndicated in Europe versus 70% for the US and 30% for Europe during the same period in 2015.
- The US leveraged loan markets have been characterised by a consistent lack of new loan supply and an increasing level of investor demand throughout the year. At the beginning of the year, the limited new supply was matched by limited investor demand due to (i) a general risk-off stance which was mirrored in the equity, high yield and commodity markets, and (ii) a lack of new fund inflows. Consequently, new issuance in Q1 2016 was limited, and pricing and structures were conservative and lender-friendly relative to prevailing terms in most of 2015.
- As the year progressed, investors shifted into a yield seeking/risk taking mode and inflows returned to all leveraged loan investor classes. As a result, from the beginning of Q2 2016 and into Q4, a significant undersupply/over-demand imbalance has existed in the market which has led to more aggressive terms as well as lower new issue yields: after peaking at 6.5% in February, average new issue yields fell to 5.2% in September.
- In addition, investors' search for yield has driven a significant rebound in second lien loan volume since Q1, which stands at USD 5.5 billion for the first nine months of 2016 with 66% of this total coming in Q3.
- While financing terms and pricing have become more aggressive during the year, average leverage levels on large LBOs have remained relatively constant in the high 5x debt-to-EBITDA range, which have been kept in check as a result of the Federal Reserve's Leverage Lending Guidelines. In addition, as the average Enterprise Value paid by Sponsors on LBOs has steadily increased over the past three years, average equity cushions at 45% are near recent highs and well above the low 30% range seen in 2006-2007 just before the 2008 Financial Crisis.
- The market for highly leveraged US loans continues to be driven by institutional investors with CLOs the dominant force accounting for 61% of the institutional market. Due to a very slow start to the year, CLO issuance for the first nine months of 2016 was USD 46bn, down 41% from the same period last year, but with issuance picking up significantly in recent months, volume for the year is expected to approach USD 65bn versus USD 99 billion for all of 2015. Loan Mutual Funds, the second most important institutional investor class, experienced heavy

- outflows earlier in the year, but have seen a significant reversal in the third quarter with inflows for the quarter totalling USD 3bn.
- Direct Lenders, typically US asset managers that manage multiple investment vehicles such as CLOs and Separately Managed Accounts on behalf of third party institutional investors, are becoming an increasing threat to syndicated loan underwriters' market share due to their ability to commit to take down entire first lien tranches alongside direct second lien investors in middle market and increasingly larger cap LBO financings.

Project finance and emerging markets

- North American project finance year-to-date volumes totalled USD 28bn through Q3 2016, down 33% from the same period in 2015 as three jumbo LNG transactions totalling almost USD 20bn in the second quarter of 2015 make year-on-year comparisons challenging. The number of transactions was almost flat to last year at 84 versus 86 for the same period in 2015.
- While LNG project financings accounted for a large proportion of activity in 2015, they have been virtually non-existent in 2016 given the low oil price environment.
- Pricing for financings of fully contracted projects has recently started to trend higher by 25 to 37.5 bp with terms being impacted by the continued implementation of regulatory changes associated with Basel 3 and the widening of funding costs for many banks active in the space, especially European banks.
- Merchant gas-fired power construction projects are being priced at initial margins as low as LIBOR + 325 bp with merchant risk partially mitigated by a hedge and/or capacity payments.
- Mini-perm structures with tenors of 7 to 10 years continue to be the sweet spot for banks as appetite for longer maturities continues to decrease.
- Well-structured and appropriately priced transactions for relationship sponsors continue to attract strong liquidity. European, Canadian and major Asian banks continue to be the primary source of bank liquidity although second tier Japanese banks and US regional banks provide additional retail capacity, and asset managers continue to look opportunistically for floating rate project finance loans. Investment banks are willing to commit to deals when capital market opportunities are present.
- An institutional investor universe that also is active in leverage finance loans exists for project finance loans with below investment grade credit profiles that are outside of most bank's risk tolerance appetite.
- Year to date Latin American syndicated loan volume plunged 77% to USD 8.5bn for the first nine months of 2016 versus USD 38bn for the same period a year ago and is expected to log its slowest year since volumes began to be tracked. Mexico led Latin American issuance with roughly half the total as Brazil's share has dramatically fallen since 2014.

- Brazil's lending environment remains challenged by a severe recession, fallout from corruption scandals and political turmoil that has led most deals to be clubbed up or financed on a bilateral basis.
- Banks continue to invest in Latin America debt, but face lower pricing in all regions except Brazil due to a lack of supply. With banks facing increased funding costs in a tight pricing environment, ancillary business is more critical than previously.

APAC

Corporate

The 2016 Asia Pacific Corporate and Acquisitions loan volume is expected to record ca. USD 593bn, a ca. 4% reduction from last year's level.

- Corporate and Acquisition loans remain the key contributor to loan volume in APAC, representing ca. 89% of the total loan volume in the region. Japan continues to top the league tables in Asia Pacific, in terms of volume share, followed by China, Australia, Hong Kong and India.
- Asia Pacific M&A volume is expected to reach ca. USD 89bn in 2016, well above last year's USD 53bn, as a couple of jumbo M&A transactions have been closed in 2016, including but not limited to the USD 12,700m recourse loan backing the acquisition of Syngenta AG by China National Chemical Corp ("ChemChina").
- Relevant corporate deals by size in 2016 are the USD 6.1bn equiv. loan for Thai conglomerate Berli Jucker PCL's acquisition of Thai grocery and general merchandising retailer Big C Supercenter PCL and the HKD 39bn (USD 5bn equiv.) financing supporting China Cinda Asset Management Co Ltd's acquisition of Nanyang Commercial Bank Ltd.

Leverage

In 2016 the Asia Pacific leveraged finance market is expected to record a total volume of USD 8.8bn equiv., representing a ca. 33% year-on-year decrease.

- As of end Q3 2016, China had overtaken Australia, which was the traditional leading market in the past, with a USD 5bn volume (70.4% share) while Australia was having a slow year, with only a 6.6% share of the market via two transactions.
- The Singaporean market (6.3% share) came into the spotlight with a single USD 455m transaction supporting the buyout of Interplex Holdings by Baring Private Equity Asia, putting Singapore as the fourth largest market in the region.
- Japan had fallen to attain only 2.3% market share, a ca. 86% volume decrease versus last year. Two transactions took place with a total loan volume equating to only USD 168m, a substantial difference compared to USD 1,233m as of end Q3 2015.

Project Finance

The Asia Pacific project finance market has continued to register volume decreases in 2016 and we are

- forecasting volume to reach ca. USD 32.9bn, a 49% decrease versus last year's figure.
- While China continues to be the most active project finance country, project financing opportunities in the country tend to offer limited opportunities for international banks as transactions are largely denominated in local currency and tend to be done by Chinese banks due to their competitive pricing and stronger liquidity.
- Indonesia has become the second largest market, mainly driven by two large transactions, i.e. an USD 3.7bn project financing for the BP and CNOOC-led Tangguh Train 3 LNG project and an USD 3.4bn financing to support the development of the Central Java coal fired power project.

2017 forecast

Western Europe

- We are forecasting the overall 2017 volumes in EMEA to grow by ca. 5% to USD 1,150bn.
- In the Western Europe corporate market, we expect margins to remain fairly stable at the current low levels for investment grade borrowers, while a slight decrease is still possible for non-investment grade corporates. Refinancing activity is expected to remain slow for investment grade borrowers. On the other hand, we can expect inaugural refinancing facilities for non-investment grade borrowers and acquisition transactions driven by a sustained M&A activity, since companies are still looking for consolidation opportunities.
- In the EMEA leveraged market, we expect 2017 volume to be broadly in line with 2016 at ca. EUR 65bn, and may be influenced by:
 - Market volatility, due to upcoming major political events (presidential elections, Brexit and the trigger of Article 50, etc.);
 - New US-like regulations (such as cap on leverage levels, etc.) which could be implemented in Europe by ECB, with early guidance given from December 2016.

We expect many of the 2016 key themes to continue to be prevalent, such as increased pressure for covlite terms to be made available to smaller companies, and the increased competition from unitranche and direct lenders.

■ The European project finance market has shown resilience in 2016 and we expect activity to remain relatively constant through 2017. With QE programmes still present in the European market the cost of liquidity remains relatively cheap for banks and strong appetite should remain. Furthermore, low interest rates have fuelled investment in infrastructure from institutional investors. As QE slows down, bank regulation continues and interest rates eventually go up, we may start to see a more negative impact on Project Finance volumes. However, the timing for these events are of course unclear.

- We expect further greenfield broadband infrastructure deals into 2017 and a few other PPP deals (such as tunnels and/or roads) in Western Europe. Otherwise, the infrastructure activity will surround further acquisitions of infrastructure assets.
- The commercial real estate market in Europe has generally been active this year and we expect this momentum to carry through into the new year as deals continue to be competitively bid across each asset class. Having said this, as the announcement of Article 50 draws nearer, lower volumes of transactions in the UK could be expected as investors pause awaiting greater visibility. Outside of the UK, we expect strong activity in the main core markets with strong liquidity among banks and institutional investors.
- We expect activity in the O&G market to pick up as commodity prices stabilise and agreement on valuations spurs increasing M&A activity (with the equity and HY markets already reopened for upstream finance). Larger, multi-billion, mid and downstream projects are also expected in the CEE region (TAP pipeline), Africa (Mozambique LNG) and possibly Russia.

CEEMEA

- The Russian market in 2017 will likely be driven by geopolitical decisions. If the current level of sanctions remains as it is today, we can expect further renewed appetite towards Russian borrowers, with international banks including Japanese lenders gradually resuming lending activity, even for unsecured lending which has not been present for a large international deal since the sanctions were imposed. If new sanctions are imposed, we can expect lending to once again be curtailed.
- While we are not optimistic about deal flow in Middle East for the rest of the year, a further pick-up in the region is likely to be observed next year with sovereign related entities looking to raise substantial capex related financings (KNPC in Kuwait, Dubai Metro, various project transactions in Oman, Abu Dhabi corporates, among others). A significant amount of loans maturing in 2017 will also need to be refinanced next year.
- In CEE, we expect continued strong appetite from banks and excess liquidity due to scarce deal flow vs high local currency deposit bases. We are seeing signs that competition will lead to aggressive structures across the region which is already offering long tenors and tight spreads.
- Turkish banks should see pricing of their refinancing rise in 2017 as a result of Moody's downgrade of Turkish sovereign debt and several banks falling to non-investment grade. Vakifbank has recently signed a USD 836m eq. one-year loan and the increase in pricing can already be seen (+25bp). This deal is also smaller than the previous USD 936m 2015 loan that it refinances, a trend that could be reflected in future deals as the pool of banks willing to lend to Turkish banks reduces.

African activity in 2017 is difficult to predict and will vary from country to country. We expect a few international deals to emerge in North Africa (particularly Egypt) and Morocco continues to be driven by the local bank market. Otherwise, we expect a limited number of international financings and those that succeed are likely to be Project Finance or Structured Trade related. Examples could include LNG financings in Mozambique and gas deals in Ghana.

Americas

- In the corporate investment grade market, we expect liquidity to remain strong in 2017. However, as banks continue to focus on Basel regulations and its negative impact on return on capital, more banks are likely to walk away from participating in corporate revolvers as they become more disciplined about justifying committing capital in the context of overall relationship profitability. As a result, we expect to see a continued trend of volatility in the mix of banks in any given deal as lenders assess their ability to win meaningful ancillary fee opportunities with their clients. However, given the strong overall liquidity in the market, it is unlikely that we are going to see any near-term pricing increases except perhaps on jumbo sized deals. We expect M&A activity to pick up next year which should help to satiate banks search for better returning lending opportunities.
- The near-term outlook in the US leveraged loan markets is for conditions to remain relatively unchanged. Despite the predictions of a sharp sell-off in the capital markets if Trump won the presidency, the reality has proven to be quite the opposite. However, given the considerable uncertainty now around the direction of US policy, there is the potential for near term volatility as markets react to his statements on policy and what can be inferred by his cabinet appointees. Furthermore, continued soft macroeconomic numbers have the potential to create medium term risk aversion, although our expectation is that the technical imbalance between supply and demand will continue to outweigh modestly weaker fundamental data. Consequently, we anticipate that conditions will remain borrower-friendly.
- A key driver of this continued imbalance is the historically low yield environment for riskless and lower risk asset classes and consequently the constant search for yield and investor migration into non-traditional investment markets, such as leveraged loans (or in structured investment markets, such as CLOs, which are collateralised by leveraged loans). Therefore, barring a significant weakening in fundamental economic conditions, a major unexpected market shock, or an increase in new money loan supply, we expect conditions to remain stable in 2017.

- In the Project Finance & Emerging Markets, looking forward, given the current low oil price environment, there are likely going to be very few LNG transactions with the pipeline of transactions consisting mostly of renewable and merchant gas-fired power projects and midstream acquisition financing.
- If bank liquidity remains strong as expected and without the potential for mega LNG deals soaking up bank capacity, we expect banks will need to be more creative and willing to assume slightly more risk on transactions in order to meet their budgets.
- However, as banks continue to implement regulatory capital changes associated with Basel 3, upward pricing pressure is likely and appetite for tenors longer than 5 to 7 years will continue to decline.
- In Latin America, Mexico is expected to be the primary source of volume in 2017 as a result of the energy reforms although a continuation of low energy prices may cause deal flow to remain subdued. Syndicated loan activity in Brazil is expected to remain anaemic as the myriad of issues facing the country are unlikely to see much improvement in 2017.

APAC

- We are forecasting the 2017 volume in APAC to grow by ca. 6% to ca. USD 700bn.
- Corporate and acquisition activity should remain stable and be the key contributor to APAC loan volume in 2017. M&A financings are expected to be dominated by Chinese outbound M&A as cash-rich mainland Chinese companies continue to seek advanced technology to bring back to China and diversify their business globally. That said, overseas regulators have been putting more pressure on Chinese outbound M&A deals during 2016 in fear of national interest and security issues.
- Similar to previous years, the leveraged finance volume will remain modest when compared to the rest of the world despite private equity sponsors having high cash balances and ample bank liquidity as the deal sizes in the region tend to be smaller by international standards. We expect more Australian borrowers to tap the US Term Loan B ("TLB") market as an alternative source of funds after the closing of the first AUD denominated TLB in October 2016.
- There are a large number of project financings under discussion (mainly for Indonesian power plants); however, debt volume is challenging to forecast as lead times for such projects, especially in less developed economies, can be very protracted. Elsewhere, while there is unlikely to be any jumbo project financings in Australia in 2017, the Australian government has set a target to invest significantly in renewable energy over the next five-year period, which should contribute to the overall volume.

DEBT CAPITAL MARKETS MANAGEMENT

Global Head of Debt Capital Markets	Demetrio Salorio	demetrio.salorio@sgcib.com	+44 (0) 20 7676 7573
Co-Head of DCM Corporate Origination	Felix Orsini	felix.orsini@sgcib.com	+33 (0) 1 58 98 47 68
Co-Head of DCM Corporate Origination	Brendon Moran	brendon.moran@sgcib.com	+44 (0) 20 7676 7974
Head of DCM Financial Institutions Origination	Eric Meunier	eric.meunier@sgcib.com	+44 (0) 20 7676 7950
Head of DCM Public Sector Origination	Felix Orsini	felix.orsini@sgcib.com	+33 (0) 1 58 98 47 68
Head of High-Yield Capital Markets	Tanneguy de Carné	tanneguy.de-carne@sgcib.com	+44 (0) 20 7676 7273
Deputy Head of High-Yield Capital Markets	Marie-Ange Carrere	marie-ange.carrere@sgcib.com	+33 (0) 1 42 13 62 45
Head of Capital Markets Engineering	Jonathan Weinberger	jonathan.weinberger@sgcib.com	+44 (0) 20 7676 7685
Regional Head of DCM CEEMEA	Cecile Camilli	cecile.camilli@sgcib.com	+44 (0) 20 7676 7578
Regional Head of DCM AMER HY	Arnaud Achour	arnaud.achour@sgcib.com	+1 212 278 5365
Regional Head of DCM AMER IG	Andrew Menzies	andrew.menzies@sgcib.com	+1 212 278 6021
Regional Head of DCM APAC	Laurent Morel	laurent.morel@sgcib.com	+852 21 66 56 76

SYNDICATE

Head of Global Syndicate	Terence Shanahan	terence.shanahan@sgcib.com	+44 (0) 20 7676 7207
Deputy Head of Global Syndicate	Stephen Swift	stephen.swift@sgcib.com	+44 (0) 20 7676 6894
Global Head of Loan Syndicate (effective 1 January 2017)	Jose Antonio Olano	jose-antonio.olano@sgcib.com	+44 (0) 20 7762 4719
Head of Global Bond Syndicate	Eric Cherpion	eric.cherpion@sgcib.com	+44 (0) 20 7676 7618
Global Head of Infrastructure Capital Markets	Duncan Scott	duncan.scott@sgcib.com	+1 212 278 6879
Head of US Bonds Syndicate	Richard Wolff	richard.wolff@sgcib.com	+1 212 278 7631
Head of EMEA Loan Syndicate	Laurent Vignon	laurent.vignon@sgcib.com	+33 (0) 1 42 13 38 74
Head of US Loan Capital Markets & Syndicate & Sales	Cynthia Jay	cynthia.jay@sgcib.com	+1 212 278 5439
Head of US Loan Capital Markets & Syndicate	David Sharp	david-c.sharp@sgcib.com	+1 212 278 7128
Head of Asia Pacific Loan Syndicate & Sales	Gareth Williams	gareth-lon.williams@sgcib.com	+852 2166 5607

ASSET BACKED PRODUCTS - SECURITISATION & DISTRIBUTION

Global Head of Asset-Backed Products & Securitisation	Jerome Jacques	jerome.jacques@sgcib.com	+33 (0) 1 58 98 56 84
Deputy Head and Global Head of Engineering	Laurent Mitaty	laurent.mitaty@sgcib.com	+33 (0) 1 42 13 98 58
Deputy Head and Global Head of Trading	Fouad Farah	fouad.farah@sgcib.com	+1 212 278 7126

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75886 PARIS CEDEX 18 - FRANCE WWW.SGCIB.COM

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29 BOULEVARD HAUSSMANN, 75009 PARIS WWW.SGCIB.COM A FRENCH CORPORATION WITH SHARE CAPITAL OF EUR 1,009,380,011.25 552 120 222 RCS PARIS

