NOVEMBER 2017

FOR INSTITUTIONAL AND CORPORATE CLIENTS ONLY

DEBT CAPITAL MARKETS 2017 REVIEW AND 2018 FORECAST

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

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

SOCIETE GENERALE
Corporate & Investment Banking

BUILDING TEAM SPIRIT
TOGETHER

Contents

Executive Summary 2
Debt Capital Markets issuance volumes 3

Debt Capital Markets 4
Corporates 4
Investment Grade 4
High Yield 10
Financial Institutions 12
Senior preferred market 13
Senior non-preferred / Senior HoldCo market 14
Covered bond market 15
Public Sector 17
Emerging Markets 24
APAC 24
CEEMEA 28
LATAM 34

Liability Management 38

Hybrid Capital Market 40

Green and Social Bonds 45

Asset-Backed Products Securitisation & Distribution 46

Syndicated Loan Market 50

Executive Summary

"THERE CANNOT BE A CRISIS NEXT WEEK. MY SCHEDULE IS ALREADY FULL." *(Henry Kissinger)*

2017 is arguably more like 2016's evil twin than its copy cat

Once again, outstanding volumes were raised in the debt capital markets in 2017 across currencies, with a record year for corporates and SSA issuers in particular. This outcome was in line with our expectations communicated at the end of last year, and driven by the same conducive environment that characterised 2016. The low interest rate environment and support from central banks were again major drivers of opportunistic issuance, pre-funding, and M&A financing. Maturity extension also stayed high on the agenda, as highlighted by Austria's impressive EUR 3.5bn century bond (SG as bookrunner).

Investor sentiment, however, was very different this year. The start of 2016 saw record low volumes and high volatility mainly due to falling commodity prices. In Q1 2017, the political uncertainties in the Netherlands and France had the opposite effect and drove many issuers to front-load their annual funding ahead of potential European Central Bank tapering.

The risk-off sentiment that surprised markets in H2 2016 after the Brexit vote and the election of President Trump never materialised in 2017, despite headlines that included ECB tapering, Brexit negotiations, the German elections, North-Korea tensions and the Catalonia crisis. In the financial sector, discussions around Banco Popular, Monte dei Paschi di Siena and the liquidation of Veneto Banca and Popolare di Vicenza were also largely ignored by the market. If anything, resilience only seemed to increase over the year, as illustrated by the record volumes from high-yield issuers, the return of Greece to the bond market and the steady stream of new issuance throughout the year, including August.

One theme 2017 may be remembered for is the take-off of the green bond market. While still very small, it is no longer a niche market. It crossed the EUR 100bn equivalent mark worldwide for the first time, and sovereign issuers joined the party in style with France's debut EUR 7bn green bond. More generally in the supras and agencies space, more than 70% of the top 35 issuers in EUR and USD have now issued green bonds and are committed to issuing them at least once a year. Issuance has also gone global, with strong growth from China of course, but also more recently from Japan, India and Australia.

Looking ahead, 2018 might be less predictable than we would like to think. Market resilience to political headlines will again be put to the test with the upcoming Italian elections, while ECB tapering – to which markets have so far refused to react negatively – takes full effects. This combined with the US Federal Reserve's expected rate hikes will put additional pressure on European long-term rates. Overall, we expect liquidity and risk appetite to remain conducive and new issue volumes to be broadly in line with what we have seen over the last two years. Nevertheless, the outlook for the second half of the year is more uncertain, particularly in Europe.

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 preferred	Senior HoldCo/ SNP	Hybrids	Total	Sovereign	Agency/ Supra	Local authorities	Total	Bonds
2014	222	63	29	**314**	117	149	31	59	**356**	968	181	72	**1 221**	**1 891**
2015	239	55	26	**320**	154	160	26	44	**383**	947	164	59	**1 170**	**1 873**
2016	297	50	9	**356**	132	122	56	28	**337**	844	190	52	**1 086**	**1 780**
2017 Expected	281	75	11	**367**	113	108	69	39	**329**	925	230	50	**1 205**	**1 901**
2018 Forecast	290	64	12	**366**	125	100	90	45	**360**	888	216	56	**1 159**	**1 885**
2018 vs. 2017	+3%	-15%	+9%	**-0%**	+10%	-7%	+30%	+15%	**+9%**	-4%	-6%	+11%	**-4%**	**-1%**

Source: SG CIB 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 preferred	Senior HoldCo/ SNP	Hybrids	Total	US Treasury	Sovereign non-US	Agency non-US/ Supra	Local authorities	Total	Bonds
2014	644	312	8	**964**	10	348	106	134	**598**	2 206	97	240	13	**2 556**	**4 118**
2015	787	262	8	**1 057**	22	318	144	122	**605**	2 123	84	244	13	**2 464**	**4 126**
2016	747	229	1	**977**	17	330	174	111	**631**	2 070	116	295	29	**2 510**	**4 118**
2017 Expected	760	280	2	**1 042**	13	395	172	61	**640**	2 552	140	253	32	**2 977**	**4 659**
2018 Forecast	750	250	3	**1 003**	15	403	197	70	**685**	2 635	128	270	24	**3 057**	**4 745**
2018 vs. 2017	-1%	-11%	+50%	**-4%**	+20%	+2%	+15%	+15%	**+7%**	+3%	-8%	+7%	-25%	**+3%**	**+2%**

Source: SG CIB Analytics, Dealogic

DCM issuance volumes on GBP market

	Corporate bonds				Financial bonds					SSA bonds			Total
In GBP bn	Investment grade	High yield	Hybrids	Total	Covered bonds	Senior preferred	Senior HoldCo/ SNP	Hybrids	Total	Sovereign	Agency/ Supra	Total	Bonds
2014	19	10	3	**31**	7	8	1	10	**26**	126	22	**148**	**205**
2015	15	7	2	**24**	9	11	2	5	**27**	112	23	**135**	**185**
2016	19	4	0	**23**	6	8	5	3	**22**	113	24	**137**	**182**
2017 Expected	26	12	1	**39**	10	19	4	7	**40**	121	22	**143**	**222**
2018 Forecast	29	9	1	**39**	13	19	7	8	**47**	136	25	**161**	**247**
2018 vs. 2017	+12%	-25%	+0%	**+0%**	+36%	+0%	+66%	+14%	**+18%**	+12%	+14%	**+12%**	**+11%**

Source: SG CIB Analytics, Dealogic

DCM (in addition)

	ESG
In USD bn equivalent	ALL
2014	36
2015	42
2016	99
2017 Expected	142
2018 Forecast	165
2018 vs. 2017	+16%

Source: SG CIB Analytics, Dealogic

	Asian supply*	CEEMEA supply**	RUB***	LATAM supply
In USD bn equivalent	ALL	ALL	ALL	ALL
2014	240	136	22	135
2015	190	87	26	80
2016	205	156	29	125
2017 Expected	290	200	33	138
2018 Forecast	325	200	33	140
2018 vs. 2017	+12%	+0%	+1%	+1%

Source: SG CIB Analytics, Dealogic

** All Asia excl. Japan G3 currency bonds*

*** Source: Bond Radar*

**** Source: Cbonds*

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
2014	938	**1 348**	**2 600**	**803**	**4 751**
2015	1 005	**1 371**	**2 413**	**740**	**4 524**
2016	664	**1 019**	**2 618**	**757**	**4 394**
2017 Expected	537	**994**	**2 780**	**666**	**4 440**
2018 Forecast	591	**1 050**	**2 925**	**699**	**4 674**
2018 vs. 2017	+10%	**+6%**	**+5%**	**+5%**	**+5%**

Source: SG CIB Analytics, Dealogic

PLEASE NOTE THAT ALL DATA ARE EXPORTED AS OF NOVEMBER 15TH 2017

Debt Capital Markets

Corporates

- Historically low interest rates across the globe were once again a key catalyst for debt issuance across markets in 2017. M&A, much like in 2015 and 2016, was also a key theme as companies continued to pursue inorganic growth. It was interesting to note, however, that the pace of M&A related to debt transactions slowed in 2017 versus the year prior.
- Perhaps the biggest difference seen in 2017 versus 2016 was the staggering resilience displayed by markets in the wake of several geopolitical events and key elections. Generally, this year we saw bond markets around the world widen a little ahead of such events in anticipation of potential negative outcomes, only to grind to even tighter levels in the weeks following. Unlike the multi-week closing experienced by many markets at the beginning of 2016, none of the key markets experienced any prolonged shutdown due to geopolitical headlines in 2017.
- The ECB was inarguably the most important variable in Europe this year, with the Bank of England (BoE) treading cautiously due to an impending Brexit but providing less direct support for the bond market. EUR spreads continued to reach new all-time lows with private investment increasingly being pushed down the risk curve in order to meet return hurdles. All eyes will remain on the ECB in 2018, with the central bank expected to continue to provide support for the market through its corporate bond purchase programme, albeit at a decreasing level as the year evolves.
- The US market was also driven by central bank activity, but the micro dynamic was skewed towards a strategy of issuing ahead of further rate hikes rather than opportunistic issuance during quantitative easing. We expect November and the first week of December in 2017 to represent one of the final windows for issuers to move ahead of what is expected to be a less accommodative Federal Reserve in 2018.
- 2017 saw a slight pickup in hybrid issuance from 2016, with volumes increasing from EUR 9bn in 2016 to an expected EUR 11bn by year-end 2017. However, we are still a far cry from issuance in years past, as we saw over EUR 29bn and EUR 26bn in 2014 and 2015 respectively. As opposed to 2016 where volatility was sharp and issuers preferred shorter tenors to optimise pricing, 2017 saw more issuers utilising longer call dates in order to take advantage of low interest rates.
- The positive tone across the US high-yield market has continued to firm up throughout 2017, with a record-breaking March and 2017 year-to-date new issue volumes consistently well above the levels seen in 2016, up by at least 20% over the same comparable period. The secondary market has been equally robust with oil prices rallying to above USD 50/bbl, equity markets at record highs, low volatility and depressed default rates all supporting a healthy risk appetite from investors.
- Finally, we continued to see an increased number of 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. This theme echoes the sharp pickup in liability management transactions seen in 2016.

Investment Grade

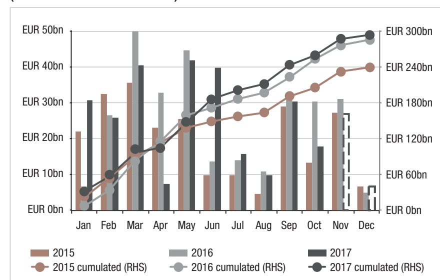
EUR MARKET

2017 review

- After another record year in 2016 (EUR 297bn), the market is on pace to come close to that record in 2017. At the end of October 2017, with EUR 261bn issued, we stand ~EUR 1bn ahead of last year's YTD pace. That said, the Q4 2016 supply of EUR 62.3bn made for a record Q4, but with a thinner pipeline than before it is possible we fall a little short.
- The key theme this year was the ECB underpinning the market to such an extent that some investors are looking to other regions and asset classes in order to find yield. This dynamic has spurred the bid for assets offering yield, and so lower rated, longer-dated and/or subordinated credit often find excellent demand. That said, in the low beta space high quality corporates have been well received as they usually offer a route to a preservation of capital in a negative rate environment.

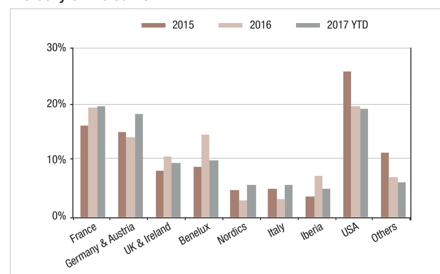
- Headlines throughout the year had a couple of effects on market dynamics. From a spread perspective, in the month running up to an event levels widened, deterring some issuers for a short time, but then in most instances levels tightened back in following market favourable outcomes. From a timing perspective, such events led to periods of pre-funding, as witnessed ahead of the French election and now again for Italian issuers ahead of their elections in spring 2018. Positively, there were not any extended periods in which the market remained closed, unlike in 2016 in which the market was shut for an extended period to start the year due to falling commodity prices and volatility stemming from China.
- 2017 began with a record January for IG corporates, with just over EUR 30bn issued. This was in stark contrast to the year before which only saw a total of EUR 6.7bn in January. With QE from the ECB in full swing, deals priced at very aggressive levels as investors clamoured for new issue paper.
- The UK's triggering of Article 50 in March did little to slow issuance, with market participants treating it as a well telegraphed non-event. Issuance still came in at EUR 40bn for March, EUR 8bn of which came from Volkswagen's offering, marking its return to the capital markets. This number was down from March 2016's EUR 50bn, but that was a record-ever month, attributed to the market close in January and February plus the existence of AB Inbev's EUR 13.25bn jumbo deal.
- The market continued to hum along at a steady pace, only briefly interrupted by headlines stemming from the impending French election. Many feared that anti-establishment sentiment would carry Marine Le Pen to victory in the final weeks leading up to the election, similar to the trend seen in the US and the UK. However, in the final few weeks, polls actually began to swing in Emmanuel Macron's favour, easing market concerns up until the election in which Macron claimed a resounding victory. Post this election, issuance then surged through May and June which essentially brought Q2 2017 issuance flat to the year prior (EUR 89bn in Q2 2017 vs. EUR 91bn in Q2 2016).
- Perhaps the most intriguing aspect of Q2 was the resilient market sentiment that accompanied the strong new issue supply. In years past, we had generally seen some market indigestion following consecutive months of high issuance, but this year marked an exception to that trend. This can be primarily attributed to the sustained presence of the ECB. While corporate supply began to surge in May and June (including ATT's EUR 7bn), the ECB's supply of sovereign paper began to diminish as they hit or neared many of the caps, thus pushing them to find increased paper in corporate primary and secondary. These dynamics will also likely lead to the Corporate Sector Purchasing Programme (CSPP) being one of the last components of the ECB's Asset Purchase Programmes (APP) to be tapered in 2018.
- The ECB's behaviour explains the odd dynamic in the corporate space where issuance is on pace with last year's record number, and yet investors are still struggling to find assets. At the current pace, investors are on track to finish 2017 net positive EUR ~25bn in cash.
- In addition to the ECB crowding out many of the traditional private investors, financial redemptions have outpaced new issues for the past three years which has led to an additional flow of cash to corporate investors, further exacerbating their positive net cash position. Liability management has extended this theme.
- We entered Q3 in essentially a goldilocks environment where investors had excess cash to put to work and many of the political events behind. As a result, July's supply of EUR 16.5bn saw most deals pricing with minimal new issue concessions, and going on to trade well inside re-offer in secondary trading.
- August was subdued until the strong conditions in the US and Europe enticed British American Tobacco (BAT) to launch their EUR 3.1bn deal in connection with their acquisition of the remaining stake in Reynolds (EUR deal was launched in combination with their USD 17.25bn deal). The fact that BAT felt confident enough to launch a jumbo M&A trade in the traditionally quiet month of August spoke to the strength of the market.
- Spreads and new issue concessions initially suffered a little in the post-summer period, as price sensitivity came to the fore in the expectation of substantial supply in the run-up to September's ECB meeting where many thought an end date to QE would be announced. However, although a large number of trades came to the fore, most deals were small in size and the month finished at EUR 30.5bn.
- As a result of the lower issuance volume, spreads tightened into October, price sensitivity became much rarer and new issue concessions narrowed. Low and high beta deals garnered excellent demand and credit curves flattened. Nestlé achieved the tightest ever 12 and 20Y prints (MS+ 20bp and +32bp respectively) and the flattest ever 12/20 curve at 12bp. October was also characterised by a large number of Italian issuers, often employing liability management as part of opportunistic pre-funding ahead of next year's Italian election.
- Most issuance in 2017 came from the auto space which represented ~18% of total issuance with TMT, utilities, and pharmaceuticals representing the other largest sectors making up ~15%, ~14%, and ~10% respectively. Volkswagen's return to the market certainly inflated auto presence relative to year's past while the lack of concentration of major M&A deals in any one sector kept other sector's share relatively equal.
- 2017 will hardly be a memorable year from a blockbuster deal perspective; however, it is hard to imagine another year in which the EUR market remained so remarkably strong for such an extended period of time.

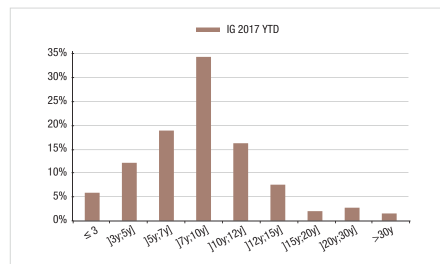
Monthly breakdown of EUR IG supply volumes in 2015-2017 (Nov. and Dec. forecasts)



Source: SG CIB Analytics, Bloomberg

Overall US corporate issuance remains muted, giving way to an uptick in German issuance, and preference for tenor remains in the belly of the curve





Source: SG CIB Analytics, Bloomberg

Regional focus

Western Europe

- Western European borrowers accounted for 75% of total EUR IG issues in 2017, a moderate increase from 73% in 2016, and a large uptick from 62% in 2015.
- Volkswagen was the largest European borrower, with EUR 16.25bn issued in 2017 year-to-date, followed by General Electric and AT&T with EUR 8.0bn and EUR 7bn respectively.
- France was the largest contributor out of Western Europe and globally, representing 20% of total volumes. Germany was the third largest overall and second largest issuer out of Western Europe with 18% of total issuance.

Americas

- The "reverse-Yankee" theme continued albeit at a smaller pace than in 2015 and 2016. Issuers from the Americas made up 19% of overall supply this year versus 27% in 2016.
- We saw large American blue chips coming into the EUR market, especially in the first half of the year with General Electric and AT&T representing the second and third largest trades of the year.
- The EUR/USD basis normalised a little at the start of the year, with the 10Y rising from the low -40s towards the mid -30s where it remained for much of the second half.

US and Germany claim majority of top spots in the EUR market in 2017

Issue date	Issuer	Country	Ratings at launch	Deal Value (€m)	Tranches
23-Mar-17	Volkswagen Intnl. Fin.	Germany	A3/BBB+	8 000	4
10-May-17	General Electric	USA	A1/AA-	8 000	4
07-Jun-17	AT&T	USA	Baa1/BBB+	7 000	5
16-May-17	LVMH	France	NR/A+	4 500	4
14-Feb-17	PEMEX	Mexico	Baa3/BBB+	4 250	3
26-Jun-17	Daimler	Germany	A2/A	4 050	3
28-Feb-17	Pfizer	USA	A1/AA	4 000	4
23-Oct-17	Verizon Communications	USA	Baa1/BBB+	3 500	3
29-Jun-17	Volkswagen Leasing	Germany	A2/BBB+	3 500	3
23-Jan-17	Deutsche Telekom	Germany	Baa1/BBB+	3 500	3

Source: SG CIB Analytics, Bloomberg

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

Source: Bloomberg

2018 forecast

- SG CIB expects EUR ~300bn in IG corporate supply in 2018, up slightly from 2017's total volume. This is anticipated to be made up of EUR 290bn senior and EUR 12bn IG hybrid supply. Although we expect reduced support from the ECB to be a major factor in the condition of the overall market, increased redemptions in 2018 versus the year prior should outweigh reduced support from the ECB in driving issuance volumes.
- Rates remain extremely low relative to historical standards and the European economy continues to improve which leads us to believe that few companies will elect to let debt roll off their balance sheet. The one exception may be the oil & gas sector which continues to de-lever amid a challenging commodity environment, but O&G represents just 7% of IG corporate redemptions in 2018 (top three sectors being autos at 20%, industrials at 19%, and utilities at 18%).

USD MARKET

2017 review

- The Corporate IG market opened impressively with a slew of corporate issuance complementing the usual raft of trades from financial institutions. Unlike the previous January, which saw very few deals due to crumbling commodity prices and volatility in China (outside of ABI's USD 46bn deal only USD 33bn total priced), the market remained open and strong with steady deal flow. A total of USD 82bn in corporate supply came to market in January, up USD 3bn from 2016.
- Perhaps the most impressive run of the year came in the final week of January with AT&T, Microsoft, and Apple all pricing USD 10bn+ deals. To see so many large deals emerge from a single sector in such a short time span spoke to the strength of the market at the beginning of the year. Each deal garnered a strong orderbook and priced with reasonable net interest costs given the size of each deal. AT&T's USD 10bn transaction was particularly interesting in that it preceded their highly anticipated jumbo M&A deal set to launch later in the year, and yet the USD 10bn deal in January still managed to garner significant investor demand.
- The strong tone set in the first month continued with the market remaining resilient through the end of Q1 with a steady flow of issuance across sectors. With oil & gas issuers primarily focused on balance sheet repair, issuance from this sector was notably down. TMT more than picked up the slack in Q1, a theme that would prove persistent through the remainder of the year. Supply was also driven by the autos as nearly every IG issuer from that sector tapped the market in Q1.
- Q2 remained a "steady as she goes" type of environment with conditions favourable, but lighter from a supply perspective. It became clear that the initial rush in Q1 had been primarily driven by issuers looking to pre-fund ahead of future Fed meetings and any potential market disruptions. The most noteworthy transactions were a USD 5.2bn deal from Cardinal Health followed by a USD 7.75bn deal from Reckitt Benckiser, both in connection with acquisitions. TMT remained a major player as well, with deals coming from Apple, Intel, Qualcomm, and eBay throughout the quarter.
- Another trend that was prominent through the year, but was particularly evident in Q2, was the increase in popularity of the floating rate format. With interest rates almost assuredly set to rise, investor demand for floating rate notes sky-rocketed this year, evidenced by only three floating rate note tranches dropped in Q2 2017 versus 13 dropped in Q2 2016. Many of the larger asset managers became name agnostic by Q2, with their focus solely on acquiring as much floating rate paper as possible ahead of additional rate hikes and rising yields.
- As the year moved into the second half, Q3 turned out to be a near mirror image of Q1 with many issuers looking to pre-fund ahead of the Fed's tapering announcement as well as concerns over a potential government shutdown at the end of September. AT&T stole the spotlight issuing the largest transaction of the year in July at USD 22.5bn in connection with their acquisition of Time Warner. This was followed two weeks later by BAT's USD 17.25bn deal in connection with their acquisition of Reynolds. Both transactions were highly anticipated by the market and helped to drive Q3 supply ahead of 2015 & 2016's year-to-date pace.
- From an investor perspective the ECB's continued quantitative easing has encouraged increased participation from European accounts in US corporate orderbooks. This theme is particularly pronounced in the medium part of the curve where they can invest in their usual tenors yet at the same time reach their return hurdles.
- Asian accounts have also been present in orderbooks of US corporates in years past and 2017 was no exception. The continued commitment of the Bank of Japan to combat deflation (10Y target at 0%) has driven yields to extreme lows and, much like in Europe, has driven investors to look elsewhere in order to meet return hurdles. The presence of Asian accounts at the longer end has led to a significant flattening of curves, even in the TMT space which has traditionally seen steeper 10s/30s curves relative to its peers.
- An interesting trend seen in 2016 was the surge in supply for August, a historically quiet month. That trend continued in 2017 as August saw USD 80bn in corporate issuance, up from the USD 60bn seen in the prior year. It was important to note that a good portion of August 2017's issuance came from BAT's deal as well as from Amazon (USD 16bn to finance the Whole Foods acquisition), but there was still abnormally high issuance compared to year's past.
- We expect the trend of higher August issuance to continue in future years with the "slowdown" in August becoming a theme of the past. Technology has given portfolio managers greater access to communication, with analysts and other members of their firms allowing them to make investment decisions more easily, even when away from the desk. The jumbo deals launched in August this year, along with the prudent pre-funders who accessed the market prior to Labor Day, should pave the way for August to become a more normal month of issuance moving forward.
- Although 2017 has not been a particularly exciting year from an event perspective, many of the themes of 2017 are likely to linger into 2018. Brexit negotiations have not sparked nearly as many headlines as originally expected and the central banks, with the exception of the Fed, have maintained their steadfast monetary support for markets. It will be interesting to see if

2017's momentum will carry into 2018, with many of these events likely to re-emerge in a somewhat more concrete context.

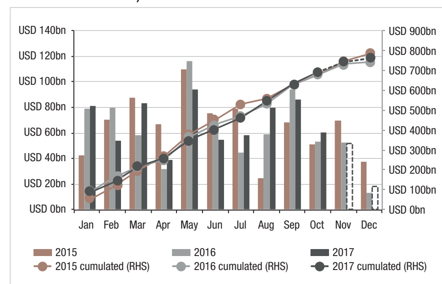
- The most impressive component of the year was the historic flow of money into IG bond funds, as 2017 has already seen ~USD 105bn of IG Lipper flow versus USD 42.7bn in 2016 and USD 14.7bn in 2015. This year marked the largest inflow ever by a long shot and to date has not seen a single month of net outflows. For a year in which many thought there might be some outflows from bond funds due to asset managers rotating more of their capital into equity, this makes the historic inflows even more impressive.

Top ten largest USD IG corporate deals in 2017

Issue date	Issuer	Country	Ratings at launch	Deal value (€m)	Tranches
27-Jul-17	AT&T	USA	Baa1/BBB+	22 500	7
08-Aug-17	BAT Capital	UK	Baa2/BBB+	17 250	8
30-Jan-17	Microsoft Corp	USA	Aaa/AAA	17 000	7
15-Aug-17	Amazon	USA	Baa1/AA-	16 000	7
11-Jan-17	Broadcom Corp	Singapore	Baa2/BBB-	13 550	4
19-May-17	Qualcomm Inc	USA	A1/A	11 000	9
13-Mar-17	Verizon	USA	Baa1/BBB+	11 000	5
2-Feb-17	Apple Inc	USA	Aa1/AA+	10 000	9
31-Jan-17	AT&T Inc	USA	Baa1/BBB+	10 000	6
22-May-17	Becton Dickinson	USA	Ba1/BBB	9 675	7

Source: SG CIB Analytics, Bloomberg

Monthly breakdown of USD IG supply volumes in 2015-2017 (Nov. and Dec. forecasts)



Source: SG CIB Analytics, Bloomberg

Regional focus

Western Europe

- European issuers accounted for 11% (approximately USD 75bn) of total volumes issued in the IG USD corporate space in 2017 year-to-date, a number exactly in line with 2016 and a similar market share.
- BAT was the key issuer out of Western Europe this year, issuing the second largest transaction of the year, a USD17.25bn transaction in connection with their acquisition of Reynolds. Excluding this transaction, European issuance would have been down slightly year-on-year, but it is important to note that 2016's numbers were also distorted depending on which region ABI was assigned to (for our calculations, we considered ABI to be a US issuer).

Americas

- The dynamics of American issuers in the USD market were identical to 2016, contributing 77% of all USD volumes, compared to 83% in 2015. The slight drop from 2015 can be attributed to an increasing presence from Asia which represented just over 7% of supply for 2017.
- Eight of the top 10 trades this year were carried out by US issuers which was the same number as the previous year.

2018 forecast

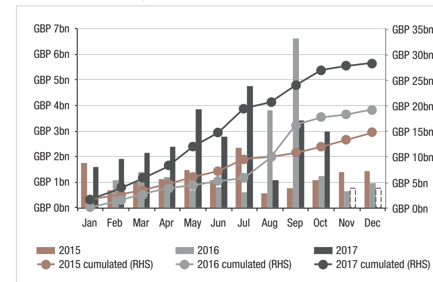
- We expect year-on-year issuance in USD IG corporates to be flat to slightly lower than the USD 760bn projected for 2017. Our estimate for the upcoming year is ~USD 750bn.
- Central banks should continue to drive the flow of issuance, with issuers positioning themselves to get out ahead of further rate hikes in the US while maintaining a careful eye on the tapering of the Federal Reserve's balance sheet.
- The biggest wildcard to corporate issuance in 2018 will be US tax policy, as any bill passed could have anywhere from a significant impact to a negligible impact on corporate volumes. Healthcare reform and infrastructure spending will also be important factors to watch, but their potential impact is significantly smaller than a comprehensive tax reform.
- Unlike in 2017, we expect geopolitics to have a more meaningful impact on the market. Expectations that the Trump administration would pass legislation carried the market in 2017, but we would anticipate the market to react negatively to a continued failure to push through true reform.
- On a sectorial basis, we expect many of the trends seen in 2017 to continue into next year with O&G issuance subdued due to many of the major players continuing to reduce debt, while TMT will remain the key driver. Further M&A in the sector is quite possible. Autos, consumer goods, utilities, and industrials should be flat while healthcare remains a wildcard with the potential to be significantly higher if M&A were to increase in the space.

GBP MARKET

2017 review

- After a mixed 2016, 2017 marked a reawakening for the sterling market which is on pace to eclipse GBP 26bn. This would fall roughly GBP 7bn short of the record 2012 number and would put us 42% ahead of last year's GBP 19bn.
- While not as aggressive as that of the ECB, the Bank of England's quantitative easing program supported a tightening of corporate spreads. Similar to the initial stages of the ECB's asset purchase programme, private investors sought to increase their exposure to corporate in order to source. This phenomenon was further exacerbated by the Corporate Bond Purchase Scheme (CBPS). The BoE's actions underpinned the market for the first half of the year and the market remained strong even after this scheme ended with the market broadly expecting interest rate policy to remain accommodative.
- Issuance was steady throughout the year, underpinned by a steady flow from domestic issuers (52% of the market). US issuers, often seeking diversification of investors or tenor as well as some net investment hedging resulted in 27% of issuance coming from this region. These deals also tended to be large in size as highlighted by ABI's three tranche GBP 2.25bn deal in May (8, 12 and 20Y notes), AT&T's GBP 1bn 20Y in June and Verizon's GBP 1bn 19Y in October. The market also saw a continued presence from Germany (12%), particularly the German autos that both have domestic liabilities to fund and, also in some instances, were able to achieve some favourable pricing at the front end of the curve.
- The dynamics of tenor have shifted over the years, with supply now more balanced across the length of the curve rather than being heavily concentrated at the long end. While pensions still like to asset-liability match if possible, the impacts of Solvency 2 continue to grow and so there are increased costs to buying lower rated longer bonds. 2017 saw the 12-15-year part of the curve particularly popular, with the tenors representing a balance between competitive pricing arbitrage and investor preference. Issuance in this format represented 28% of overall issuance, up from 9% in 2016 and 10% in 2015.
- Brexit headlines consistently popped up throughout the year but issuers still had plenty of windows to access the market. Conditions generally fluctuated from decent to great, evident in the generally strong performance of new issues throughout the year as well as in secondary trading.
- We expect volumes to finish the year at GBP 27bn in corporate supply. Looking forward, the still favourable pricing conditions look set to accommodate pre-funding ahead of any market turbulence that we seem long overdue for.

Monthly breakdown of GBP IG supply volumes in 2015-2017 (Nov. and Dec. forecasts)



Source: SG CIB Analytics, Bloomberg

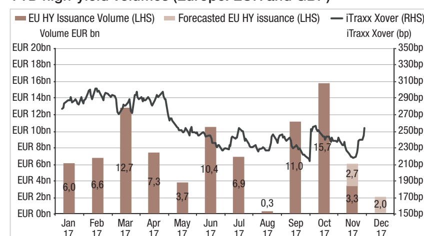
2018 forecast

- SG CIB expects that 2018 will still be a strong year for issuance, but that it may be a more challenging year as the market begins to truly feel the longer-term implications of Brexit. Also, as part of this dynamic, domestic issuers will likely seek to fund 2019 redemptions ahead of Brexit creating a front-loading effect.
- Continued accommodative support from the Bank of England will help to stem some of the fallout, but a pickup in inflation or a slowdown in GDP growth are worth watching. So while there is much discussion around potential rising interest rates, it is unlikely there will be a large spike in rates and thus we believe the competitive funding environment should continue to offer some arbitrage opportunities.
- With the GBP itself likely to remain volatile and possibly weaken further, additional forces could act – whether its cross-border M&A into the UK or whether overseas, corporations believe further net investment hedging is required.
- While Brexit will likely act as a net negative for the UK economy and the performance of new issues, it may be a catalyst for 2018 volumes. UK companies may lose some of the benefits that can be sourced from European Investment Bank (EIB) loans, encouraging them to further look to the bond market.
- From a timing perspective, we anticipate issuance in 2018 to be front-loaded with issuers looking to get out ahead of potential disruptions and an increase in volatility from Brexit. We expect issuance to come in around GBP 30bn across IG senior and hybrids, up slightly from 2017.

High Yield

2017 European market overview

YTD high-yield volumes (Europe: EUR and GBP)



Source: Bloomberg

1. A steady rise in risk appetite as the market grinds tighter

- The first quarter of the year saw strong demand for higher-rated issuers, with BB-rated issuers accounting for 66% of total supply in Q1 2017.
- From May onwards, increasing risk appetite from investors enabled a larger number of single B and CCC-rated issuers to access the HY primary market, representing 62% of total supply in H2 2017 versus only 40% in H1 2017.

2. Stronger HY primary market thanks to an uninterrupted market window

- While the European HY market was almost closed in the first months of 2016, there were no disruptive events in 2017 with primary volumes already surpassing total full-year 2016 supply in the first days of September.

3. More and more US issuers tapping the European HY primary market (reverse Yankee)

- 2017 is expected to be a record year for reverse Yankee issuances, with already 20 US issuers tapping the European HY market so far for total proceeds of EUR 11.9bn eq. (vs. EUR 8.2bn in 2016).

4. UK issuers see a strong comeback to the HY primary market from last year

- Sterling issuance for 2017 so far amounts to EUR 12.2bn eq. and is set to beat the EUR 12.7bn record set in 2013. The HY primary market saw 39% of total GBP-denominated supply priced in Q1 2017 (EUR 4.3bn eq. through 10 transactions). Despite persistent newsflow around Brexit in 2017, UK issuers have benefited from good conditions.

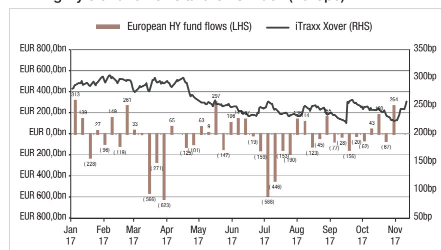
5. Increasing number of HY bonds refinanced in the term loan market

- So far this year, ~EUR 10.1bn of HY bonds have been refinanced via the term loan market, up sharply from ~EUR 4.2bn in 2016.
- This refinancing explains why despite significant negative cumulated fund outflows in European HY funds, investors have remained consistently cash rich.

6. Continued signs of aggressiveness on terms and covenant loosening

- As a result of persistently strong investor demand coupled with competition from the loan market, covenants in HY bond documentation have continued to weaken and become more issuer-friendly (featuring EBITDA grower baskets, portability, restricted payment carve-outs, limited condition acquisitions, etc.)

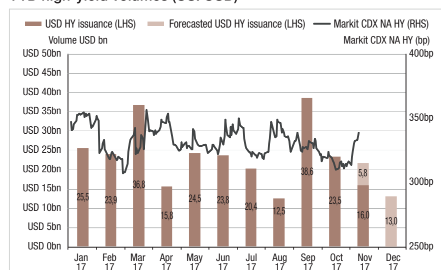
YTD high-yield fund flows and CDS index (Europe)



Source: LCD, Bloomberg

2017 US market overview

YTD high-yield volumes (US: USD)



Source: Bloomberg

1. Secondary market rally takes yields and spreads to multi-year tights

- With little to derail the rally in HY bonds, yields and spreads have compressed dramatically since the end of 2016, sitting at 5.86% (down 60bp YTD) and 403bp (down ~70bps YTD) respectively. Current secondary levels are hovering around the lowest levels seen in over three years, and the market does not seem to be showing any signs of slowing down.

2. Unabated market window

- Despite 2017 being fraught with uncertainty, ranging from geopolitical conflict with North Korea, elections in key EU member countries, natural disasters, and Fed policy normalisation, the primary market showed little sign of slowing down and was able to absorb new supply while trending well ahead of 2016's pace for most of 2017.

3. Hunger for new issues making the primary market more receptive to lower quality credits

- Looking at bonds rated Caa1/CCC+ and lower, 2016 saw a full-year total of USD 12.1bn of supply versus USD 26.24bn in 2017 year-to-date. Narrowing the focus to Caa2/CCC and below, volumes stood at USD 5.0bn year-to-date compared to only USD 1.3bn for all of last year.

DEBT CAPITAL MARKETS
CORPORATES

4. Commodity price stabilisation leads energy issuers to seize the market window

- Oil & gas issuers placed USD 35.5bn in new paper year-to-date compared to only half as much (USD 18.5bn) in 2016 year-to-date. Most of this year's volume came from previously out-of-favour E&P companies and accounted for close to 50% of all oil & gas paper to come to market this year.

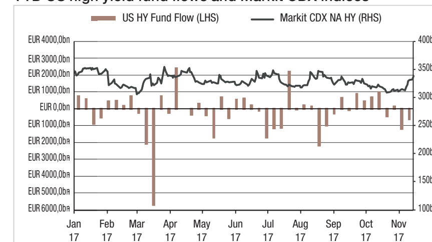
5. Deterioration of covenant quality

- 2017 saw an influx of bonds with HY-lite covenant packages, making up 47% in August and 51% in July according to Moody's Investor Service. Also, North American HY covenant quality sat at 4.48 in September, its worst score since August 2015 (4.52).

6. Strong refinancing trends with a decline in LBO volume

- Refinancing accounted for 70% of proceeds in 2017 year-to-date. On the leveraged buy-out (LBO) front, total volume was down (US 9.6bn vs. USD 12.1bn) although the number of LBO deals increased from 15 to 18 year-to-date. The decline was driven by smaller deals, as there have only been two deals this year where USD notes accounted for >USD 1bn of financing versus four deals in 2016.

YTD US high yield fund flows and Markit CDX indices



Source: LCD, Bloomberg

Landmark deals in 2017

- **Grupo Cortefiel:** On 7 September, Grupo Cortefiel priced a EUR 600m secured offering comprised of EUR 275m 7Y (non-call 2) fixed-rate notes and EUR 325m 7Y (non-call 1) floating-rate notes, with SG acting as Global Coordinator. Together with cash on hand and the equity contribution from CVC and PAI, the proceeds were used to repay in full the debt outstanding as well as related fees and expenses. The historically stressed fashion retailer finally priced EUR 275m fixed senior secured notes tighter than guidance to yield 5.000% and EUR 325m FRN at the tight end of guidance at E+525bp.
- **Stada:** On 22 September, Stada priced a dual offering comprised of EUR 735m 7Y (non-call 3) secured notes and EUR 340m 8Y (non-call 3) unsecured notes, with SG acting as Joint Bookrunner. The senior secured notes were upsized by EUR 250m from EUR 485m, and priced at the tight end of guidance (3.5–3.75%). The unsecured notes priced at 5.000% tighter than guidance (5.25% area). This landmark deal is the largest ever LBO transaction in Germany and the largest European buy-out since 2013,
- **Wind Tre:** On 23 October, Wind Tre priced a EUR 7.3bn eq. cross-border offering comprised of three EUR-denominated tranches and one USD-denominated tranche, with SG acting as Joint Bookrunner. The EUR-denominated offering was made up of EUR 2.25bn 6Y FRN with a E+275bp coupon, EUR 1.625bn 5Y fixed rate notes with a coupon of 2.625% and EUR 1.75bn 7Y fixed rate notes with a coupon of 3.125%. The USD-denominated tranche was made up of USD 2bn of 8Y fixed-rate notes with a coupon of 5.000%. This offering represents the largest multi tranche EUR-denominated transaction on record.
- **High Ridge Brands:** On 17 March, High Ridge Brands, owned by CD&R, priced its debut USD 250m offering of senior notes (Caa1/CCC+) at par to yield 8.875%. Following a well-received roadshow, the deal came at the tight end of guidance. The proceeds were used to repay the bridge loan partially funding the acquisition of Dr Fresh, and to repay existing debt at High Ridge Brands Co. SG acted as Joint Bookrunner on the transaction that contributed to building the US HY franchise on sponsor-led transactions.
- **Vine Oil & Gas LP:** On 13 October, Vine Oil & Gas LP, formed by Blackstone Energy Partners in 2014, priced its inaugural offering of USD 530m of 5NC2 senior notes (Caa2/CCC+) at 99 to yield 8.985%. Proceeds were earmarked to repay in full the company's existing third lien term loan, and in part borrowings under its second-lien term loan and revolving credit facility (RBL). Aside from being SG's fourth Bookrunner position on a sponsor-backed deal in 2017, the successful outcome of a Caa2/CCC+ rated O&G issuer highlights the strength of the market and our firm commitment to natural resources companies.

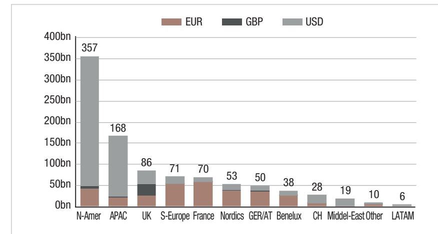
2018 forecast

- We expect the European market to be slightly down in terms of volumes next year and to continue to be dominated by stronger credits and well-known issuers. The HY primary market should be driven by:
  - (ii) a lower volume of redemption from the post-2014 period
  - (i) a gradually rising interest rates environment
- We expect lower volumes on the US market as well as, because of rising rates and the general sentiment that we are nearing the end of the credit cycle in the US.
- In terms of our volume forecasts for 2018, we expect to reach:
  - (i) EUR 64bn in EUR-only issuance, down from a projected EUR 75bn for full-year 2017
  - (ii) GBP 9bn in GBP-only issuance, down from a projected GBP 12bn in full-year 2017, and
  - (iii) USD 250bn in USD-only issuance, slightly down from a projected USD 280bn for full-year 2017.

Financial Institutions

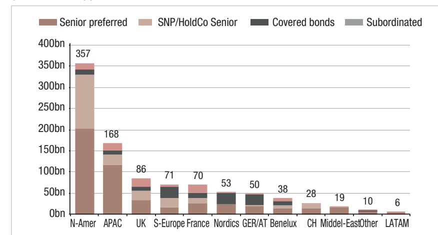
- Large Central Banks' liquidity injections have pushed rates and equity volatility down, with 2017 seeing the first historical lows since the financial crisis, despite several noteworthy economic and political events. Moreover, bank fundamentals further improved, contributing to the overall benign environment for Financial Institutions (FI). Consequently, the bond primary market remained open for most of the year across asset classes, with execution risk limited and healthy levels of supply evenly spread throughout the year, while the secondary market saw good performance across the capital structure.
- Overall, FI supply was in line with last year's. Focusing on senior unsecured and covered bond issuance, volumes in EUR were marginally lower, reflecting the smaller needs in Europe as cost-efficient funding offered by central banks and negative deposit rates prevented issuers from holding excess liquidity – this in spite of the pick-up in loan growth across channels. Conversely, the primary market had a clear uptick in USD supply versus 2016 as the robust US economy, deeper market depth and favourable cross-currency versus EUR boosted overall supply. As for GBP, the segment saw a large increase stemming notably from higher domestic issuance.
- The adoption of the Senior Non-Preferred (SNP) laws in France (December 2016), Spain and Belgium created a new asset class in the debt market. As a result, supply increased towards SNP/Senior HoldCo issuance from senior preferred bonds as banks sought to fulfil their TLAC (Total Loss- Absorbing Capacity) and MREL (Minimum Requirement for Own Funds and Eligible Liabilities) requirements.
- Many events could have driven volatility higher, but it remained contained throughout the year:
  - Central bank actions were well signalled to the broader market and therefore brought little surprise when announcements were made. The ECB extended QE for nine months, although at a reduced pace of EUR 30bn starting from January 2018. In the US, the Fed is steps ahead in its monetary policy, continuing its gradual rate increase and intending to further reduce its balance sheet to restore the economy's monetary equilibrium.
  - Idiosyncratic risks, such as the bank resolution case by Banco Popular, the Italian intervention in Monte dei Paschi di Siena and the liquidation on Veneto Banca and Popolare di Vicenza had a surprising positive impact on peripheral senior bonds from the respective jurisdictions. Investors considered these cases as a successful test of the resolution and liquidation frameworks and valued the protectiveness of the senior unsecured asset class.
  - In the geo-political landscape, Donald Trump was inaugurated in the US in January, but to date has not been able to push through his highly anticipated tax reforms. The tax reform expectation led to "Trumpflation" dynamics, which widened the gap between USD and EUR rates further. At half-year, rising tension between the US and the Korean peninsula triggered some risk-off sentiment, but most of the weakness reverted swiftly as time passed. In Europe, Emmanuel Macron became President of France with an agenda of economic reforms, whereas Angela Merkel was elected for her fourth term as Chancellor of Germany. In the meantime, Brexit negotiations rolled on, but to this day no formal agreement has been reached between the UK and the EU.
  - Surprisingly, spreads have been fairly immune to all these jitters, and given the robustness of the market, issuers were not forced to adjust their funding strategy nor the sequencing of their trades throughout the year. Execution risk remained contained with even the riskier asset classes and weaker issuers experiencing supportive issuance conditions.

Overall currency issuance distribution per region in 2017 YTD (EUR bn eq.)



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

Overall asset class issuance distribution per region in 2017 YTD (EUR bn eq.)



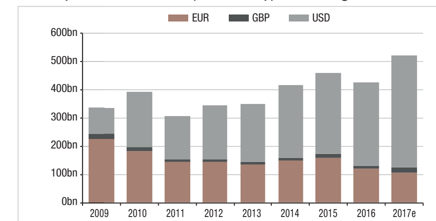
Source: SG CIB Analytics, Dealogic
All issuers, amount > EUR 250m eq., maturity > 18 months

Senior preferred market

2017 review

- Stricter regulations and the adaptation of FIs to the new frameworks have been a recurring theme over the past few years, with 2017 being no exception. Funding plans have been adjusted accordingly, and with the passing of the SNP laws in France, Spain and Belgium, senior preferred bonds were increasingly side-lined this year. In the secondary market, EUR Senior spreads experienced tail wind from the gradual improvement in economic fundamentals, low levels of market volatility and the diminished levels of supply. Also, this year TLTRO 2, CBPP3 and CSPP from the ECB and the Term Funding Scheme (TFS) in the UK still affected and reduced the long-term funding needs of FIs.

Senior preferred volumes (EUR bn eq.) increasing in USD



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

- Although the market remained open for most of the year, senior preferred issuance was largely frontloaded in Q1, with bullet structures being the format of choice in EUR and GBP, and floating rate notes often issued in a dual-tranche format in USD. The senior green bond market also expanded further, with several banks, mostly from Asia and Europe, coming to the bond market to finance a better world at attractive spread levels.
- Overall, senior preferred volumes increased in USD (USD 395bn in 2017e vs. USD 330bn in 2016), as cross-currency developments versus EUR were supportive, particularly in the short-end of the curve. Nevertheless, volumes in EUR decreased following the implementation of the SNP laws (EUR 108bn in 2017e vs. EUR 122bn in 2016). In GBP, supply increased (GBP 19bn in 2017e vs. GBP 8bn in 2016), mostly due to the strong uptick in domestic issuance.
- American and APAC issuers dominated the USD senior markets with a 51% and 28% market share respectively. In EUR, southern European issuers took the lion's share with 21% of total volumes, followed by the Nordics (14%), UK (12%) and North American issuers (11%). In GBP, 62% of the senior preferred supply was domestic, with 9% coming from North America.

Regional focus

Western Europe

- While overall EUR volumes in 2017 are expected to be below those from 2016, regional trends were varied: senior preferred issuance in France, Spain and Belgium were reduced following the implementation of the SNP laws, whereas UK and Italy saw an uptick in supply as investors digested the Brexit referendum, and Italy's intervention into ailing banks proved senior preferred as a resilient asset class. Noteworthy is the significant decrease in German/Austrian supply in senior funding, as needs were low and issuance was shifted towards the extremely tight levelled Pfandbrief market.
- Swiss and Italian issuers found their way to the USD market more often this year, whereas the Nordics, UK and Benelux decreased their senior funding in the dollar market. Like last year, French and German/Austrian issuers had comparable issuance volumes in USD senior.
- In GBP, we saw heightened activity, particularly from UK issuers as the Brexit-shock faded on the investor side. Also, Benelux and German/Austrian issuers were frequently active in the GBP senior space following strong investor appetite for non-domestic paper.

CEEMEA

- In CEEMEA, senior preferred volumes were slightly higher than last years' (EUR 21.9bn eq. In 2017 vs. EUR 17.7bn eq. in 2016). The UAE, Kuwait and Turkey in particular increased their USD funding in senior preferred. On the EUR side, volumes came predominantly from Poland in the senior preferred format, though at comparable levels at EUR 2.5bn 2017 versus EUR 2bn in 2016.

Americas

- The USD was expectedly the currency of choice in the US, with growing funding needs pushing USD funding ca. 40% higher compared to last year. Chile, Colombia, Brazil, Mexico and Panama also had heightened activity in USD senior. In EUR, both Canadian and US issuers were more active compared to 2016 in senior preferred, but overall EUR volumes remain just a fraction of the overall funding for this region and asset class.

APAC

- The steady growth in the global economy driven by a strong Asian development helped overall senior preferred funding to exceed the levels seen last year. India, Japan and the Philippines have more than doubled their funding in USD senior. Australia and New Zealand on the other hand were substantially less active, with senior preferred funding decreasing by ~USD 8bn year-on-year.

2018 forecast

Overall, we expect central bank policies to remain a key driver of the market sentiment in 2018, and idiosyncratic risk and regulatory developments to stay on investors' radar for the coming year. For senior preferred, we expect volumes to stay in line with last year on the whole (~EUR 475bn eq.).

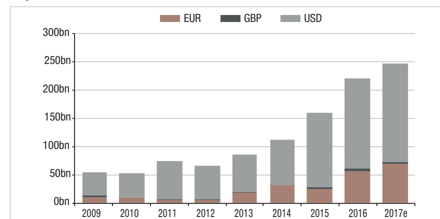
- EUR volumes are set to decrease (from EUR 108bn in 2017 to EUR 100bn in 2018) due to lower levels of supply from European issuers as the shift towards MREL/TLAC-eligible senior instruments continues. That said, some tail wind for issuance can be expected from the extremely squeezed senior preferred levels, which could make issuance in this asset class economically appealing.
- In USD, we believe needs from US banks will be relatively stable, but we expect higher levels of activity coming from APAC and Australia/New Zealand in the coming year – also driven by the fact the latter have been less active this year. This should drive USD issuance up from USD 395bn in 2017 to USD 403bn in 2018. The developments of the basis swap will of course impact the split between EUR and USD.
- Finally, in GBP we expect to see stable volumes (~GBP 19bn) as the increase in domestic supply should be primarily focused on senior HoldCo issuance.

Senior non-preferred / Senior HoldCo market

2017 review

- With the first SNP law adopted at the end of 2016, 2017 was the first full-year to test investors' perception and relative positioning of this new asset class. The implementation of the SNP law in France in December 2016 allowed for comparable laws in Spain (June 2017) and Belgium (July 2017), and subsequently the first entries into this asset class. National champions such as Banco Santander, BBVA, CaixaBank and Belfius Bank all issued their inaugural bonds throughout 2017, with pricing rationales varying per transaction as there was an increasing number of references. The absolute differential versus senior preferred and the relative positioning between senior preferred and Tier 2 were the most commonly used methods to price the new issues, which in all cases could rely on strong investor reception.
- Taking a closer look on tenors, we saw issuers finding investors' sweet spot in intermediate maturities (up to eight years), exclusively in bullet format for SNP as some uncertainty remains regarding callable structures. On the EUR FRN side, we only saw activity from French banks taking advantage of the savings vs. Fixed issuance, whereas Banco Santander, BPCE and Credit Agricole also tapped into the USD FRN investor pool.
- Although SNP volumes increased YoY as expected, HoldCo supply was lower due to diminished funding needs from the UK, Switzerland and Japan. Nevertheless, overall SNP/HoldCo volumes were in line with last year in USD YoY (i.e. USD 172bn 2017e vs. USD 174bn in 2016), with EUR currency filling the minor gap with the marginal increase YoY (i.e. EUR 69bn 2017e vs. EUR 56bn in 2016). In GBP, supply has been slightly lower to GBP 4bn in 2017e from GBP 5bn in 2016.

Senior non-preferred / HoldCo volumes (EUR bn eq.) – exponential increase in overall volumes YoY



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

- Focussing on the major currencies, US banks were the most active issuers of TLAC/MREL-eligible debt in EUR (40%), USD (62%), and GBP (63%). France accounted for 26% of total EUR issuance, with southern Europe taking the third spot at 12%. In USD, Japan accounted for 13% of eligible debt supply and the UK 10%. In GBP, the UK followed second behind the US in their domestic currency at 37% this year.

Regional focus

Western Europe

- Similar to last year, SNP/HoldCo funding in USD was preferred over EUR in Western Europe, though the differential between currencies was at a smaller margin, as Swiss and UK issuers were less active in this format. France, Spain, Belgium had an unsurprising uptick in supply of MREL/TLAC-eligible instruments, but HoldCo Benelux issuers such as ING Group and KBC Group also issued during the course of the year.

America

- In the US, total volumes across USD, EUR and GBP were higher after last years' volumes stagnated. Supply continued to be dollar orientated with callable maturities (e.g. 6NC5, 11NC10, etc.) with the frequent addition of a smaller FRN tranche to maximise investors' reach. To date, ~20% of US HoldCo supply was issued in EUR with similar choices of formats as in USD.

APAC

- Senior HoldCo supply was modest in the APAC region, with a marginal volume decrease YoY to ~EUR 24bn eq. The HoldCo format was used almost exclusively by Japanese issuers, with USD by far the main currency of choice. Japanese issuers occasionally found their way to the EUR market, where they have established footprint in recent years.

2018 forecast

Volumes in SNP/Senior HoldCo debt continued to increase in recent years, and we expect this asset class to flourish further throughout 2018. We project EUR 265bn eq. of supply in 2018 across EUR, GBP and USD, compared to EUR 225bn eq. in 2017. The main drivers for the increased volume projections are the extension of the SNP

legislation to further countries in Europe, as well as further compression in the differential between Senior OpCo and TLAC/MREL-eligible senior securities.

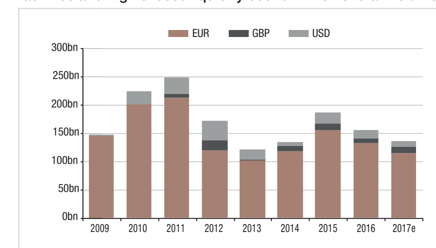
- In EUR, we expect to see an increase from EUR 69bn in 2017 to EUR 90bn in 2018, as further jurisdictions adopt the SNP legislation and we see supply from smaller names across Europe. On the HoldCo front, we also expect to see higher volumes as UK banks needs will increase due to the end of the Term Funding Scheme (TFS).
- In USD, whilst we believe needs from US banks will be relatively stable, we expect to see an increase from USD 172bn in 2017 to USD 197bn in 2018 driven mostly by European names. In addition to the pricing arbitrage, issuers with large needs will tap this market to diversify their investor base.
- We also see an increase in GBP supply for the coming year, from GBP 4bn in 2017 to GBP 7bn in 2018, which reflects larger domestic funding needs in HoldCo format mostly.

Covered bond market

2017 review

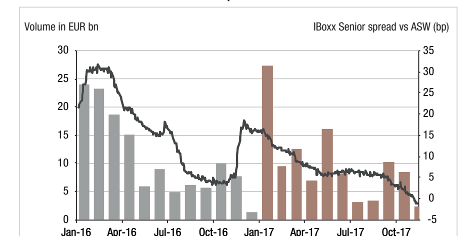
- The covered bond market has been very resilient throughout the year, supported by the ECB purchase programme (CBPP3). However, supply levels were lower compared to 2016: alternative funding facilities such as TLTRO (Targeted Longer-Term Refinancing Operations) and TFS were still largely in place, and issuers' focus on credit instruments to comply with regulatory requirements have tempered covered bond supply for the year. Stricter excess liquidity management and lower funding needs related to 2017's redemptions also impacted issuers' volumes. Similar to previous years, supply was traditionally frontloaded with the market not experiencing an issuance front-run ahead of a rumoured ECB tapering announcement. The primary market remained open throughout the year, with the exception of the traditional blackouts. Rate volatility remained fairly contained, allowing issuers to extend their curve by tapping into longer maturities. Furthermore, the ECB did everything within its mandate not to rock the boat, which supported secondary spreads throughout the year to new tight levels.
- The EUR segment continues to account for most of the issuance, with EUR 113bn in 2017e (from EUR 132bn in 2016). In USD, supply has remained limited, due to substantially lower issuance from Canada and Australia/New Zealand. In GBP, volumes went up to GBP 10bn in 2017e from GBP 6bn in 2016, supported by higher issuance from domestic banks.

Covered bond volumes (EUR bn eq.) – alternative funding facilities and high excess liquidity cost diminish overall volumes



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

Covered bond supply was concentrated in H1 in 2017, with a continued downward trend in spreads



Source: SG CIB Analytics, Markit iBoxx, Dealogic

Regional focus

Western Europe

- France, Germany and the Nordics continued to be key regions for EUR covered bond issuance, representing 55% of the year-to-date total volume (vs. 49% of 2016 total).
- Southern European issuers on the other hand have further reduced their relative issuance amounts to 9% in 2017 from 14% in 2016 and 22% in 2015. This is in spite of large redemptions in the region, causing a substantial negative net-supply for 2017.
- This year we saw the return of Greek banks to the covered bond market. Piraeus Bank, Eurobank Ergasias and the National Bank of Greece issued in the short-end of the curve in Conditional Pass-Through format (CPT), and we expect further supply from this jurisdiction in the coming year.

CEEMEA

- This year saw only EUR 1bn of supply in this region, which came from the Polish PKO Bank in CPT format.

America

- All of the North American activity in EUR covered bonds came from Canadian issuers, who took advantage of the deep investor base compared to the USD market. Nevertheless, overall volumes were substantially lower for the region compared to the previous year across the major currencies (EUR 11.6bn eq. in 2017 vs. EUR 23.4bn eq. in 2016).

APAC

- Australian and New Zealand banks took a break in the USD covered bond market and were also less active in EUR by issuing EUR 6.25bn in 2017 compared to EUR 7.25bn in 2016. Following the inaugural covered bond from Singapore last year, there was heightened activity in 2017 with DBS, OCBC and UOB issuing a total of EUR 2.75bn year-to-date across EUR and USD.

2018 forecast

In the past, covered bond redemptions were a good proxy for future supply, as issuers often rolled over their maturing bonds. The alternative funding facilities from central banks undermined these types of projections, as excess liquidity became costly and cheap alternative funding made some of the supply in this asset class less relevant in some cases. With CBPP3 set to continue (though at a slower pace) in 2018, and the last TFS drawdown scheduled for February 2018 in the UK, we expect a gradual increase of wholesale funding. The covered bond asset class is expected to regain some of its popularity given its low volatility versus credit and the ability to fund in longer tenors.

Overall volumes are projected to increase to ca. EUR 150bn eq. in 2018 versus 135bn eq. in 2017, leading to the first positive net supply in covered bonds for the market since 2013.

- In EUR, we expect volumes to move from EUR 113bn in 2017 to EUR 125bn in 2018, as issuers will still enjoy the support of CBPP3 and new issuers may access the market. This would however still represent lower volumes compared to 2014/2015.
- In USD, we also expect to see an increase from USD 13bn to USD 15bn, as volumes from Canadian and Australian/New Zealand banks were quite low this year. Additionally, the higher rates in the US may offer issuers the opportunity to price with negative EUR-equivalent yield by going to the USD market.
- Finally, in GBP, we expect volumes to go up from GBP 10bn in 2017 to GBP 13bn in 2018, as domestic banks will look for secured funding alternatives to the TFS.

Public Sector

OVERVIEW

- In the EUR market, despite uncertainties on the back of the elections in Europe, ECB decisions and Brexit, the SSA (Sovereigns, Supras and Agencies) sector remained strong. Cash-rich investors kept looking for high quality paper on both the primary and secondary markets, well supported by PSPP buying activity. Indeed, the prospect of the ECB tapering the programme – announced only at the end of October – led SSA issuers to frontload their annual funding programmes in the first half of 2017. The sweet spot in EUR was once again at the long end, with issuers extending their debt duration at very low costs. Participants will now focus on the tapering of QE starting in January and its impact on markets going forward, which could possibly involve changes being made to SSA funding strategies for the upcoming periods.
- In the USD market, SSA bond yields were affected by the first months of US President Donald Trump's administration, with participants monitoring its ability to pass the proposed reforms, while the global geopolitical scene remained under pressure. The Fed's monetary policy nevertheless played a key role, and investors remained active driven by upward pressure on interest rates. The USD market saw however a decrease in primary volume from European SSA issuers, as cross-currency spreads tightened, therefore not offering the same advantageous funding costs.
- The GBP SSA bond market continued to be driven by domestic supply, with the UK Debt Management Office (DMO) remaining the most important issuer. Market participants focused mostly on Brexit developments, with the gilt curve continuing to move in step with headlines. Investors continued to target long-dated issues in search of higher yield levels, while the UK DMO took advantage of such demand to secure very long-term funding at attractive costs.
- PSPP remained very active in 2017, with monthly net purchases at around EUR 50.8bn, putting pressure on European government bonds (EGBs) in terms of liquidity.

EUR public sector issuance volumes 2017e vs. 2016e

Sector	Issuance volumes in 2016 (EUR bn)	Expected realised issuance volumes in 2017 (in EUR bn)	2016-2017e evolution (%)
Sovereigns	844	925	9,6%
Agencies & Supranationals	190	230	20,9%
Local authorities	52	50	-4,4%
Total Public Sector	1 086	1 205	10,9%

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

Very strong primary market activity starting in Q1 from public sector issuers despite political risks regarding the outcome of elections in Europe and the consequences of Brexit

- Markets expectations around the triggering of Article 50 by the UK at the end of March, and the potential outcome of the Dutch and French elections in March and April/May, respectively, focused all attention in the first quarter of the year on political risks. The potential impact of these events in the European Union shook the EUR fixed income markets, particularly in the public sector.
- In this context, we saw the 10Y Bund in the 30bp range (from 0.186% to 0.485%) in Q1 and the 10Y OAT moving 47bp (from 067% to 1.139%).
- SSA issuers took advantage of market expectations surrounding ECB QE tapering, with agencies and supras executing around 45% of the estimated annual volume as early the end of Q1.
- European sovereigns started early as well by launching sizeable transactions in the first months of the year. Among them were France (inaugural EUR 7bn 22Y green OAT, with SG as bookrunner, the largest green benchmark ever issued), Belgium (EUR 6bn 10Y/dual-tranche EUR 6bn 7Y and 40Y, SG CIB as bookrunner for the latter), Finland (dual-tranche EUR 4.5bn 5Y and 30Y), Spain (EUR 9bn 10Y/EUR 5bn 15Y), Italy (long EUR 6bn 16Y), Portugal (EUR 3bn 10Y, SG CIB as bookrunner) and Ireland (EUR 4bn 20Y).

Markets experienced high volatility ahead the French presidential elections, with a decrease in issuance volumes at the beginning of Q2. Nevertheless, Macron's victory brought back confidence to the EUR market and activity picked up again sharply afterwards

- Sovereign supply remained heavily skewed towards longer maturities. France (EUR 7bn), Belgium (EUR 3bn), Italy (EUR 6.5bn) and Spain (EUR 8bn) successfully

EUR MARKET

2017 review

Higher SSA primary supply in a persistent low interest rate environment, with agencies and supras more active in EUR in 2017

- Sovereigns' primary activity was higher compared to 2016, with the increase in amounts issued via auctions partially offset by a lower volume of syndicated transactions. Agency and supras issuance remained very active in 2017 thanks to higher annual funding needs (EUR 523bn eq. vs. EUR 505bn eq. in 2016) and increased EUR-denominated funding: overall, supras and agencies issuance volumes in EUR increased from 36% last year to 44% this year as of 25 October.

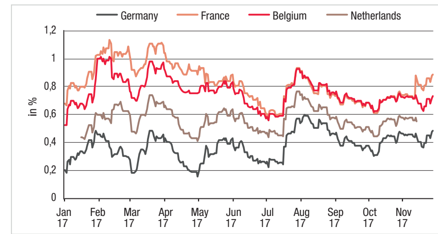
issued new benchmarks in the 30Y to 40Y area of the curve on the back of large redemption flows in Q2 and solid demand (SG CIB acted as joint bookrunner in the first two transactions).

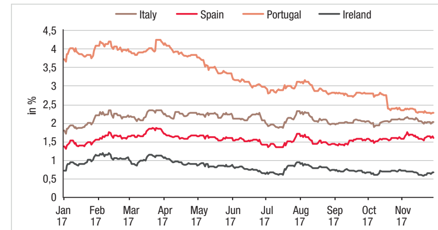
- The victory of Emmanuel Macron in both the first and second rounds of the French presidential elections brought some relief to the market, boosting equities and leading to the strong outperformance of the OAT curve. In this context, the 10Y OAT yield moved from one of its highest levels of the year, 1.125% in March, to the lowest at 0.583% in June.
- The event also had a strong impact on the OAT/Bund spread, which tightened more than 40bp during the quarter.

Primary issuance slowed down in Q3 as SSA issuers founds themselves well ahead on their funding programs. Overall, supras and agencies levels remained stable during the quarter, while EGBs spreads continued to tighten

- Supras and agencies kept their focus mainly on the long end. With strong demand from cash rich investors, frequent issuers (i.e. EFSF, KFW and EIB) successfully launched benchmarks with very limited premium. Among those deals, KFW printed in September a new 10Y benchmark with the highest orderbook ever reached for one of its bonds (SG as bookrunner).
- On the sovereign side, Ireland launched a benchmark in the 10Y tenor for EUR 3bn and Austria priced a 5Y and 100Y dual-tranche for a total of EUR 7.5bn (SG as bookrunner on both transactions). The new 100Y benchmark is the Europe's first benchmark-sized and the largest century bond (EUR 3.5bn), and allowed Austria to extend its duration well beyond the RAGB due in 2067 and issued in 2016.
- In addition, Greece picked a good window before the summer break to return to the market for the first time since 2014, and printed a new EUR 3bn 5Y benchmark, combined with an exchange and tender offer.
- Following the tightening of core EGBs yields at the end of June, we saw a softening on the back of weak inflation data and a more dovish tone from central banks. In this context, the 10Y Bund yield moved up by 37bp in the period from mid-June to mid-July, but came down by around 32bp afterwards (until September).
- Regarding the non-core EGBs, the highlight was the upgrade by S&P of Portugal's rating to BBB- (stable) from BB+, announced in September. With the upgrade, the PGB curve shifted downwards and the spread versus BTP tightened by ~30bps.

Euro area 10-year benchmark yield performance in 2017





Source: Bloomberg

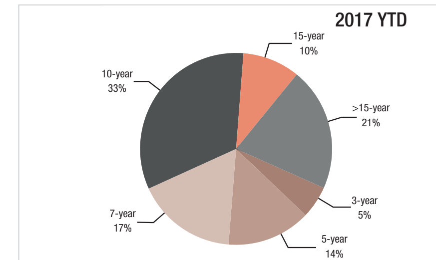
Q4 was dominated by limited impact of Catalonia's referendum on the Euro SSA market, and participants focusing on the ECB QE tapering announcement. Primary market activity was subdued in EUR, creating a favourable environment for issuers to print at very tight levels, in some case through their secondary curves.

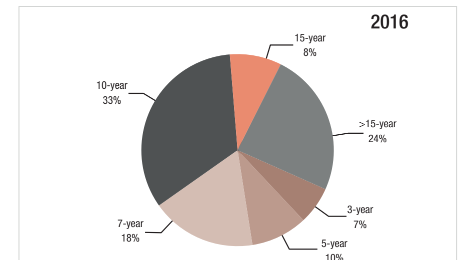
- The last quarter of the year started with tensions around the Catalonia referendum in favour of the province's independence. While the political situation in Spain remained uncertain, the market was quite resilient, with little impact on EGBs yields.
- Looking at the primary market, the most relevant transaction came from the EFSF (European Financial Stability Facility) which printed a EUR 3bn 6Y benchmark through secondary levels. In addition, Austria's ASFiNAG came back to the syndicated bond market to launch a new EUR 750mn 7Y benchmark (SG as bookrunner).
- On the sovereign side, Ireland was the only European issuer to launch a benchmark in the 5Y tenor for EUR 4bn (SG as bookrunner), linked to the early repayment of loans from the IMF, Sweden and Denmark. No other European sovereign is expected to launch syndicated transactions until the end of the year.

In a volatile context, investors extended their duration with high quality SSA paper.

- The historically low yields environment gave a boost to long-dated issuance in 2017. Accordingly, primary issuance remained high at the long and very long-end, with those segments representing around 63% of primary volume, in line with 2016.

EUR SSA issuers extended their debt profile in 2017 YTD vs. 2016

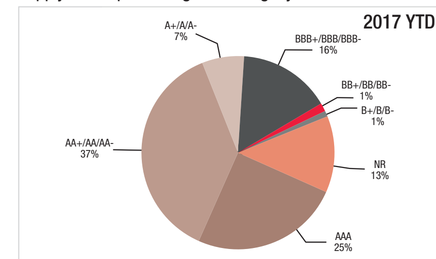


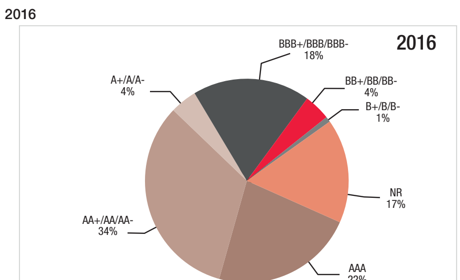


Source: SG CIB DCM Analytics

- Supply coming from AA- or higher-rated issuers increased compared to last year (62% in 2017 vs. 56% in 2016). In the low-rated basket, we saw a decrease in supply coming from BBB+ or lower-rated issuers this year (18% in 2017 vs. 23% in 2016).

Supply from top-rated signatures slightly increased in 2017 YTD vs. 2016





Source: SG CIB DCM Analytics

The inflation-linked market throughout 2017

- EUR inflation-linked bonds issuance volumes (excl. retail bonds) should reach around EUR 55bn at the end of 2017, above the 2016 issued amount of EUR 47bn. In terms of syndication:
  - Italy priced a EUR 3bn 10Y inflation-linked bond in March at 11bp over the real yield of the 3.1% September 2026 inflation-linked BTPei, at the tight end of guidance (SG CIB as bookrunner).
  - Spain launched a EUR 5bn 10Y inflation-linked in April at 96bp through the real yield of the SPGB 1.50% April 2027, at the tight end of guidance (SG CIB as bookrunner). The transaction met with strong investor demand and books closed in excess of EUR 16.4bn.
  - Ireland issued a EUR 609.5m 23Y first-ever inflation-linked bond via PP.
- The PSPP programme has been a key driver for EUR linker performance over the past two years, given the significant flow effect from linker purchases. It should come as no surprise that prospects of a tapering of the program may impact expectations of future linker performance, particularly if inflation expectations fail to build much momentum.
- With nominal yields also moving higher, breakevens should be relatively supported, though the relative performance will very much depend on whether inflation is perceived to be a threat.

2018 forecast

2018 SSA issuance programme

EUR public sector issuance volumes 2017e vs. 2018e

Sector	Expected realised issuance volumes in 2017 (in EUR bn)	Estimated issuance volumes in 2018 (in EUR bn)	2017e vs. 2018e volumes (%)
Sovereigns	925	888	-4,0%
Agencies & Supranationals	230	216	-6,3%
Local authorities	50	56	11,4%
Total Public Sector	1 205	1 159	-3,8%

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

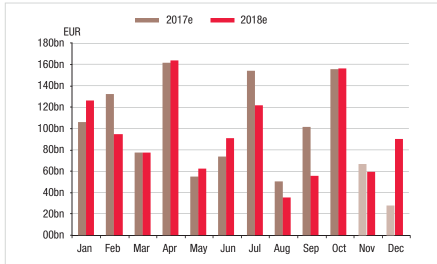
2018 major market trends in EUR

For 2018, we anticipate a 3.8% decrease in total EUR issuance volume from public sector issuers compared to 2017.

- We expect a decrease (-3.8%) in total issuance volume from public sector issuers in 2018 compared to 2017, as we expect sovereign issuance volumes to reach EUR 888bn in 2018 versus EUR 925bn expected in 2017, representing a decrease of approximately 4.0%. In addition, we forecast a decrease of primary market volumes from agencies and supras of 6.3%, reaching EUR 216bn in 2018.

- On the other hand, local authorities' total issuance is expected to increase by 11.4% in 2018 compared to 2017.
- Despite the tapering of the PSPP starting in January, the ECB will continue to play a decisive role in the markets to sustain the economy and reassure investors. Moreover, with some of the PSPP bonds reaching maturity, reinvestment flows are set to pick up in 2018 and accelerate in the following years.
- In addition, we do not expect the EUR inflation-linked market to pick up next year on the back of lower forecasts for eurozone inflation. According to SG economists, inflation should average 1.1% in 2018. Nevertheless, this should not discourage debt management offices (DMOs) from regularly tapping the inflation-linked market.
- In terms of EUR SSA bond redemption flows, we expect EUR 1,130bn outflows in 2018, i.e. 2.4% lower (sovereigns -3.3%, agencies and supras +0.7%, local authorities -0.1%) than 2017.

Public sector EUR bond redemption flows in 2017e and 2018e



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

USD MARKET

2017 review

The USD market remained the most active, despite the decrease in issuance volumes from supras and agencies

- The tone of the USD debt capital market was dictated by the new US administration and expectations of its ability to pass proposed reforms, and by the Fed's monetary policy.
- Total volumes from public sector issuers in the USD market reached USD 1,983bn (excluding US agencies) by mid-October, posting a decrease -1.1% on last year mostly due to lower issuance from supras and non-US agencies (-17.6%) compared to last year. Despite that, the USD market remains the most active market for the largest share of the global issuance activity.
- On the non-US sovereign side, issuance volumes are expected to increase to USD 118bn from USD 116bn in 2016. This year emerging and Middle Eastern countries (i.e. Argentina, Abu Dhabi and Saudi Arabia) again accounted for the largest share of primary activity. On the supra and agencies side, the USD market saw a decrease in volume from European issuers. Indeed, with the tightening of the EUR/USD basis, supras and agencies USD issuance volumes moved from 49% last year to 34.5% compared to a year ago.

USD public sector issuance volumes 2017e vs. 2016

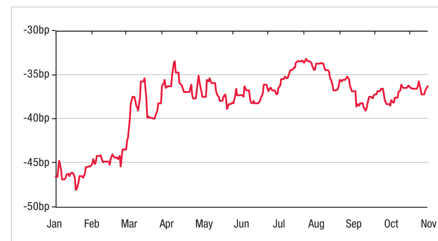
Sector	Issuance Volumes in 2016 (in USD bn)	Expected Realized Issuance Volumes in 2017 (in USD bn)	2016-2017e evolution (%)
US Treasuries	2 070	2 552	23,3%
non US Sovereigns	116	140	20,3%
non US Agencies & Supranationals	295	253	-14,2%
Local authorities	29	32	12,5%
Total Public Sector	2 510	2 977	18,6%

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

EUR/USD cross-currency spreads tightening, lower USD issuance from European SSA issuers

- EUR/USD basis swap spreads tightened significantly in 2017, going from -47bp in January to 33bp in April in the 5Y tenor, but remaining in the in the -33bp and -39bp range for the rest of the year. The move witnessed in the first four months of the year was driven mainly by expectations of further PSPP tapering, and higher EUR rates. In addition, buoyant financial conditions in the US and robust EM FX during that period helped ease offshore borrowing conditions in USD terms.
- As a consequence, European SSA issuers have issued fewer transactions in USD compared to a year ago. The sovereigns Belgium and Finland issued a total of USD 2.5bn in September. On the supras and agencies side, we also witnessed lower primary issuance in USD from names such as EIB, KfW and CADES. Nevertheless, ESM inaugurated its USD programme in Q4 to diversify its funding and further expand its investor base.

5-year EUR/USD basis swap in 2017



Source: Bloomberg

Trump's administration and Fed's monetary policy driving the USD market in 2017

- With Trump assuming the US presidency in January, several changes in public policies were expected (i.e. tax reform, further tightening of monetary policy and revision of trade agreements), which could have a strong impact on markets already in the first months of his administration. While EGBs yields were under pressure on the back of political uncertainties, US equities rallied in Q1 driven mainly by the positive economic data, and despite uncertainty surrounding the timing and impact of Trump's reforms.
- In March the Fed confirmed market expectations and raised its federal funds rate by a quarter-point. After the announcement, we witnessed a strong performance of the UST curve which continued until mid-April, with the 10-year yield tightening by more than 45bps.
- The Q2 was marked by initial reactions about the US internal policy combined with the geopolitical uncertainties. The solid results of the economy and labour market increased expectations about a rate hike in June, which was confirmed by the Federal Open Market Committee (FOMC) with the announcement of the raising of the interest rate by another quarter-point.
- Following the strong outperformance of the UST at the end of June/ beginning of July, we saw the curve moving down during Q3. The 10Y Treasuries reached its lowest level of the year, trading at 2.040% on 9 September. In fact, the developments of the US economy and solid labour market coupled with a dovish tone from the FOMC on a potential third rate hike in 2018 and its balance sheet normalization contributed to the rally in broader markets.
- This trend, however, has been reverted since September on the back of the geopolitical tensions involving North Korea and the challenges of Trump's administration to approve proposed reforms. In addition, the more hawkish tone regarding a further rate hike before year-end adopted by Janet Yellen since the September's meeting triggered a sell-off in UST. In this context, the UST 10Y retraced more than 40bps. The US equity markets, on the other hand, continue its strong performance since the beginning of the year, pushed by expectations of the potential of Trump's package to boost the US economy.
- After a very quiet start of Q4, primary issuance picked up in the last weeks of October (i.e. EIB, ADB, KFW, BNG, AfDB, CDC – SG as bookrunner for CDC). Nevertheless, activity decreased compared to the previous quarters, as most SSA issuers were well ahead on their funding programmes. In addition to regular issuers on the USD market, ESM launched its inaugural USD benchmark.
- Given the recent positive numbers of the US economy, the Fed is expected to raise rates in December. Indeed, recent comments from Fed officials have added to momentum for a quarter-point rate hike at the last meeting of the year.

2018 forecast

2018 SSA issuance programme

USD public sector issuance volumes 2017e vs. 2018e

Sector	Expected Realized Issuance Volumes in 2017 (in USD bn)	Esimated issuance volumes in 2018 (in USD bn)	2017e vs. 2018e volumes (%)
US Treasuries	2 552	2 635	3,3%
non US Sovereigns	140	128	-8,3%
non US Agencies & Supranationals	253	270	6,6%
Local authorities	32	24	-24,8%
Total Public Sector	2 977	3 057	2,7%

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

2018 major trends in USD

- In terms of issuance volumes, USD volumes should be up by 2.7% overall, according to our estimates, in particular on the back of an increase in US Treasuries (+3.3%) due to a higher central government net borrowing (USD 772bn versus USD 585bn estimated in 2016).
- We expect non-US sovereigns to continue to enter the USD market as a way to diversify and hedge their liquidity risk, and capitalise on investor appetite for higher yield, but at a slower pace. We expect non-US sovereign issuance volumes to reach USD 128bn in 2018 versus USD 140bn expected in 2017, representing a decrease of approximately 8.3%.
- Primary activity from agencies and supras is expected to be higher than in the previous year.
- In terms of the economy, we expect moderate economic growth in 2018, which will depend on tax cuts to keep it sustained. These tax cuts could support consumer gains through later 2018 and into 2019. However, those gains remain at risk if the reform is not fully approved in Congress, weakening its potential long-term benefits.
- Soft inflation trends and Fed leadership changes could be two factors prompting investors to rein in their expectations of rate hikes. SG economists expect one rate hike in December 2017 and three in 2018.

GBP MARKET

2017 review

The GBP bond market remained driven by the UK DMO

- The UK DMO was the most active issuer in 2017, accounting for almost 50% of the total syndicated SSA supply in 2017.
- Regarding supra and agency activity, issuance volumes decreased slightly in 2017. The European Investment Bank (EIB) remained the most active issuer, as the supra created two new lines and increased their outstanding bonds several times.

GBP public sector issuance volumes 2017e vs. 2016

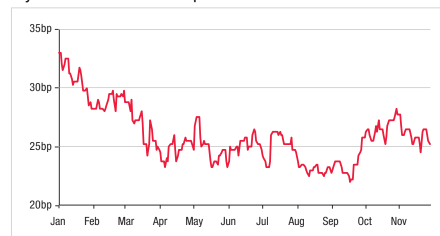
Sector	Issuance Volumes in 2016 (£ bn)	Expected Realized Issuance Volumes in 2017 (£ bn)	2016-2017e evolution (%)
Sovereign (UK DMO)	113	121	7,7%
UK DMO Auctions	93	98	5,5%
Agencies & Supranationals	24	22	-8,7%
Total Public Sector (excl. LA)	137	143	4,9%

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

Investor appetite remained focused at the long and ultra-long part of the curve

- Overall SSA volume is expected to be higher in 2017 than in 2016. This is driven by an increase of the primary issuance from the UK DMO, which is expected to reach GBP 121bn by the end of the year.
- The sweet spot continued to be the 10Y tenor, but in 2017 we saw the supply shift towards longer maturities. Issuance in the 3Y and 5Y area decreased significantly (GBP 7.2bn, 18%) compared to a year ago, while supply on the very-long end of the curve (20Y and beyond) increased significantly (GBP 6.4bn, +7.9%).
- The demand for long-dated supply remained solid in 2017, with investors actively participating in UK DMO syndicated transactions. Indeed, investors' willingness to extend their duration led those deals to be heavily oversubscribed, with an average ratio higher than 5.7. As such, long-dated issuance amounted to more than GBP 47.5bn, representing almost 40% of the total issuance volume in 2017 (vs. 34% the previous year).
- Non-domestic sovereign issuers have not been in the GBP market this year, while agencies and supras preferred to target the shorter part of the curve, in particular the 3Y to 5Y segment, to launch arbitrage transactions to diversify their funding portfolios.
- The decrease of non-domestic issuance is partially explained by the tightening of the cross-currency swap, which has not encouraged EUR-denominated currency issuers to tap the GBP market.

5-year GBP/EUR basis swap in 2017



Source: Bloomberg

- In general, domestic investors represented the bulk of the demand. International investor appetite for GBP-denominated 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, or following macro indexes.

The GBP market experienced some volatility on the back of Brexit developments

- The GBP market started the year strongly on the back of high redemptions in January. Supply to the primary market was driven by the UK DMO, whether in auctions (40% increase compared to 2016) or syndications (128% increase compared to last year). The market welcomed the new transactions, as witnessed by the record orderbook of GBP 23.5bn garnered for the launch of the new UKT 1.75% July 2057 benchmark in January, followed by interest of GBP 12bn to tap the inflation-linked UTKi 0.125% 2065 in February.
- At the end of March, Theresa May triggered article 50 of the Lisbon treaty, and with it the start of two years of negotiations to reach an amicable agreement with the EU. In an attempt to reinforce the Conservative party's presence and hence consolidate the UK government for Brexit negotiations, the Prime Minister surprised the market by calling for general snap elections on 8 June.
- In the run-up to the general elections, opinion polls started to raise doubt on May's ability to reach a large majority, pushing 10Y gilt yields below 1% for first time since October 2016 and the EUR/GBP exchange rate down to 1.14. Despite the volatility fuelled by uncertainties surrounding the elections and Bank of England actions, the primary market remained open. The UK DMO managed to tap its newly 40Y benchmark for GBP 5bn with a final book exceeding GBP 26bn.

DEBT CAPITAL MARKETS
PUBLIC SECTOR

- The UK general elections aimed at increasing the Conservatives parliamentary majority did not have the desired effect. Theresa May's party lost 12 seats in the House of Commons, which should have weakened her negotiating position for a "hard Brexit" during the talks with the EU started mid-June. In this context, the sterling experienced its biggest drop for eight months (-1.6% vs. USD and -1.4% vs. EUR on June 9th), while 10Y gilt yield moved around 21bp higher in the course of the month.
- The summer recess shored up the Gilt market, with UKT 10Y retracing their losses and reaching 1.03% at end of August (from 1.256% back in June). However, Brexit uncertainties prevailed. While the IMF revised the 2017 UK growth forecast down from 2% to 1.7% in July, the Bank of England revised its economic growth forecast down from 1.9% to 1.7% in 2017, and from 1.7% to 1.6% in 2018 in August. In terms of supply, the UK DMO increased its gilt I/L November 2056 for GBP 2.5bn in July, with an outstanding final orderbook exceeding GBP 14.8bn.
- During the September meeting, the Bank of England changed to a relatively hawkish tone, in a context of accelerating inflation (2.9% vs. 2% target) that drive the 10Y gilt yield ~32bp higher. Although the BoE maintained its monetary policy (rate at 0.25% and QE programme capped at GBP 435bn), the Monetary Policy Committee members noted that inflation figures could urge the BoE to tighten its monetary policy a greater extent.

2018 forecast

2018 SSA issuance programme

GBP public sector issuance volumes 2017e vs. 2018e

Sector	Expected Realized Issuance Volumes in 2017 (£ bn)	"Estimated Issuance Volumes in 2018	2015-2016 evolution (%)
Sovereign (UK DMO)	121	136	12,0%
UK DMO Auctions	98	111	13,7%
Agencies & Supranationals	22	25	14,3%
Total Public Sector (excl. LA)	143	161	12,4%

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

2018 major market trends in GBP

- In terms of supply, we expect GBP public sector issuance to be higher in 2018 to reach GBP 161bn. The UK DMO will continue to be the key player in the GBP market with total gross bond issuance (excluding bills) expected at GBP 136bn during the next year.
- We expect agency and supra primary activity to increase to GBP 24bn, which should represent around 5% of these issuers' funding needs next year.
- The Brexit discussions between the UK and EU lawmakers and uncertainties around the next steps are expected to continue to influence GBP market activity in 2018.
- Non-UK SSA issuers will remain dependent on window openings, mostly driven by the cross-currency swap dynamics. 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 long-term 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.

Emerging Markets

APAC

2017 review

A record year for volumes in Asia Pacific DCM

- Asia's international bond markets will post their highest ever bond volumes in 2017. At the end of Q3 2017, the G3 international bond volume in Asia, excluding Japan, had already soared to USD 243bn, a level never achieved before and well above the USD 205bn issued in full-year 2016. The year-long theme was risk appetite holding firm in the face of rising US interest rates. Low volatility in credit, continual tightening of credit spreads, massive liquidity inflows with investors, and persistently accommodative QE measures from central banks supported all segments of the debt capital markets, from corporate high yields to high grade financial institutions paper. At the beginning of 2017, while all eyes were turned to the first steps of the US presidency and various European elections and referendums, Asian was a safe investment alternative for most domestic and international investors. Despite a lower issuance volume expected from Chinese issuers in Q4 due to quota limits imposed on offshore financing, we still expect the 2017 to end around the USD 290bn equivalent mark.
- On the top of those figures for Asia (excl. Japan) G3 bonds, we also saw Japan hitting a record year in 2017 with up to USD 90bn equivalent for the full year (USD 73bn at end of Q3), with significant volumes for corporates like Softbank, Toyota, Asahi and Honda, adding to the sustained flow of USD and EUR TLAC issuances from all four Japanese mega banks. Same story from Australia: the country was very active in USD and EUR from both the corporate and FI sectors, and is expected to reach the USD 50bn mark in offshore G3 bonds (USD 36bn at the end of Q3 2017). Worth noting is the significant volume of inaugural financial institution (FI) green bonds coming from those two countries, mostly in EUR, in search of a new investor base among green-hungry institutions in Europe.

China still driving the region's overall growth

- At the end of Q3 2017, Chinese issuers (excluding Hong Kong) represented around 58% of the Asian (excl. Japan) G3 international bond issuance volumes, or USD 140bn equivalent. This compares with USD 104bn for full-year 2016. Adding Hong Kong to the mix, the total comes to USD 157bn equivalent for the first three quarters of 2017 versus USD 120bn for full-year 2016. Behind the surging volumes were investment grade bonds, which accounted for almost 72% of the total issuance in China, while high-yield bonds accounted for 28%, up from 21% last year. The impressive 75% growth rate for Greater China was mostly driven by a surge in corporate high-yield issuances, as well as flows from financial institutions. However, the fourth quarter of 2017 was impacted by the slower pace of Chinese regulatory approvals after the National Development and Reform Commission (NDRC) reached its annual quota limit for offshore G3 bonds from Chinese issuers. The S&P's downgrade of the People's Republic of China in September 2017 did not change the metrics of the market, as most investors expected the three international agency ratings to equalise (A1/A+/A+). This rating move was followed by dozens of rating revisions by S&P for several fully controlled state-owned enterprises (SOEs), with the same absence of impact on secondary credit spreads. However, excess leverage and regulatory uncertainty will remain on the agenda as potential macro risks in the year to come.
- Following on from last year's trend, the CNH bond market was extremely quiet. The total 2017 year-to-date issuance volume was limited at CNH 5.0bn, a further 65% decline from CNH 14.4bn of dim sum bonds issued in 2016. Only a few issuers made a limited appearance and volumes are expected to remain low in 2018. Two Chinese FI issuers, BOC (Johannesburg Branch) issued CNH 1.5bn of silk road bonds (3Y) and BOC Aviation issued CNH 1bn (3Y). Non-Chinese issuers in 2017 featured two Canadian banks, Royal Bank of Canada (CNH 600m 3Y) and National Bank of Canada (CNH 900m 3Y) and BMW from Germany with its CNH 1bn (3Y) dim sum bond issue.

High Yield bonds breaking through with panache

- High-yield volumes achieved the most significant growth out of the APAC corporate segment. Chinese property developers continued to flock to the offshore market and printed USD 35.5bn over the first three quarters of 2017, three times the volume observed in 2016. Two jumbo multibillion deals from Chinese property companies fuelled this growth: Kaisa Group printed a 4-tranche deal and a 3Y deal totalling USD 5.17bn, and China Evergrande issued a total of USD 6.3bn from three transactions this year. At the end of Q3, the total for Asia (excl. Japan and Australia) stood at ~USD 34bn, up by around 53% from the same period a year earlier. Those primary issuances came at very tight yields, on average at +4% for the BB range and +5% for the B range, in line with similarly rated names out of Europe and the US, thus largely removing the premium for the "emerging market" flavour seen in the past few years. In sympathy with the global market, documentation packages also came with lighter covenant protection for investors, easing the way for issuers in the market. Issuance from Chinese property developers were, however, the most restricted by regulatory constraints (NDRC approvals) towards the end of 2017. Those issuers made the most use of the window opened to them in the offshore USD Regulation S (RegS) market in 2016, after relying on their domestic RMB market until late 2016. In the absence of regulatory approval requirements for transactions below one-year maturity, almost twenty transactions came with 364-day offerings, the largest issued by Greenland Group at USD 500m. It remains to be seen whether the regulator will release new policies supervising issuance of such short-term bonds.

Financial institutions: China pushes volumes up, TLAC becomes a major topic in APAC, Japan and Australia go green

- The banking sector and non-bank financial institutions remained robust in 2017, with volumes at the end of Q3 reaching USD 122bn equivalent, largely surpassing 2016 full-year volumes (USD 105bn). Most of the Tier 1 and Tier 2 Chinese banks came to the offshore market for regular senior issues, green bonds and bank capital.
- In the senior segment, we noticed repeated USD RegS issuances from six big traditional state-owned Chinese banks, China Development Bank, China Exim Bank, and the "Big Four" banks. Traditionally big issuers of USD RegS bonds, these issuers increased their access to the EUR market, with China Development Bank printing up to EUR 1.5bn (3Y), China Exim Bank EUR 1bn (3Y) and ICBC EUR 1.1bn (green 3Y). In total, Chinese banks issued USD 32.1bn and EUR 6.1bn offshore bonds during the first three quarters in 2017, compared to USD 26.4bn and EUR 3.2bn for the same period in 2016. The proceeds mainly went towards refinancing Chinese corporates with regards to their offshore capital expenditure and acquisitions.
- China's mon-bank finance sector also saw a long list of leasing companies and insurance companies coming to the market. Total volume reached USD 21bn for the first three quarters, coming close to the full-year volume of USD 26bn in 2016. For example, BOC Aviation, with its three issuances of USD 1.7bn in total (USD 500m 5Y and USD 700m 10Y followed by another USD 500m 5Y), has become a regular issuer in the USD RegS market. Chinese Reinsurance also tapped the USD RegS market twice this year for a total of USD 1.5bn (5Y).
- Perpetual bond issuance reached USD 41.6bn in total for the first three quarters in APAC G3 markets. As expected, from the beginning of 2017 we witnessed a series of jumbo AT1 deals totalling USD 14.3bn for Chinese Banks, notably the record-breaking USD 7.25bn PerpNC5 for Postal Savings Bank of China, followed by smaller Chinese banks such as Bank of Qingdao (USD 1.2bn Perp NC5) and China Zheshang Bank (USD 2.175bn Perp NC5). Bank of Zhengzhou issued its debut dollar bond with a transaction of USD 1.2bn AT1 Perp NC5. Recently, China Merchants Bank (USD 1bn Perp NC5) and Bank of Jinzhou (USD 1.5bn Perp NC5) made their appearance, adding to the market momentum. A closer look at the orderbooks of these transactions seems to confirm that Chinese bank AT1 bonds have always had strong domestic investor support. Overall, Moody's noted "that regulatory measures implemented since January [2017] have been successful in containing financial risks and unwinding some shadow banking and interbank activities", resulting in positive credit impacts on banks. As such, capital needs should be limited in the coming years. Elsewhere, Korean banks were also active on the AT1 front, with USD transactions from Woori Bank and IBK.
- TLAC issuances in USD and EUR remained the main reason for offshore funding for the four Japanese Mega Banks. Altogether, they issued multiple billions of transactions in 2017 and are expected to do the same in 2018. So far, SMFG issued USD 12.7bn and EUR 2.3bn; MUFG issued USD 7.2bn and EUR 750m; Mizuho issued USD 6.5bn and EUR 500m; Daiwa issued USD 1bn.
- Greens: in addition to offshore bond issuances from Chinese Banks, the market witnessed active inaugural issuances from Australia (National Australia Bank in EUR 500m 5Y), Singapore (DBS in USD 500m 5Y) and Japan (Mizuho EUR 500m 7Y and SMFG EUR 500m 7Y).
- Covered bond issuers were also active during the year with noticeable transactions in EUR from Australian issuers like the National Bank of Australia (EUR 1.25bn 5Y), Westpac (EUR 1bn 5Y + EUR 1bn 7Y) and the Commonwealth Bank of Australia (EUR 750m 7Y). All three major banks in Singapore also issued covered bonds in 2017, helping to build out the curve for the AAA-rated SE Asian nation (DBS EUR 750m 7Y, UOB EUR500m 5Y, OCBC EUR500m 5Y).

USD RegS becoming a tremendous liquidity pool

- There was a gradual shift in the investor base for USD-denominated bonds from Asian Pacific issuers. From 2012 to 2015, around 46% of the transaction volumes belonged to both RegS and 144A issues. However, the issuance of both formats dropped to only 29.6% of the total issuance as of the end of Q3 2017, which meant RegS issues made up 70% of the primary bond market. The liquidity pool in the RegS market has grown tremendously, not only from Chinese and Asian investors' growth in assets under management, but also from global funds setting up offices in APAC to take part in Asian bond deals.

50 shades of green

- Supported by favourable regulatory and political environments in many countries in Asia Pacific, the green bond market boomed in 2017, with debut issuers coming from different industries in response to the rising enthusiasm of green investors.
- After People's Bank of China (PBoC with their Green Bond Endorsed Project Catalogue) and the National Development and Reform Commissions (NDRC) published their respective guidelines in December 2015 for financial bonds within the inter-bank and enterprise domestic bond markets, issuance came mainly from RMB market in 2016. As such, with proceeds not yet fully used in the domestic market, China played a less significant role in offshore green bond markets

compared to 2016, with its issuance volume dropping from 41% to 29% of Asia Pacific incl. Japan green-bond volumes. Financial institutions contributed to some of the largest Chinese green bond transactions of the year, such as the triple-tranche green deal, issued by ICBC Luxembourg (debut), of USD 450m (3Y), USD 400 (5Y) and EUR 1.1bn (3Y).

- Elsewhere, Japan and India made a big leap in their share of the APAC incl. Japan green bond market, going from 6% and 5% to 12% and 11% respectively. In Japan, the Ministry of the Environment of Japan (MOEJ) established the Green Bond Guidelines in March 2017, stating the basic required features a green bond. The market welcomed both Mizuho (debut, EUR 500m 7Y) and SMFG (EUR 500m 7Y) in the green bond arena.
- Despite a quiet 2016, Australia broke the record by playing an active part in the green market to represent 8% of regional volumes. Likewise, Singapore saw its first offshore green bond issuance after the MAS (Monetary Authority of Singapore) launched its Green Bond Grant Scheme, subsidizing issuers willing to list their green bonds in the City-State. In Singapore, DBS (debut) issued USD 500m (5Y) while in Australia the NAB (National Australia Bank) also printed a EUR 500m (5Y) deals, and QBE Insurance came in with a USD 300m (5Y) transaction.
- Most of the issuers from the corporate sector came from two of the largest developing economies in the region, China and India. Despite a much smaller role of Chinese corporates this year, China Three Gorges Corp printed its signature EUR 650m (7Y) transaction. In contrast, a series of Indian sustainable energy companies rushed to the market to take advantage of the green trend. Azure Power, the leading solar power producer in India, sold its debut green bonds of USD 500m (5Y). Greenko, one of the leading clean energy companies in India, presented its dual-tranche transaction of USD 350m (5Y) and USD 650m (7Y). Another renewable energy company Neerg also brought to market its debut USD transaction with green feature of USD 475m (5Y).
- On the sovereign side, Fiji became the first ever sovereign green bond issuer in Asia, with its FJD 100m (USD 50m equivalent) deal likely to be priced in November. The proceeds will be used to address climate change, especially through renewable energy and CO2 emissions reduction.
- Overall, EUR gained huge popularity among APAC-based green issuers this year. The total issue size grew from EUR 500m in 2016 to an unprecedented level of EUR 3.25bn by mid-October 2017. We expect European investors' appetite for green bonds to remain strong in 2018, allowing more issuers to test the market with their debut or repeated issues.

Public sector

- The issuance volumes from the Asian Development Bank grew significantly as planned after the merger of the Asian Development Fund into the Bank. Four of the ten largest USD transactions of the year came from the development bank, with USD 4bn and USD 3.75bn bonds maturing in 2022, USD 3bn maturing in 2020 and USD 1.75bn in 2021.
- On the EM sovereign front, the market was equally receptive to solid investment names like the Philippines' USD 2bn 25Y transaction (rated Baa2/BBB/BBB-). Also worth noting were the 3-tranche EUR (1bn 7Y) and USD (1bn 10Y and 1bn 20Y) issuances from Indonesia (Baa3/BBB-/BBB-), and the return of the Republic of Korea (Aa2/AA/AA-) to the market after three years of absence, with a USD 1bn 10Y transaction in the first week of the year.
- Adding the PRC to the sovereign issuer list, towards the last quarter of this year, the government of the largest player in APAC bond market, China, announced plans to issue USD 2bn of USD-denominated sovereign bonds listed in Hong Kong. This will be the first issuance of its kind in 13 years, which may be read as a positive sign, despite the downgrade of the country's sovereign rating by Moody's and S&P, and as a display of its financial might, following the historic 19th Communist party congress, to tackle rising debt.
- To the frontier of B+ rated sovereigns, we saw names like Sri Lanka (rated B1/B+/B+) come to market with a heavily oversubscribed USD 1.5bn 10Y transaction. Mongolia (rated Caa1/B-/B-) is making its second trip to the market this year, following a USD 600m 7Y deal in March, to price new USD 5Y 6-month bonds as early as late-October.

2018 forecast

China's dynamics and a growing South East Asian market should push Asia Pacific offshore DCM to new record levels.

China

- China's bond market has posted significant growth in the past six years, and we believe China will remain the main player for 2018's offshore bond issuance in the Asia excl. Japan Debt Capital Market, topping USD 175bn equivalent in G3 currencies.
- SOEs under central State-owned Assets Supervision and Administration Commission (SASAC) will keep printing a high volume of large signature bond transactions to fund their overseas projects and refinance existing debt, while more and more second-tier and provincial/local governmental SOEs are expected to issue significant amounts under the "One Belt One Road" initiative that is being promoted and further implemented.
- We also expect banks and non-bank financial firms to maintain their pace of issuance in both senior bond format, and Tier2/AT1 bonds to replenish their bank capital. We also see a more diverse profile of the FI issuers, with more provincial/local banks coming to test the bond market following the state-owned "Big Four" banks and policy banks.

- Chinese property developers dominated the high-yield bond market this year even though NDRC toughened their approval procedures. We believe they will maintain their role as the key issuers in the coming year, as a looming amount of existing bonds reach maturity in 2018, a large part of which is expected to be refinanced via new bond issuance. For industrial high yield names, given the low interest-rate environment, we expect they are eager to issue and therefore lock in the low funding cost.
- Although USD will remain the most preferred currency, as observed on the primary market in 2017, Chinese issuers will continue to benefit from the eurozone's low cost environment thanks to the ECB's cautious quantitative easing tapering strategy. EUR issuance is likely to draw growing popularity in the coming year. Repeat issuers are expected to tap the euro market again with a large amount of their 2015 issuance maturing in 2018 while more EUR debut issuers will benefit from the increasing familiarity of eurozone investors with Chinese credits.
- On the back of strong government initiatives to encourage an environmentally friendly economic development, we believe green bonds will continue to develop among issuers in China. With the first Chinese offshore green bond issued only in 2015 and a growing number of offerings in the past years, we believe this trend will spread to a larger issuer base as both issuers and investors become more familiar with such structure.

Korea

- Korean offshore market has traditionally been stable in terms of issuance volumes, half of the volumes being driven by the two major Policy Banks Kexim and KDB. Those two issuers typically access the G3 currency market through benchmark issuance and private placements, including structured PP. While total redemption will slightly reduce in 2018 to ~USD 26.6bn equivalent from USD 31.9bn in 2017, we anticipate modest growth in issuance volumes in 2018 to just below USD 30.0bn.
- While North Korea tensions will remain key on the agenda for Korean issuers, SG expects corporate clients to actively leverage offshore markets during windows when arbitrage will generate cost savings compared to domestic funding. Likewise, basis swap levels might create attractive situations where more Korean issuers, especially government related entities, might tap the EUR market in 2018 if it becomes competitive against the USD. Finally, for banks, bank capital will remain on the agenda with further AT1 issuances after those of IBK and Woori Bank in 2017 (SG bookrunner on both).

South-East Asia and India

- South-East Asia and India saw a substantial increase in volumes in 2017, with USD 64bn of issuance in the first ten months of the year. This compares with USD 52bn for all of 2016. As in previous years, the Financial Institution (FI) sector dominates with 49% of total volumes, followed by corporates at approximately one-third of issuance, and the balance from sovereigns (16%).
- We expect FI volumes to remain robust in 2018, driven by banks in the region continuing to issue across the capital spectrum. Singapore's banks launched Covered, AT1 and Senior Green Bonds this year, while Indian banks continued to monitor the AT1 and Green space. Senior issuance will largely be driven by refinancing, as bonds issued in 2013-2015 start to mature.
- Corporate issuance in 2017 was underpinned by the Utilities/Energy/Oil/Gas/Metals sectors, helped by a rebound in the global economy. Appetite for corporate paper remains strong in a low-yield environment, with most borrowers choosing the USD 144a/RegS route. While EUR-denominated corporate issuance from the region remains relatively scarce, we expect more companies to start exploring the European markets for diversification purposes next year.
- One notable feature of corporate issuance in 2017 was the volume of sub-investment grade transactions. High-yield volumes doubled to USD 12bn, helped by a number of debut issues from India, Indonesia and Malaysia. This trend is expected to extend into 2018, as smaller companies in the renewable energy sectors, real estate and others seek to lock in low financing rates.
- The Monetary Authority of Singapore (MAS) introduced new incentives for corporate bond issuers in 2017, which may provide a catalyst for increased volumes from the region. Under the MAS Asian Bond Grant scheme, qualifying borrowers can receive up to SGD 400,000 to subsidise the legal, rating and underwriting costs of bringing a new issue to market. Singapore is also rapidly establishing itself as a "green hub" for the region, and the MAS Green Bond Scheme will fund 100% of eligible expenses attributable to obtaining an external review for green bonds, capped at SGD 100,000.
- Sovereign issuance is expected to total USD 9-11bn via the regular frequent government borrowers in the region (Indonesia, Philippines and Sri Lanka).

Australia/New Zealand

- Australia and New Zealand remain a significant contributor to APAC G3 bond issuance, with volumes more than USD 55bn at October 2017. This compares with USD 72bn for all of 2016.
- Issuance from banks dominates, accounting for almost 85% of total volumes in the calendar year. The Major Bank Levy Bill, passed in June 2017 by the Australian parliament, set a levy rate at 0.015% on the balance of bank's liabilities (with certain exclusions) and is estimated to raise over AUD 6billion for the government over the next four years. This has had a moderate impact on volumes, and the major banks have been assessing the cost of issuance in certain formats. For example, the effective double application of the levy to secured funding like covered bonds may result in lower issuance in this format. Nonetheless, once the Big 4 Australian banks have reported their full-year results in

the coming weeks, issuance across the capital spectrum is expected to start picking up as we head towards 2018. Full-year volumes in 2018 are expected to be in line with or slightly below 2017 levels.

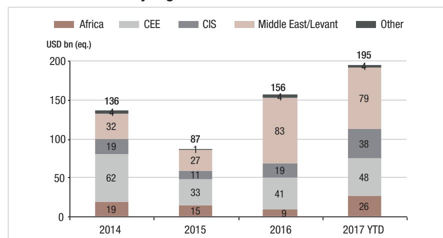
- At USD 9.4bn, the pace of corporate issuance is running slower in 2017 (-17% YoY). The privatization of numerous Australian utility & energy companies (Ausgrid, Endeavour Energy and others) was expected to drive up volumes significantly, as sponsors sought to term out bank loans in the global bond markets. So far, a large part of this refinancing has been executed in the US PP market instead, which has offered a more flexible and less document-intensive alternative. With both the USD RegS and EUR markets becoming more viable alternatives to the traditional 144a route, we expect corporate issuance from Australia to match 2017 volumes.
- By currency, the USD 144a/RegS markets remain the preferred choice for Australian/NZ borrowers, with around three-quarters of all G3 issuance denominated in USD. Issuance in EUR is significant and growing, however, and accounted for 28% of FI volumes and 25% of corporate volumes in 2017. This is partly driven by the demand-dynamic, as European investors sought to diversify their credit portfolios due to compressed spreads in their home region, courtesy the ECB bond buyback programmes. A favourable cross-currency basis swap, especially in longer tenors, has also been supportive for EUR issuance this year.

Japan

- While this document mostly focuses on Asia excl. Japan (SG DCM focus in the region), it is interesting to note that Japan had been very dynamic in its offshore G3 currency issuances throughout 2017. Volumes were massively driven by TLAC issuance from Japanese Mega Banks in January-February, as well as July and September. But new to the equation were the issuance of EUR green bonds by Mizuho and SMFG, as well repeat issuance from DBJ, Softbank. Finally, new comers on the corporate front in the like of Asahi (EUR bonds) might signal an increased interest from Japanese issuers for offshore bond markets, with very good response from investors from all over the place (Asia, Europe, US).
- Since Japan could hit up to USD 90bn of G3 offshore issuances in 2017, we think this level could be reached again in 2018, based on heavy TLAC issuances from Japanese Mega Banks (1/3 of Japanese International debt volumes at least), Softbank, DBJ and Orix regular bond issuance volumes, on the top of which significant M&A related corporate issuance volumes.

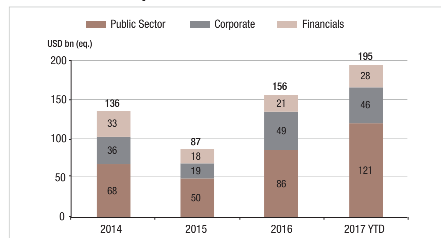
CEEMEA

CEEMEA volumes by region



Source: Bond Radar

CEEMEA volumes by asset class



Source: Bond Radar

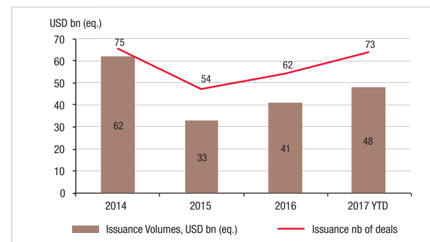
- 2017 marked the busiest activity for CEEMEA international debt markets over the last five years with total issuance volumes expected at USD 200bn (eq.), representing almost 30% increase vs. 2016 volumes.
- This robust performance was driven by the fast-recovering CIS (almost a 2x increase vs. 2016) and Africa (3x increase), outstripping the minor year-on-year decline in Middle East/Levant[1] primary activity (although its contribution is still around 41% of total CEEMEA supply). CEE deals remained the second largest source of primary supply for EM investors (25% of total supply).
- Political uncertainties, regional growth concerns, volatile price dynamics on commodities and close surveillance of the ECB and Fed monetary policies have remained the key themes for 2017. Issuers continued to benefit from a persistently low rate environment in the eurozone and the US, as investors looked for high-yielding investment opportunities in the emerging markets.
- SSA issuers remain the most active asset class in 2017, accounting for over half of total CEEMEA volumes, in line with the historically observed levels. Corporate issuance from the Middle East declined over 2017, dragging overall CEEMEA corporate issuance down. Issuance by financial institutions (FIs) has shown recovery.
- In 2018 we forecast the CEEMEA Eurobond supply to maintain similarly robust volumes of USD 200bn (eq.) on the back of a stable oil price outlook, supported by expected extension of crude oil producers' commitment to cut supply, and a heavy redemption schedule from emerging markets in the first half of 2018.

1. We use the term Levant to refer to transactions out of Iraq, Israel, Jordan, and Syria

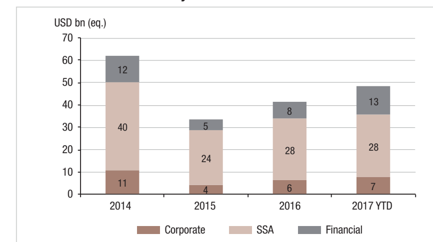
CEE

2017 review and 2018 forecast

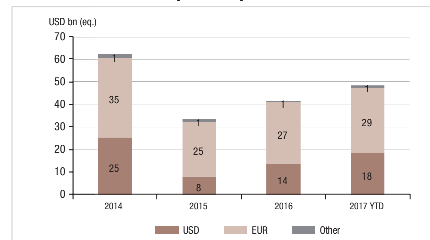
CEE issuance volumes



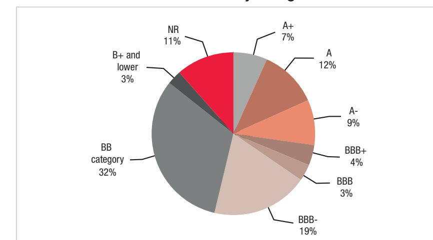
CEE issuance volumes by asset class



CEE issuance volumes by currency



2017YTD CEE issuance volumes by rating distribution



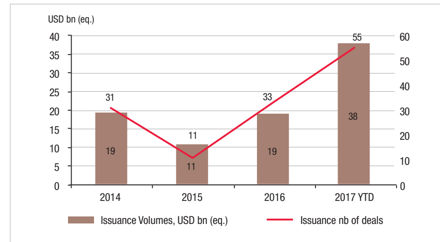
Source: Bond Radar

- With over USD 48bn (eq.) issued so far in 2017, the primary activity across the CEE region has already exceeded 2016 and 2015 volumes, approaching 2014 issuance. The increase was driven by a pick-up in issuance from Turkey.
- CEE sovereign issuers continued to dominate total issuance volumes as they sought to complete their funding strategies. Frequent issuers such as Romania, Slovenia, Poland and Latvia came to the market multiple times across the year. Benefitting from a low interest rate environment in the eurozone, CEE sovereigns targeted long-dated benchmark transactions: Slovakia, for instance, approached the markets twice this year to price a EUR 2bn 20Y and a EUR 1bn 30Y, with deals 1.5x and 3.3x oversubscribed.
- In the corporate space, the year marked the foray of several issuers to the international debt markets with the emergence of regional champions. In the sectorial focus, Media & Telecoms, Real Estate and Utilities & Power companies have largely driven the take-up in volumes.
- 2017 also marked increasing activity from FIs. Following its successful debut in 2016 on the covered bonds market, PKO BH issued two benchmark transactions in 2017, becoming a regular issuer in the covered bonds market and opening the way for the other CEE mortgage banks.
- The vast majority of total issuance was in EUR, as issuers benefitted from a persistently low interest rate environment in the eurozone, as well as the positive effects of the ECB's Asset Purchase Programme (APP). USD issues came exclusively from Turkish issuers.
- Investment grade transactions represented the lion's share of issues, with over 50% of bonds issued in the CEE region in 2017 rated BBB- or higher.
- We expect strong primary market activity in 2018, slightly short of 2014 volumes on the back of a positive growth outlook on CEE countries, with growth rates outpacing the average of the Western European nations. With countries keen to provide more investor-friendly reforms (Poland is looking to remove withholding tax, for instance), we expect deals from CEE to continue to attract heavy investor demand.

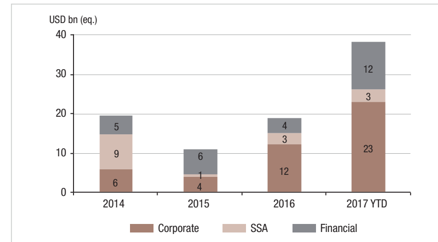
CIS

2017 review and 2018 forecast

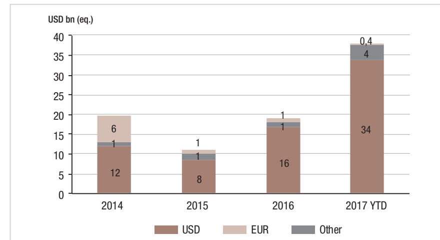
CIS issuance volumes



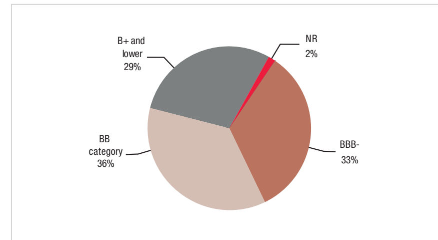
CIS issuance volumes by asset class



CIS issuance volumes by currency



2017YTD CIS issuance volumes by rating distribution



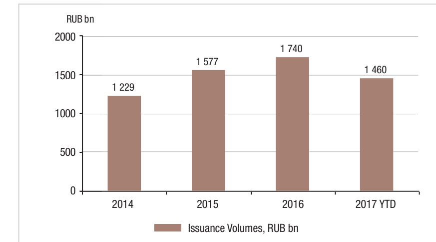
Source: Bond Radar

- CIS issuers showed robust primary market activity in 2017 with total issuance of USD 38bn (eq.) year-to-date, twice the volumes of 2016, solidifying the recovery observed last year and marking the busiest year for international bond issuance out of the region since 2013. Almost 70% of total volumes came from Russia, on the back of recovering macroeconomic conditions (SG Research expects the economy to grow by an average of 1.5% this year, leaving behind two years of recession), sustainable oil prices, and easing policy of the Central Bank of Russia (CBR), supporting a favourable outlook for Russian issuers.
- In terms of asset class split, the performance was largely driven by corporate issuers (USD 23bn (eq.), +90% YoY). The recovery in commodity prices drove issuance by Oil & Gas and Metals & Mining companies, accounting for almost 50% of total corporate issues. Prominent deals included three transactions by Gazprom for GBP 850m, USD 750m, and CHF 500m, a triple-tranche transaction by Kazmunaigas for a combined size of USD 2.75bn and a USD 1bn deal of Norilsk Nickel.
- The bulk of activity from FIs took place in the first half of 2017, with Credit Bank of Moscow approaching the markets twice with USD 700m AT1 Notes and USD 600m 10.5NC5.5 T2 bonds. Activity subsided in H2 2017 on the back of the weaker newsflow for Russian FIs and notably the CBR interventions for Otkritie and B&N Bank.
- International debt capital markets continued to serve as an important source of USD liquidity for CIS sovereigns, with two double-tranche transactions for Russia for a total volume of USD 6.9bn, a USD 3bn issue by Ukraine, marking the sovereign's return to markets post recent restructuring, and a USD 1.4bn double-tranche deal for Belarus. The year also marked the successful debut USD 500m 10Y Eurobond placement by the Republic of Tajikistan, which gained wide interest from the investors and highlighted that markets remained accessible to debut issuers across the credit spectrum.
- Overall, USD remains the currency of choice for CIS issuers, reflecting their current funding needs, and accounting for almost 90% of total volumes. The strengthening of the Russian economy reignited interest of the investors to RUB-denominated international placements, which saw strong recovery this year. Overall, four issuers placed Eurorouble bonds in 2017 raising around RUB 90bn, in stark contrast with the single-name issuance of RUB 15bn by Russian Railways in 2016 and RUB 75bn by the Ministry of Finance of the Russian Federation in 2015.
- We have observed rising investor appetite for high-risk credits, including oversubscribed deals for the Republic of Tajikistan, Ukraine and Belarus. Single-B credits accounted for a third of total 2017 year-to-date issues.
- We expect the supportive dynamics to continue in 2018, driven by a stable outlook on oil prices and economic recovery in the region, supporting the growing capex and M&A needs of corporates, and by a heavy Eurobond redemption schedule (a consequence of the record-high primary issuance in 2012-2013).

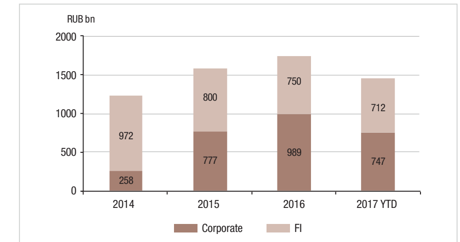
Emerging currencies: RUB

2017 review and 2018 forecast

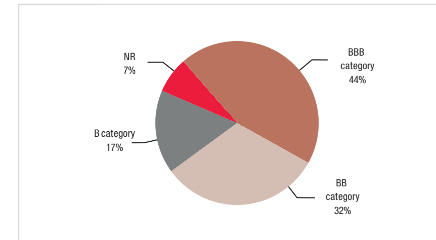
Rouble corporate and FI bond issuance volumes



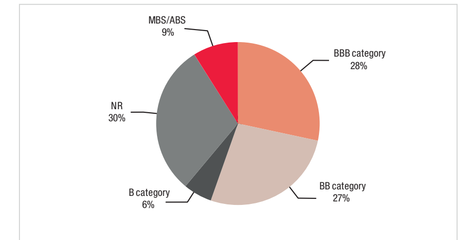
Rouble bond issuance volumes by asset class



2017YTD rouble corporate bonds by rating distribution



2017YTD rouble FI bonds by rating distribution



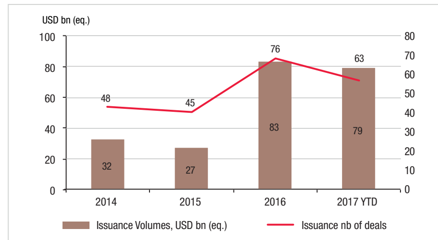
Source: Cbonds, as of 31 October 2017

- As per local Russian rating regulations, which came into force in July 2017, all local borrowers are now required to obtain a rating from the local agency accredited by the CBR (ACRA or Expert RA) to be eligible for inclusion in the CBR Lombard List (and therefore for repo transactions) and for any purchases by pension funds.
- The favourable market environment in 2017, supported by a switch to liquidity surplus in the banking system and easing monetary policy by the CBR (key rate cuts from 10% in January to 8.25% in October) allowed issuers to extend available tenors to 7+ years (Transneft, Russian Railways, Gazprom, STLC, Chelpipe). In terms of absolute coupon rates, September placements marked the lowest levels since 2013 (below 8% for top-rated corporates), marking a decline in corporate yields by 110-150bp during the year.
- As far as FIs are concerned, new CBR regulation that took effect in January 2017 require credit institutions to comply with the new mandatory reserve requirements. Liabilities on bonds issued by FIs and maturing in less than three years from the issue date are now included in reservable liabilities, leading to an increase in the cost of funding for banks by approximately 0.3-0.4%.
- Simultaneously, (1) the OFZ curve started to take a normal shape (from an inverted shape) and (2) abnormal spread contraction diluted the premium for credit risk: during the year, Tier-1 issuers were able to place bonds with a 45-80bp spread over the OFZ curve (vs. 75-100bp in 2016), and Tier-2 issuers with an 85-150bp spread over the OFZ curve (vs. 120-200bp in 2016).
- From October the CBR suspended the inclusion of new securities from credit institutions (excluding MBS) and VEB, insurance companies and supranationals into its Lombard list, affecting secondary market liquidity.
- We expect the CBR to follow a cycle of key-rate cuts to a level of 7.0% by the end of 2018, which will translate into lower OFZ and corporate yields. However, taking into consideration the fact that the CBR key rates largely affect the shorter-end of the yield curve and that the OFZ curve is steadily acquiring a normal shape, we expect the corporate rates to bottom out at the 7.0-7.5% level. Therefore, the sweet spot for tenors will go down from 5+ to 3-5 years.
- The Russian economic recovery, CPI deceleration and CBR policy will support the local bond market and we anticipate corporate RUB bond volume issuance (including FIs) at RUB 1.9-2.0tr in 2018. However, we remain cautious to the fact that favourable internal market conditions may be undermined by negative external factors (USD rate hikes, shrinking balance sheets of central banks around the world).
- Rising liquidity surplus will discourage investors from selling assets, resulting in a significant decrease in the securities market turnover.

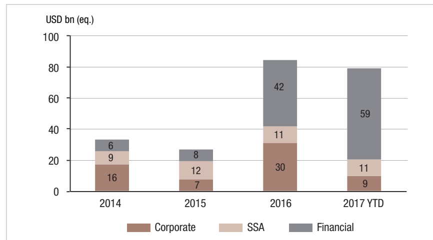
Middle East/Levant

2017 review and 2018 forecast

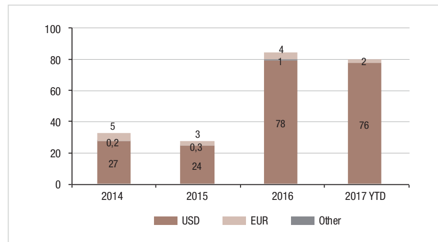
Middle East/Levant issuance volumes



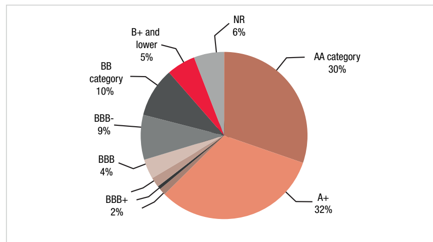
Middle East/Levant issuance volumes by asset class



Middle East/Levant issuance volumes by currency



2017YTD Middle East/Levant issuance volumes by rating distribution



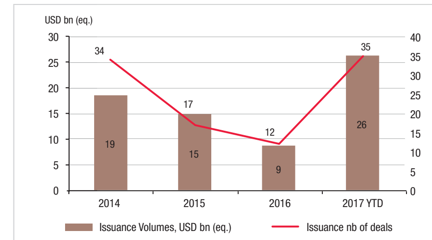
Source: Bond Radar

- Despite a record-breaking first half of the year, Middle East/Levant issuance volumes fell 6% year-on-year due to several macroeconomic shocks in the region, most notably the Qatar diplomatic crisis, volatile oil prices and varied economic performance across the countries.
- The vast majority of issuance was carried out by sovereigns, as corporate issues shrank by 70%. Saudi Arabia came to the market several times in 2017 to issue multi-billion dollar bonds, and Iraq returned to syndicated international bond market for the first time since 2006, as strong investor appetite for risk in the region drove demand higher.
- Issuance continued to be almost exclusively in USD, as OPEC's commitment to oil production cuts strained USD inflows for sovereigns and corporates and necessitated an increase in borrowing.
- 78% of the bonds issued received an investment grade rating, although issues were slightly more concentrated with the higher-rated issuers (A and higher), partially due to the jumbo dollar offerings by borrowers such as Saudi Arabia.
- Geopolitics will remain a major theme in 2018 as tensions appear to be materialising between regional and international players. Policy repositioning and the unfolding of the Syrian situation will likely bring forth concerns that may impact international investors' appetite for regional risk, and a deterioration of the current strategic status quo should not be ruled out entirely.

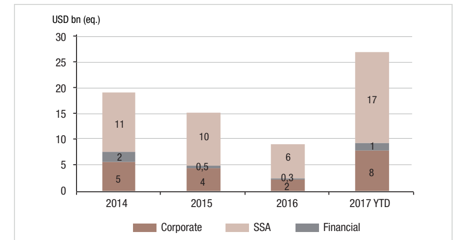
Africa

2017 review and 2018 forecast

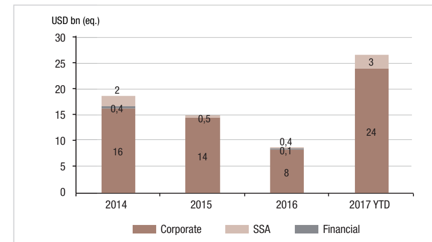
Africa issuance volumes



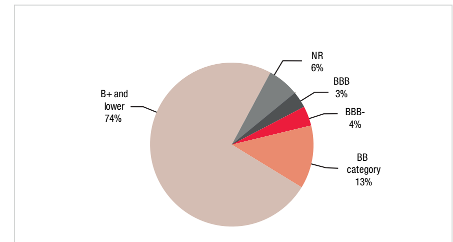
Africa issuance volumes by asset class



Africa issuance volumes by currency



2017YTD Africa issuance volumes by rating distribution



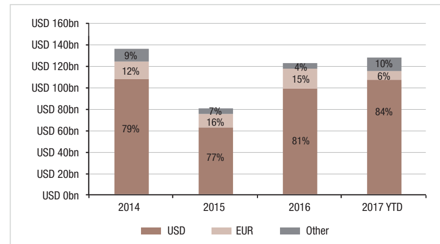
Source: Bond Radar

- Primary supply from African issuers increased significantly in 2017 up to USD 26bn eq., representing a 189% increase on 2016 volumes.
- The recovery was largely driven by the strong inflow of sovereign transactions, as several countries had to refinance their debt in 2017. Despite political uncertainties and concerns caused by Mozambique's default on its Eurobond, the offerings by African sovereigns continued to attract strong interest from the investors, searching for opportunities in the ultra-low rate market environment. Thus, among the others, we saw two triple-tranche transactions by Egypt over a wide range of maturities of 4.5-30Y with a total of USD 7bn raised, a double-tranche EUR 625m and USD 1.25bn deal for Ivory Coast, three transactions from Nigeria (with USD 1.8bn raised) and a double-tranche transaction for South Africa for USD 2.5bn.
- The favourable outlook on metal prices supported the successful return of Metals & Mining companies, with a double-tranche transaction from First Quantum Minerals (combined size of USD2.2bn) and a double-tranche USD 1.1bn offering from Sibanye Gold Limited.
- Non-investment grade issuers represented over 80% of total African volumes, with Naspers bringing the only investment-grade corporate deal to the market.
- We expect 2018 primary activity to be largely in line with the recently observed volumes, as sovereigns will maintain elevated funding needs, most notably Egypt which is likely to access the market in the same volume context as it did in 2017.

LATAM

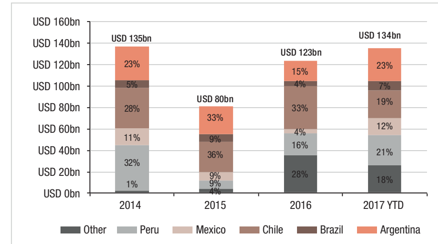
- As did the broader emerging market overall, Latin America had a spectacular year in 2017. Despite the many challenges that have come with the new US administration, the region benefitted greatly from the risk on environment that occupied investors' minds this year. The sell-off in treasuries allowed investors to benefit from higher yields, while continued credit spread tightening allowed issuers to break supply records.
- The region had to navigate challenges of various natures, but the country in the eye of the storm was Mexico. The election of Donald Trump and his "America First" rhetoric initially worried investors deeply. The Mexican peso was a major indicator of the expectations of the impact on the Mexican economy. The price of the MXN reflected mainly the risks of a renegotiation of NAFTA (North American Free Trade Agreement), although it was also used as a hedge for EM risk given it is the most liquid EM currency. Its sell-off in October reflected the increasing uncertainty the other two members of the agreement face regarding the final outcome of the renegotiation. No limit of negotiations has been set, but after failing to find common ground in the last round, further rounds were announced, pushing the currency lower and impacting credit spreads.
- More broadly, 2017 confirmed the return of Argentina and its array of issuers to the capital markets. This was also the case for Brazil. The region's largest economies represented more than 75% of the year's supply, equally distributed. Investors seem now to have more choice, if they can stomach the risk, compared to 2015 when Mexico was by far the largest contributor.
- 2018 will be an election year in the region. The two largest economies will have presidential elections: Mexico in July, followed by Brazil in October (former President Lula da Silva has a lead on the polls but could be barred from running).
- Both countries lack a clear dominant candidate who is expected to win the election. Polls will be driving investors' appetite for the countries' credit depending on how business-friendly the potential future presidents will be.

LATAM supply by currency (2017 YTD)

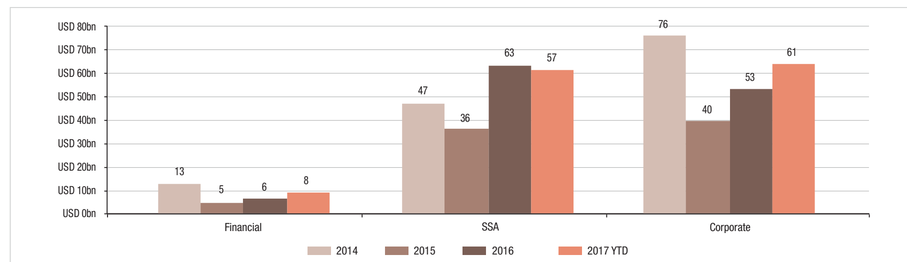


Source: Bloomberg, SG Analytics

LATAM supply by country (2017 YTD)



LATAM supply by type of issuer (2017 YTD)



Source: Bloomberg, SG Analytics

Corporates

INVESTMENT GRADE

2017 review

EUR MARKET

- As in 2016, only Mexican corporates tapped the single currency market. In February, Pemex printed the largest EM trade in euro through a 3-tranche exercise totalling EUR 4.25bn. The other large corporate issuer that was once a regular on the market, America Movil, was absent this year. Latam's largest telecom corporation announced earlier in 2017 that it would continue along its deleveraging path by paying down its redemptions with cash flow rather than tapping the debt market to refinance.
- A couple of new issuers appeared in the euro market. Two subsidiaries of Mexican group Alfa, headquartered in Monterrey, issued benchmark EUR-denominated bonds for the first time. Sigma Alimentos came to the market with a new EUR 600m 7Y while the auto-part manufacturer Nemak (non-IG) was able to print a new 7Y and with IG documentation. Together with FEMSA's inaugural EUR bond issued in 2016, the two deals confirmed the trend of Mexican corporates diversifying into Europe.

USD MARKET

- The US dollar market continued to be the market of reference for the region's corporate issuers.
- Brazilian corporate issuers returned to the market in force in 2017. We saw Petrobras (non-IG but issuing with IG documentation) come to the market twice, combining its exercises with liability management. The issuer has now streamlined its debt maturity profile and bond curve. The transactions were welcomed by investors: the orderbook for the 30Y tranche in its last transaction in May was more than 5x oversubscribed, while price came flat to fair value.
- Pulp and paper producers made a strong comeback this year. Fibria issued a new 10Y the second week of the year, while Suzano managed to print a 30Y transaction in September. Chilean Celulosa Arauco did the same with a 10Y and 30Y transaction to finance a tender on some of their existing bonds.
- Another long-awaited Brazilian issuer came back to the market in January: Embraer printed a new 10Y USD 750m. Vale also revisited the market. After its return in 2016 with a new 5Y, followed by a new 1Y. This time the world's largest iron ore producer tapped its existing 2026 bond for USD 1bn. Braskem, too, came back to the market after a long and arduous hiatus. The company faced a difficult job as it is owned by both Petrobras and Odebrecht. Eventually they priced a new USD 500m 5Y and USD 1.25bn 10Y with a strong orderbook of USD 2.5bn on the long 5Y; and USD 4bn on the long 10Y and negative NIC.
- In Mexico, we saw Pemex come to the market to finance tenders on multiple USD bonds. Total issuance was USD 5bn. With presidential elections looming in 2018, issuers started to pre-fund the year. Another large issuer from the second largest Latin American economy was the new Mexico Airport. After its inaugural transaction in 2016 with sizable green bonds, the issuer came back in September with a total USD 4bn issued. In addition, Mexichem financed the acquisition of Israeli firm Netafim with a USD 1bn trade evenly split across 10Y and 30Y. Grupo Bimbo issued a new 30Y USD 650m which came with a negative NIC even in a difficult day for the USD bond market where other transactions had difficulties gaining momentum.
- Interestingly, we had CFE tap the Formosa market with a USD 750m amortizer that matures in 2047. This was the first issuer to tap the market after regulation was amended to allow Formosa investors to buy BBB names. This was the first Formosa ever from a Latam issuer.
- Other corporates from the region tapped the market as well. We saw multiple corporates from Chile, but the largest by far was Codelco. The largest copper producer in the world came to market in July with a combination of 10Y and 30Y (USD 2.75bn) that was partially destined to finance a tender on some of their existing bonds. Other Chilean names, such as ENAP, Inversiones CMPC and Celulosa Arauco, came to the market while Falabella completed the list. The state-owned oil & gas company PetroPeru came to the market to finance its strategic Talara refinery with a 15Y and 30Y transaction.

2018 forecast

- Given the fragmented political scene, we expect to see increased volatility. This has pushed many issuers to prefund 2018 in order to avoid any major market disruptions. Issuers have been pro-active in dealing with their upcoming maturities. We saw many players in the region perform liability management exercises. We only have around USD 3.75bn of redemptions in USD coming due in 2018, while there is only one issuer, America Movil, to have redemptions in euros (EUR 1.3bn).

Public sector

2017 review

EUR MARKET

- The Republic of Chile was for many months the only Latam sovereign to tap the euro market. The issuer launched its annual funding exercise with a EUR and USD trade in May. The issuer had also simultaneously tapped both markets the year before. The euro transaction was well received by the market, showing continuous demand for the best rated Latam sovereign. NIC for the EUR 700m tap of the 2030 bonds was only 6bp.
- The other sovereign to come to the market was the Republic of Argentina. The issuer was upgraded to B+ by S&P after President Macri's good results in the general elections. The Ministry of Finance wasted no time and issued a new euro triple-tranche in early November. The issuer had earlier announced at its international roadshow its plans to tap the single currency market. The country launched EUR 1bn of long 5Y, EUR 1bn long 10Y and a rare EUR 750m 30Y, upsized from EUR 500m due to high demand.
- Two other SSA issuers tapped the market, CAF did a EUR 750m 5Y while the largest province of Argentina, Buenos Aires, came with an unusual EUR 500m 5.5Y that was more than 4x oversubscribed, making it the second Argentinean issuer after the Republic to tap the European market.

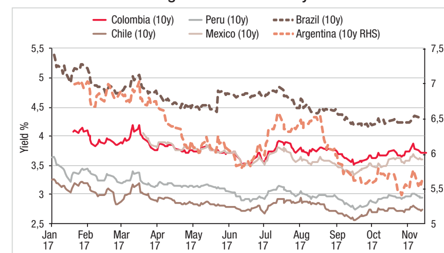
USD MARKET

- We saw many sovereign issuers come to the market in 2017. The year was opened by the Republic of Ecuador in early January before the Presidential elections took place. Other smaller issuers surfaced the same week, with Honduras and the Dominican Republic tapping the USD market. Both Central American countries tapped their bonds later in the year. January continued its hectic pace with deals from Colombia and Argentina. The latter eventually came back to the market in June with a new USD 2.75bn 100Y, a tenor that had only been printed by Mexico and Petrobras in the region. The issuer with a long history of defaults raised a lot of eyebrows around the world and in the local press due to the cost. The transaction was used to solidify the message that the country had fully returned to the international capital markets after a conflictive decade with some of its creditors.
- The Republic of Brazil also came back to the market this year, tapping the 10Y issued in 2016, the proceeds of which were used to refinance upcoming redemptions and liability management. The United Mexican States tapped the market in March with a new USD 2.4bn 10Y and then came back in October with a new USD 1.8bn 30Y.
- As mentioned above, in May Chile issued the only transaction that involved both USD and EUR. The USD leg, consisting of a USD 1.25bn 30Y was used to partially finance a tender on their 25s and 42s USD bonds. The trade was almost 5x oversubscribed.
- We saw multiple sovereigns come to the market in their local currencies. This was the case of Chile, Peru and Uruguay, as well as the province of Buenos Aires. This highlighted the demand from international investors for local bonds. As shown in the charts, more than 10% of supply came in non-USD, non-EUR currencies.
- From the provinces of Argentina to the smaller nations of Jamaica, Guatemala, Paraguay, Bolivia, the USD market saw multiple infrequent names take advantage of the excellent market conditions and low spreads.
- Worth noting: the region saw its first public social bond issued by NAFIN, the Mexican development bank, denominated in MXN with an SPO. The issuer had already tapped the green bond market in 2015 with a 144a/RegS USD deal.

2018 forecast

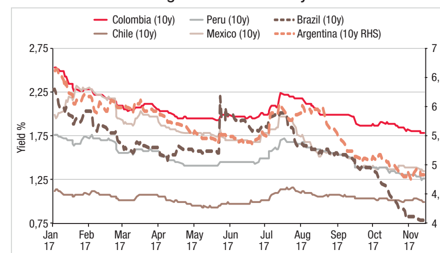
- We expect supply to be driven by multiple factors. The evolution of US rates, with the new Chair of the Fed Jerome Powell, and the impact this could have on the US dollar will affect appetite for EM paper. In addition, the health of the Latin American economies, except for Mexico, is quite dependent on commodity prices. The return of global growth, the US economy and the amount of available liquidity will all be decisive factors for the appetite for Latam paper.
- The region's SSA issuers have slightly more than USD 30bn in upcoming maturities, while we do not see anything maturing in euros. We expect issuers to continue to benefit from the favourable conditions.

LATAM IG & HY sovereign USD benchmark yields trend in 2017



Source: Bloomberg

LATAM IG & HY sovereign EUR benchmark yields trend in 2017



Source: Bloomberg

Financial institutions

Senior unsecured market

2017 review

USD MARKET: Investment grade and high yield

- Financial issuers remained the smallest contributors in the region, with less than 7% share of the total supply. Mexican Unifin tapped the USD market with a USD 450m 7Y deal in May. We saw many Argentinean banks take advantage of the ARS-denominated "euroclearable" format. Banco Macro, Tarjeta Naranja, Banco Supervielle and Banco Hipotecario all issued ARS-denominated 144a/RegS transactions available for international investors.
- The last quarter of the year was more active than usual. We saw Banco do Brasil come back to the market for the first time since 2014. The Brazilian issuer launched a USD 1bn long 7Y bond in October. The transaction was 5.5x oversubscribed and came flat to secondaries. Banco del Peru, Bancolombia and Banco de Costa Rica also came to the market.
- Finally, we had Chilean Banco de Credito e Inversiones come back after a long hiatus with a new USD 500m 10Y. The majority of Chilean issuers continued to finance themselves in the local market, while tapping the international markets with private placements in AUD or CHF for pricing arbitrage reasons. The draft of the new banking law incorporating Basel 3 has been submitted to Congress but its implementation is likely to take time on account of the Presidential election.

2018 forecast

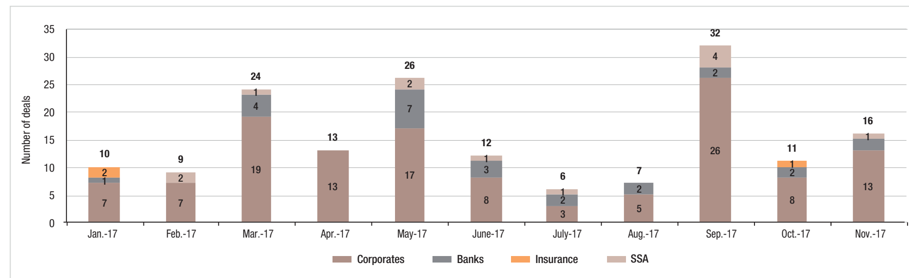
- Next year will be an electoral year, with the former Chilean President Piñera expected to win a second mandate. More clarity should follow. However, some Chilean banks might be tempted to come to the market before the final law is set in stone. The need for capital for the country's banking system remains fairly manageable, at around USD 3-4bn. We see mainly AT1 instruments filing this regulatory gap.

Liability Management

OVERVIEW

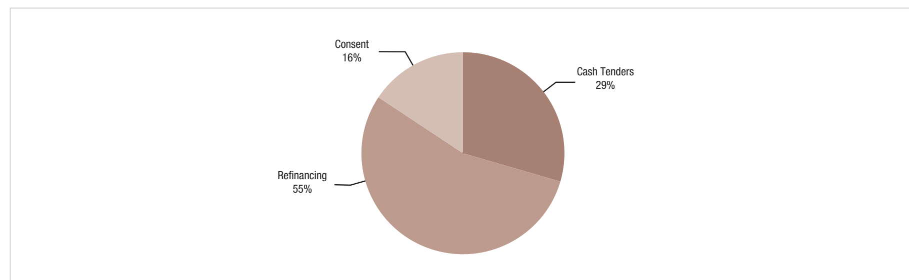
- The Liability Management (LM) market remained very active in 2017, with 166 transactions executed in the European markets in 2017 year-to-date, compared to around 170 transactions for the same period last year.
- LM activity remained correlated to primary market activity, with activity peaking in March, May and September, those months being the usual suspects for debt supply.

LM remained strong in 2017, led primarily by corporates



Source: SG CIB Analytics

Refinancing transactions from corporates represented the bulk of LM deals



Source: SG CIB Analytics

Corporates

2017 review and 2018 forecast

- Corporates continued to dominate the LM activity in Europe in 2017, accounting for 76% of the total number of deals executed this year. A total of 126 corporate LM transactions were performed in 2017 year-to-date, compared to 125 for the same period last year.
- Repurchases of EUR-denominated bonds experienced a higher average take-up of 41% (vs. 31% in 2016) – these exercises took the form of refinancing rather than pure cash tenders.
- The ECB's Corporate Sector Purchase Programme (CSPP) continued to cause secondary spreads to tighten across the board for European issuers, with negative tender yield offers being the 'new norm'.
- Since the launch of the CSPP, primary markets have also generally been in good shape, encouraging issuers to pro-actively refinance upcoming redemptions and optimise their interest expense, while extending their average maturity. There have been 72 refinancing transactions year-to-date across various formats (tenders followed by new issue, new issue followed by tenders, exchange offers, intermediated tenders) versus 58 during the same period last year.
- Additionally, there were 31 cash tender offers, driven mainly by issuers in the metals & mining sector (ArcelorMittal, Anglo American, BHP Billiton, Rio Tinto) who used the significant free cash flow generated by the commodities price rally to reduce absolute debt and decrease costs.
- Corporates continued to exercise consent solicitations for a variety of reasons, with 23 such transactions executed this year. The most prominent of these were in the context of M&A/restructuring activity, where issuers targeted all their outstanding bonds to gain bondholders' approval (Accor on EUR 2.9bn, Pentair on USD 2.8bn, Carmila on EUR 1.2bn, Essilor on EUR 800m) and/or seek amendments to terms and conditions (KazMunayGas on USD 7.9bn in June, and on USD 3.6bn in September).
- We expect this strong LM trend to continue into 2018 for corporates, driven by the low-yield environment and M&A activity.

Financial Institutions

2017 review and 2018 forecast

- The LM activity for financial institutions (FI) was behind 2016, with 25 LM exercises in 2017 year-to-date compared to 45 in 2016, where banks accounted for almost all of these transactions.
- Cash tender offers were the most commonly used forms of transactions, targeting all asset classes across the capital structure:
  - Senior: senior debt LM was the key theme for financials in 2017. We saw some prominent transactions from Credit Suisse (EUR 3.75bn capped tender offer on 10 senior bonds and a concurrent any-and-all tender offer on 6 EUR and USD bonds with a total outstanding of EUR 6bn eq., of which one grandfathered Tier 2 bond) and Lloyds with a cash tender offer on TLAC-ineligible senior OpCo bonds. Late July, Novo Banco launched a cash tender offer and consent solicitation on 36 of its outstanding senior securities as part of its restructuring plan.
  - Subordinated: some banks continued to optimise their regulatory capital positions by repurchasing old-style or grandfathered Tier-1 and Tier-2 bonds (CASA, Credit Bank of Moscow, RBS, Ulster Bank).
- The majority of consent solicitations were conducted in conjunction with tender or exchange offers to allow for early redemption (Vakifbank, Hoist Kredit, Novo Banco, Banca Crige) or made in the context of internal reorganisation (Old Mutual, Danske Bank, Nordea in the context of relocation to Finland).
- Insurers were not very active in the LM space in Europe, with the main transactions coming from UK issuers on the likes of Old Mutual, RSA Insurance Group and Phoenix Group.
- For 2018, 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 to TLAC and MREL requirements.

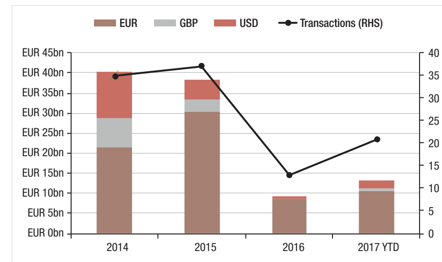
Hybrid Capital Market

Corporates

PRIMARY MARKET ACTIVITY

2017 review

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

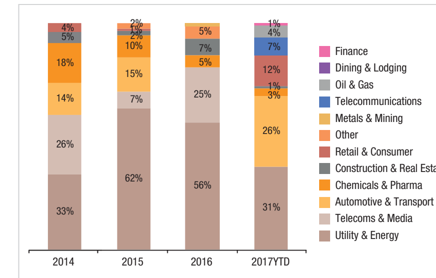


Source: SG CIB Analytics, Dealogic

- 2017 corporate hybrid issuance was limited due to lower hybrid refinancing needs and less M&A activity.
- In Europe, the bulk of issuance on the market came in the first half of the year, with volumes split evenly between Q1 and Q2. The ECB CSPP continued to support new issue conditions with the average subordination premium tightening by a further 140bp since the beginning of the year, from 310bp on average to 170bp.
- With rates and corporate bond spreads remaining at historically low levels, hybrids continued to offer investors a very attractive yield pick-up.
- In 2017 year-to-date, European corporate issued EUR 13.3bn eq. of hybrids.
- 2017 major trends can be summarised as follows:
  - 2017 issuance was again dominated by the utility & energy sector, as illustrated by TenneT's first-ever green hybrid bond for EUR 1bn (issued as replacement for a call of EUR 500m in June 2017), SSE's EUR 1.2bn equivalent two-tranche issuance (issued as replacement for calls of EUR 750m and USD 700m in September 2017) and Suez's EUR 600m PerpNC2024. The automotive sector was the second busiest with Volkswagen pricing a dual tranche EUR 3.5bn subordinated perpetual bond in June.
  - 2017 also saw the lowest coupons ever in the primary market: following Evonik's inaugural EUR 500m 2.125% 60NC5.3 hybrid bond issued in July, Danone priced in October its inaugural EUR 1.25bn PerpNC5.6 hybrid bond with a subordination premium in the low 120bp, breaching the 2% coupon mark, Ferrovial printed in early November its inaugural EUR 500m PerpNC5.5 at 2.125% followed by Iberdrola's second-ever green bond hybrid for EUR 1bn at 1.875%.
  - All hybrids with first-call dates in 2017 were redeemed, but not all were 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 25 October, BG Energy (acquired by Shell and upgraded) announced its intention to call three of its outstanding hybrids (GBP 600m, EUR 500m and USD 500m) without replacing them.
    - RWE redeemed three of its hybrid bonds with calls in April, July and October 2017 without replacing them. In late September, the company also executed a cash tender offer on the rest of its hybrids using the cash from the reimbursement of the nuclear fuel tax to buy EUR 585m eq. of nominal.
    - On 9 February, Wienerberger called its EUR 500m PerpNC2017 at the first call date without replacement, despite the replacement intention language in the documentation (even if not rated by S&P).

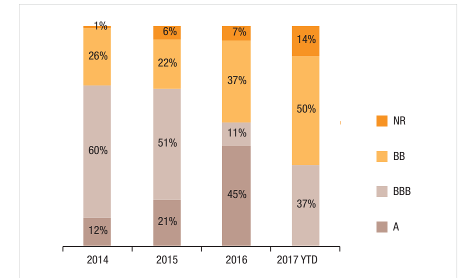
HYBRID CAPITAL MARKET
CORPORATES

In 2017 corporate hybrid supply came primarily from the utility & energy and automotive sectors



Source: SG CIB Analytics, Dealogic

In 2017 the primary market was dominated by lower-rated corporate hybrids (instrument rating)



Source: SG CIB Analytics, Dealogic

DEVELOPMENTS IN THE HYBRID SPACE

S&P Advanced Notice of Proposed Criteria Change

In late October, S&P released a Request for Comment (RFC) detailing the proposed changes to their April 2013 criteria ("Methodology And Assumptions: Assigning Equity Content To Corporate Entity And North American Insurance Holding Company Hybrid Capital Instruments"). Key proposed changes are summarised below:

High Equity Content (HEC) hybrids

- Stricter eligibility criteria for high equity content hybrids, with only mandatory convertible notes and government-held hybrids meeting the current conditions for HEC being eligible for 100% equity under S&P's revised criteria. In this context, a mandatory deferral feature and absence of step-up alone are no longer sufficient to secure high equity content.
- Therefore, a High Equity Content fixed income instrument (publicly sold) with a mandatory deferral trigger (for issuers rated below A-) is no longer possible at S&P.

LM within the first five years

- S&P would be inclined to allow for a refinancing of hybrids within the first five years if it is replaced with an instrument that has a lower "all-in" refinancing cost (i.e. taking into account coupons and redemption premium, if any). This is a dramatic shift of position from S&P who have always been very strict on the five-year rule.
- It is worth noticing S&P's clarification on the replacement amount. Indeed, the previous "nominal-for-nominal replacement rule" (inherited from the 2008 Hybrid Capital Handbook methodology) stated that "the replacement issue should equal at least the amount redeemed. (...) We do not generally consider less than full replacement by another hybrid capital issue to be adequate." In October's proposal, the replacement would need to be done on an equity content basis and not on a nominal for nominal basis anymore (i.e. 100% of IEC could be replaced with 50% of HEC or common equity).

S&P would review and take comments into considerations before publishing their definitive criteria. The deadline for response was 30 November.

2018 forecast

- In 2018, we expect corporate hybrid issuance volumes to be largely driven by M&A (e.g. Bayer plans to issue hybrids to finance the Montsanto acquisition), and by replacement of upcoming redemptions (~EUR 9.2bn eq. in 2018 and ~EUR 6.7bn eq. in 2019). We expect the following issuance volumes:
  - In EUR, a total of EUR 12bn of issuance;
  - In USD, a total of USD 3bn of issuance;
  - In GBP, a total of GBP 1bn of issuance.

Financial Institutions

REGULATORY ENVIRONMENT

Banks

Additional amendments to Pillar 2 requirements

- On 8 September, the Presidency of the Council of the EU published a non-paper discussing additional amendments to Pillar 2 (P2)-related provisions in the draft Capital Requirements Directive (CRD V), and to own-funds related provisions to the draft Capital Requirements Regulation (CRR).
  - The proposed draft reflected that the Pillar 2 requirement (P2R) and Pillar 2 guidance (P2G) addressing different manifestations/aspects of the same risk, should not be construed as an overlap, and should therefore not be prohibited.
  - The proposals also included the introduction of grandfathering of AT1 and Tier 2 instruments that do not comply with the new requirements to be introduced by CRR2 (mandatory point-of-non-viability (PONV) clause for third country law issuances, no set-off and netting arrangements). The grandfathering period would be three years from 1 January 2019 and would apply to any AT1 and Tier 2 instruments issued before the date of entry into force of the CRR Proposal, and it would cease to apply after January 2022, such that non-compliant issuances would cease to qualify as AT1 or Tier 2 instruments.
- On 24 February, the Bank of England's Prudential Regulation Authority (PRA) published a consultation on "Refining the PRA's Pillar 2A (P2A) capital framework", more than a year after the P2A framework entry into force on 1 January 2016:
  - The PRA proposed to (i) refine its P2A methodology for companies using the Standardised Approach (SA) for credit risk, (ii) update its internal-rating based (IRB) credit risk benchmark as part of its P2A methodology and (iii) take into account the upcoming IFRS 9 standard in the supervisory review and evaluation process (SREP).
  - The updated P2A framework will be implemented on 1 January 2018.

IFRS 9 implementation and impact on capital requirements

- In 2017, the European Banking Authority (EBA) published several papers on transitional arrangements phasing in the capital impact of IFRS 9 and implementation of IFRS 9:
  - In March, the EBA disclosed that i) transitional arrangements need to be in place at the time of implementation of IFRS 9 on 1 January 2018 with a phase-in schedule of 80% in 2018, reducing to 0% in 2021, ii) the "static" approach of calculating the amount to be phased-in is preferred, iii) for SA banks, all IFRS 9 provisions should be treated as Specific Credit Risk Adjustments (SCRAs) and not General Credit Risk Adjustments (GCRAs) and therefore would not be eligible for inclusion in Tier 2, and would not compensate existing generic provisions.
  - On 13 July, the EBA published an updated report that included some quantitative and qualitative observations of its second assessment impact of IFRS 9. Based on a sample of approximately 50 institutions across the European Economic Area (EEA), the EBA noticed that the CET1 ratio will decrease, on average, by 45 bps (and by up to 75 bps for 86% of respondents) and total capital ratio will decrease, on average, by 35 bps (and by up to 50 bps for 76% of respondents).

Implementation of MREL and TLAC

- On 17 February, the Single Resolution Board (SRB) published its report "MREL: Approach taken in 2016 and next steps", which detailed the SRB's 2016 methodology for calibrating MREL. The SRB would develop its MREL policy in Q4 2017 with a view to setting binding bank-specific MREL targets for most systemic banks. The SRB would expect firms to comply with the binding targets at the end of an appropriate transition period. MREL at material entity level would also be defined late 2017/early 2018 for major banks
  - Denmark, Sweden and UK published their final frameworks on MREL covering the quantum, eligibility criteria and timing of MREL.
- On 6 July, the Financial Stability Board (FSB) published the final version of its Guiding Principles on the Internal TLAC of G-SIBs. Internal TLAC is applicable to material sub-groups of G-SIBs but which are not themselves resolution entities (for whom external TLAC rules apply). Most of the principles set out in the publication were in line with the FSB TLAC Principles from November 2015, with further clarity brought on the size (75-90% of external TLAC requirement that would apply to such a material sub-group were it a resolution group) and composition of the internal TLAC requirement, cooperation and coordination between home and host authorities, and the trigger mechanism for internal TLAC (inclusion of a contractual non-viability provision enabling the loss absorption by the subsidiary at the initiative of the host authority without necessarily an entry into resolution).

Insolvency regimes harmonisation

- Last summer, both the Spanish and Belgian governments implemented in their insolvency law the possibility for local banks to fulfil their future TLAC/MREL requirements by allowing them to issue senior non-preferred (SNP) instruments following the vote on the French law at the end of 2016. The proposed texts are in line with the Creditor Hierarchy Harmonisation Directive (CHHD) proposal published on 23 November 2016 by the EU Commission.
- On 10 October, the European Parliament ECON Committee voted the final report on the BRRD Creditor Hierarchy Harmonisation Directive (CHDD) which was subsequently agreed on by the trilogue (the European Parliament, the Council and the Commission) on 25 October. The amended Bank Recovery and Resolution Directive (BRRD) aims to facilitate the application of the MREL and TLAC requirements with the creation of a senior "non-preferred" debt category, ranking below ordinary senior debt instrument and having the following characteristics:
  - initial maturity of at least one year
  - no embedded derivatives
  - the contractual documentation explicitly refers to the ranking of the instrument in the applicable insolvency law
  - no sale restriction will apply to retail investors (however, this does not prevent Member States from adopting similar features in their national laws)
  - the transposition deadline is 12 months after entry into force of the Directive.

The final adoption of the CHHD is therefore expected by year-end with a transposition by Member States 12 months later.

Dealing with failing banks

- On 7 June, the Single Resolution Board (SRB) used its resolution tools for the first time and placed Banco Popular Español into resolution, marking the first comprehensive resolution conducted under BRRD by the SRB, by using subsequently (i) the power to write-down (EUR 2bn of CET1 and EUR 1.3bn of AT1) and convert (EUR 684m of Tier 2) capital instruments, and (ii) through the sale of business tool (Banco Popular was transferred to Banco Santander at a price of EUR 1). Previous resolutions (such as BES/Novo Banco or Heta asset resolutions) were executed by national authorities.
- On 23 June, the ECB determined that Veneto Banca and Banca Popolare di Vicenza were failing or likely to fail, as the two banks repeatedly breached their supervisory capital requirements, and consequently informed the SRB. The SRB concluded that, while there were no alternative supervisory or private sector measures which could prevent the failure of the banks, the conditions for a resolution action in relation to the two banks had not been met, as a resolution action was not necessary in the public interest. The SRB therefore decided that the banks will be wound up under Italian insolvency procedures.
- On 25 June, in order to facilitate the liquidation of the two banks, the European Commission approved the Italian measures under EU State aid rules. In particular, the Italian State granted cash injections of ~EUR 4.8bn and state guarantees of a maximum of EUR 12bn, both backed up by the Italian State's senior claims on the assets in the liquidation mass.
- On 29 August, the Central Bank of Russia (CBR) announced it had taken over administration of Otkritie Bank, Russia's eight largest bank. On 26 September, the CBR determined that the CET1 ratio of Bank Otkritie was less than 2%, meaning that a Write-Down Event was triggered on the USD 300m 10% Loan Participation Notes due 2019. The Write-Down Measure (interest cancellation and write-down of the loan) occurred on 8 November 2017.

Basel 4 framework developments

- On 19 May, the Basel Committee Chairman issued a note to the Governors and Heads of Supervision (GHOS) members as an update on the finalisation of Basel 3 reforms (the so-called "Basel 4" framework).
  - A vast majority of members support a fully-loaded output floor of 75% with a transitional framework of seven years, starting at 45% in January 2021 to end at 75% in January 2027 (+5% increase per year). The output floor would replace the existing Basel-1 floor.
  - The Standardised Approach (SA) for credit risk / Internal Ratings Based (IRB) approach / Operational risk framework / CVA framework would remain as agreed by the BCBS at the November 2016 meeting in Santiago.
  - The leverage buffer surcharge for G-SIBs must be met with Tier 1 capital and is set at 50% of the G-SIB buffer (the leverage ratio denominator is still being finalized).
  - Banks will be required to disclose RWAs based on the revised SA on a fully loaded basis by 2021. Prior to that, banks will be required to disclose RWAs based on the current SA.
  - Details of the transitional arrangement are summarised below:

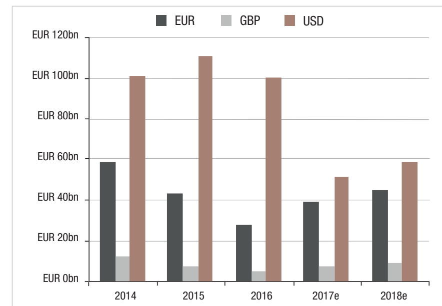
Revision	Implementation Date
Approach for credit risk	1 Jan 2021
IRB framework	1 Jan 2021
CVA framework	1 Jan 2019
Operational risk framework	1 Jan 2021 (fully phased in by 27)
Leverage ratio	Existing exposure definition: Jan 2018 Revised exposure definition: Jan 2021 G-SIBs leverage ratio surcharge: Jan 2021
Ouput floor	Jan 2021: 45% Jan 2022: 50% Jan 2023: 55% Jan 2027: 75% Jan 2024: 60% Jan: 65% Jan 2026: 70%

PRIMARY MARKET ACTIVITY

2017 review

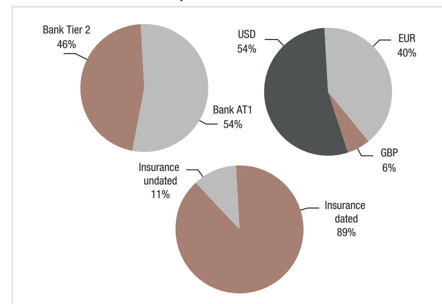
- The financial hybrid market has been changing continuously over the past four years in response to the evolving regulatory environment. 2017 saw higher primary supply of capital instruments than 2016 mainly due to the development of senior non-preferred notes.
- Capital issuance remains driven by the evolving regulatory environment (MREL and TLAC, capital buffers, Pillar 2).
- In light of Pillar 2 add-on requirements, we expect banks to continue filling their AT1 and T2 Basel III buckets.

Slightly lower supply in 2017 (vs. 2016) due to a drop in USD issuances



Source: SG CIB Analytics, Dealogic

Features of 2017 bank capital instrument issuances



Source: SG CIB Analytics, Dealogic

EUR MARKET

Euro-denominated subordinated volumes (banks and insurance) increased by EUR 11bn to EUR 39bn in 2017 from EUR 28bn in 2016 driven mainly by SNP/SRN / HoldCo senior instruments.

- We saw higher supply especially from banks which accounted for EUR 34bn of issuance (vs. EUR 22bn in 2016), while insurance companies printed EUR 5bn (vs. EUR 6bn in 2016).
- In terms of split between AT1 and Tier 2, we saw EUR 15bn of AT1 and EUR 19bn of Tier 2 issuances.
- Most transactions came from core countries (UK, France, Switzerland, Belgium, etc.).
- In mid-October, the market saw ASR Nederland (insurance) issuing the first Restricted Tier 1 instrument in a core currency.

USD MARKET

In the USD-denominated subordinated market, the volume of issues decreased sharply from USD 111bn in 2016 to USD 61bn in 2017. Banks represented 82% of volumes and insurance companies the rest.

- In terms of regional split, 40% of the supply came from Western Europe while 24% came from the APAC region, followed by US issuers with 20% of supply. Interestingly, the CEEMEA region accounted for 9% of issuances with notable transactions from Russia (AT1 from Credit Bank of Moscow's and Tinkoff Bank) and Turkey (TGB, Isbank, Akbank, etc.)
- The split in terms of AT1 and Tier 2 was fairly even, with USD 32bn of AT1 and USD 29bn of Tier 2 supply.

GBP MARKET

Volumes in the sterling market followed the EUR trend with GBP 6bn issued this year vs. GBP 3bn in 2016. Almost the entire supply came from banks.

2018 forecast

On the financial institutions side, we expect the focus to continue on MREL/TLAC. With many banks having almost filled their AT1 and T2 Basel III buckets, the additional TLAC/MREL requirements are expected to drive the hybrid market supply in 2018. We forecast the following volumes of subordinated debt for FY 2018:

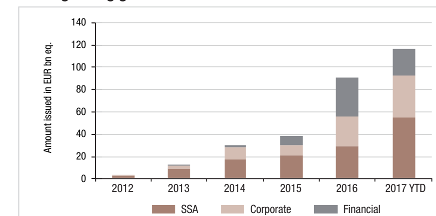
- In EUR, a total of EUR 45bn of issuance or an increase of around 15% vs. 2017 full-year expected.
- In USD, a total of USD 70bn of issuance or an increase of 15% vs. 2017 full-year expected.
- In GBP, a total of GBP 8bn of issuance compared to GBP 7bn 2017 full-year expected.

Green and Social Bonds

2017 review

- In 2017, issuance volumes in the green and social bond market segment again experienced significant growth, with over EUR 116bn eq. year-to-date and ~EUR 120bn eq. expected for the full year (vs. EUR 90bn eq. for FY 2016) representing over 210 different issuers year-to-date (vs. 156 for the FY 2016). In just four years, this market has grown 10-fold (from just EUR 11bn issued in 2013).
- European issuers constituted the vast majority of issuers and accounted for 47% of issued volumes in 2017 year-to-date, followed by Asia (25%).
- In terms of issuer type, sovereigns, supranationals and agencies (SSAs) issued 47% of total volumes, followed by corporates (32%) and financial institutions (21%).

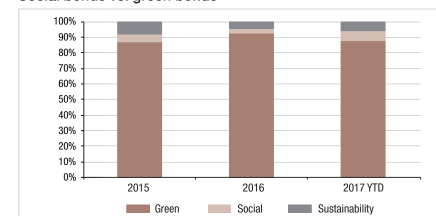
A fast growing green and social bond market



Source: SG CIB

- Although green bonds still make up the majority of issues (87%) - France's EUR 7bn inaugural Green OAT government bond being one of the most emblematic green bonds of 2017 – social bond issuance picked up significantly in 2017 following the publication of ICMA's Social Bond Principles earlier this year. In addition to the regular social bond issuers, such as Spain's ICO or Dutch BNG and NWB in the EUR market or IFC in USD, new social bond issuers, such as National Australia Bank, Kommunalkredit or Council of Europe, made a foray into the market.
- Like green bonds, which aim to finance carbon and environmental footprint projects, social bonds are highly valuable and a complementary source of growth to the sustainability bond market by offering a sustainable social investment solution that meets the additional United Nations Sustainable Development Goals.

Social bonds vs. green bonds



Source: SG CIB

- Coming back to the European market, the euro represented around half of 2017 year-to-date issuance volumes. Of note, non-European issuers issued green bonds in EUR to take advantage of the deepest pocket of investor demand.
- The predominance of the euro reflects the strong and growing demand for sustainable financial assets from European investors. Not only does the vast majority of European institutional investors take into account environmental, social and governance (ESG) criteria in their investment decisions, there is also strong support from the political and regulatory environment.

2018 forecast

- At European level, the EU's High-Level Expert Group (HLEG) created in December last year delivered in July the first set of recommendations to improve the EU's contribution to sustainable development. The final report would be published at the end of the year. Early recommendations to mobilise more capital towards a more sustainable economy include establishing a European standard and label for green bonds and other sustainable assets, and strengthening ESG reporting requirements.
- This latter recommendation will also impact institutional investors and is based on the French regulation, in particular on Article 173 of the French Energy Transition Law which came into force at the end of 2015. Under this law, from 2018 all France-based institutional investors are required to (i) disclose their methodology for incorporating ESG factors in their investment decisions and, (ii) for investors with assets under management of EUR 500 million or more, to provide detailed reporting on the means employed to support the energy and environmental transition (integration of climate risks, contribution to the 2°C scenario, etc.) as per France's commitments to the COP21 and Paris agreement.
- Other national initiatives are multiplying in Europe, such as in the Netherlands where major institutional investors (asset managers, insurance companies, pension funds) have created a working group to agree on a set of standards regarding the definition of sustainable investment as well as its impact measurements.
- In conclusion, the European sustainability bond market will continue to grow significantly, supported by issuers, investors and intermediaries, as well as a highly favourable political and regulatory environment.

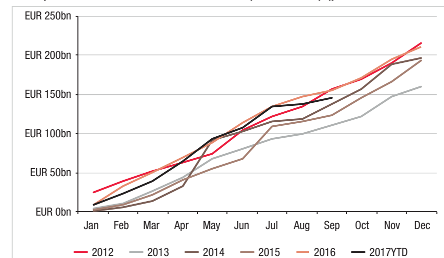
Asset-Backed Products Securitisation & Distribution

EUROPEAN MARKET

2017 review and 2018 forecast: Ready for take-off?

- Year-to-date[1] issuance volumes (including both retained and public) were at around EUR 145bn. This level is remarkably stable compared to the volumes reported over the last five years. The split between public and retained moved from approximately 45%/55% in 2014 to 55%/45% last year. Year-to-date figures were around a 50/50 split with a small lead for publicly placed ABS.
- This result was achieved despite regulatory uncertainty which lasted until June 2017 regarding the new securitisation regulation (STS Regulation[2] and CRR Regulation). The final securitisation regulation was voted in by the European Parliament on 26 October. The new securitisation regulation will apply from 1 January 2019.
- Market prices were remarkably narrow and stable throughout the year, with some sub-sectors experiencing some continuous tightening of spreads along the year.
- The figures above exclude synthetic securitisations/ significant risk transfer (SRT) securitisations which are a private or even bilateral market estimated at between EUR 20 25bn per year (based on an EBA report[3]). We expect this market to remain just as active, although we see a shift first between sponsors (smaller, non-systemically important financial institutions are increasingly involved), and second regarding underlying portfolios (more portfolios are outside large corporate exposures). The reasons behind the development of SRT securitisation is the upcoming implementation of IFRS and new measures from Basel 4.

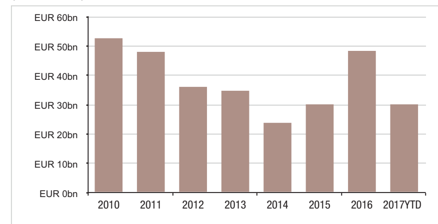
European ABS cumulated volumes (in EUR bn) (public + retained)



Source: SG cross Asset research/rates

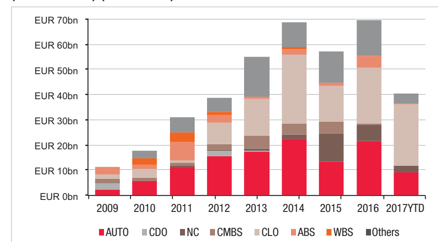
- We see reasons to be optimistic about the ABS market's evolution. Although volumes have not bottomed out significantly (again) this year, the European securitisation market is resilient. Securitisation is part of banks' toolkit and regulators have effectively followed a pragmatic marketable approach.
- The most active submarkets were RMBS, consumer ABS (auto ABS and unsecured) and managed collateralised loan obligations (CLOs). Spreads are trading at very tight levels in absolute terms rather than in relative terms. In particular, Italy recorded one of the largest ABS spread drops in 2017 across Europe, which is bringing some new public market activity out of the country.
- Looking at the case of **RMBS**, this is still the largest contributing sub-sector with two major jurisdictions, the UK and the Netherlands. The former could at some point be impacted by the Brexit developments. We think that, possibly in 2018 and more likely in 2019, the gradual redemption of the TLTRO should boost RMBS volumes up for continental Europe. IFRS9 will apply from 1 January 2018, which should also be supportive for new transactions in securitisation.

European publicly placed prime RMBS cumulated volumes (in EUR bn)



Source: SG Cross Asset research/rates

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



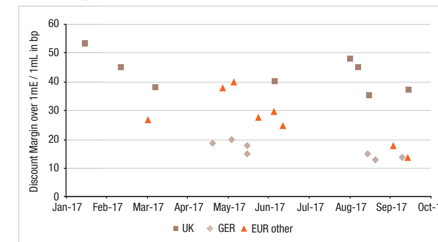
Source: SG Cross Asset research/rates

1. *End of September 2017*
2. *Simple, Transparent and Standardised*
3. *"Discussion on the Significant Risk transfer in Securitisation", European Banking Authority, 19 September 2017*

ASSET-BACKED PRODUCTS -
SECURITISATION & DISTRIBUTION

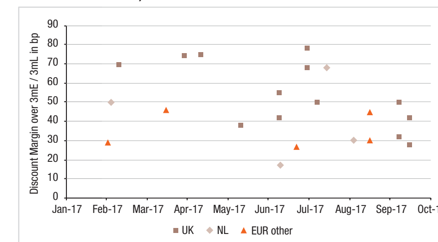
- **European Consumer ABS** is by and large the bread and butter of securitisation and should therefore continue to contribute significantly going into 2018. After a rather weak start to the year, auto loan and lease ABS primary market activity started to pick up in May 2017 with relatively heavy issuance windows in June/July and a busy September/October period. However, the year is likely to come out below last year's issuance volumes.
- Overall, the resilience of the market was acknowledged by several factors, including the tightening of spreads already observed throughout 2016 and which has been almost continuous in several asset classes in 2017. The investor base is firmly in place and is a strong support for the market.
- The first EUR ABS transactions pricing above par came to market in Q3 2016 (German auto ABS and Dutch RMBS). Since then further asset classes (French, Dutch and Italian auto ABS and Italian consumer ABS) followed suit in 2017.
- Various transactions were structured with mezzanine tranches and saw a very high level of subscriptions, demonstrating investors' appetite for yield.

Senior auto ABS – discount margins at pricing (above 1m Euribor / 1m Libor)



Source: Societe Generale Cross Asset Research/rates

Senior prime RMBS – discount margins at pricing (above 3m Euribor / 3m Libor)

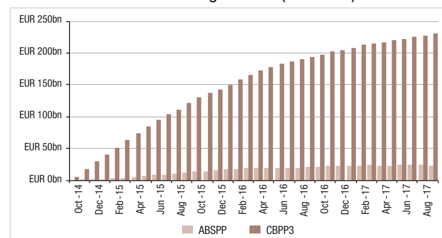


Source: Societe Generale Cross Asset Research/rates

- **European SME ABS** primary market activity continued to be focused on Italy and Spain. Although the percentage of SME/Leasing ABS transactions placed from Italian originators increased substantially with spreads tightening, the majority of Italian SME/Lease ABS deals are retained. The European Investment Fund (EIF) and the European Investment Bank (EIB) along with Cassa Depositi e Prestiti (CDP) and KfW continued to play a key role in supporting the market as active investors or guarantors.
- A number of **NPL[1] transactions** emerged in 2017 from Italy, Ireland and Portugal, as well as from Greece and Ukraine, although on a private basis. The structuring of these portfolios remains complex due to confidentiality issues stemming from the transfer of impaired loans. Two ABS transactions on Italian NPLs by Banca Carige and Credito Valtellinese under the GACS scheme were closed in 2017, and we expect to see more next year given the amount of NPLs outstanding and the pressure coming from the ECB.
- **European CMBS** remains marginal, despite the strong investor appetite for the real estate asset class. Lending is mostly driven by alternative lending, REITS, and any other direct means to invest in real estate.
- 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, and a much calmer 2016 with only two public CMBS issuances collateralized by real estate in Germany, there were no primary public CMBS issuance in Europe in 2017 year-to-date.
- The **European CLO** market was quite active this year. 2017 year-to-date issuance volumes reached EUR 13.2bn, with 33 new primary issues, in line with 2016 volumes for the same period (EUR 13.1bn with 32 transactions). An extra EUR 11.9bn were refinancing of existing tranches with lowering of nominal coupons, as underlying loans were also being renegotiated at lower spread levels. New issuances are behind initial expectations for 2017, as high loan prices in the secondary loan market and tighter spreads in primary institutional loans made "ramping up" difficult for managers at the beginning of the year. The investor base grew again this year on the back of the attractive level of CLOs compared to other asset classes in the ABS market, which led to strong demand and tight spread levels over the whole capital structure. CLO managers took advantage of tighter levels at the end of the non-call period for numerous deals to enter into refinancing and reset transactions. It is worth adding that three debut managers joined the market this year (Brigade, Onex and HPS); one more manager is expected in Q4 2017. We expect this positive trend to continue until year-end, as the pipeline of forthcoming transactions is quite busy.
- **ECB ABS Purchase Programme:** While the ECB has been very active in terms of extraordinary monetary policy, purchases under the ABS Purchase Programme (ABSPP) remain low with outstanding amounts mostly unchanged. As of the end of September, the cumulative outstanding amount under the ABSPP was EUR 24bn, ten times less compared to the Covered Bond Purchase Programme (CBPP3), with cumulative holdings of EUR 231bn.

1. *Non-performing loans*

ABSPP vs. CBPP3 outstanding volumes (in EUR bn)



Source: Société Générale, ECB

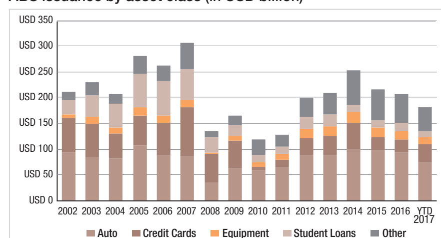
- From a monetary policy point of view the development of the ABSPP cannot be seen as satisfactory, as the net purchase amounts and outstanding amounts on the ABSPP are not anywhere near the other asset purchase programmes. On 26 October, the ECB announced a 50% reduction of monthly purchases to EUR 30bn until September next year. However, tapering should have little impact on the ABS market, whatever the evolution of the ABSPP. We see the market as strong enough to work on its own, as long as no further constraints are put in place for whatever reason.
- **Regulatory focus:** Following the trilogue negotiations between the EU Commission, the Council and the Parliament which started in January, the parties reached an agreement on the STS Regulation and on the CRR Amendment Regulation in May. In June the EU legislative institutions published the two preliminary texts on the amendments to the proposed regulations intended to (i) lay down common rules on securitisation and to create a European framework for "simple, transparent and standardised" (STS) securitisations and (ii) change the prudential treatment framework of securitisation transactions. In the weeks following October's vote, the regulations will be published and come into force thereafter. Clear interpretations and guidelines (regulatory technical standards) will be invaluable for implementing the new regulations into practice. The new regulations will not apply until 1 January 2019.
- The Securitisation Regulation will include harmonisation rules on risk retention, due diligence and disclosure applicable to all securitisations, and will also introduce criteria for STS securitisations. The CRR Amendment Regulation will apply to all ABS transactions closed on or after 1 January 2019. It will include provisions which result in lower regulatory capital requirements for STS securitisations compared to non-STS securitisations.
- ABS transactions closed before 1 January 2019 will benefit from grandfathering under the existing regulation regime until 31 December 2019. The Securitisation Regulation and the CRR Amendment Regulation will lead to major changes to European securitisation rules applicable from 1 January 2019. We could expect a higher volume of securitisation transactions in the second half of 2018 to be issued under the existing regulation rather than at the start of 2019 under the new Securitisation Regulation.

US MARKET

2017 review and 2018 forecast

- **US ABS:** The US ABS market is on pace for a strong year with issuance expected to exceed USD 200bn. The largest area of growth came from the credit card sector where issuance is up more than 66 percent year-on-year, fuelled by Citi's re-emergence into the market, cross-border Canadian bank participation, refinancing of maturities and issuers taking advantage of attractive funding costs. In addition, to steady issuance from staple asset classes – auto, credit card, student loan and equipment – the esoteric asset sector has seen significant growth, driven largely by whole business, timeshare, and fleet lease securitisations, in addition to issuance in the newer asset classes, namely device payment plan (handsets) and peer-to-peer. Esoteric ABS issuance is sustained by strong investor demand, as investors seek attractive yields in a low spread environment.

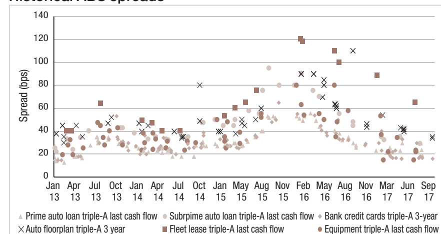
ABS issuance by asset class (in USD billion)



Source: Bloomberg, SIFMA (YTD to 19 October 2017)

- Market conditions were firmly in favour of issuers in 2017. The narrative of too few bonds to satiate demand persisted all year. Fund flows were significantly up this year at USD 98.6bn year-to-date versus USD 47bn for all of last year, and only USD 7bn the year before that. Wider swap spreads swung the pendulum towards ABS products for its relative value versus corporate; ABS prices off of swap rates which currently provide a pick-up of ~25bp (3Y swaps) to treasuries which is the benchmark used for corporates. The sharp increase in front-end rates since early September also continued to fuel demand. Based on the confluence of factors above, benchmark ABS spreads are at or near post-crisis tights.

Historical ABS spreads



Source: Société Générale, Bloomberg, SIFMA

ASSET-BACKED PRODUCTS -
SECURITISATION & DISTRIBUTION

- Fixed rate demand still dominates the market for now, however, we did see some resurgence in floating-rate interest during 2017. This is owed in part to the fact that investors are more convinced that the Fed is committed to a normalising policy, and that while the market continues to undershoot the Fed, floating rate notes will provide protection in the event the Fed is more aggressive than what is priced into the market.
- Short term, money market instrument demand remained meagre as a result of the SEC's 2a-7 Money Market reform that came into effect in October 2016. Money market fund assets once close to USD 1.5tr have decreased and stabilised at roughly USD 500bn. Additionally, with increasing probability of Fed rate hikes, investors have pressured for wider yields.
- On the regulatory front, the credit risk retention rules as stipulated by the Dodd-Frank Act came into effect on 24 December, 2016, requiring sponsors to retain at least five percent of the credit risk of the underlying assets in the ABS, commonly held through a vertical or horizontal residual interest. Horizontal residual interest retention has required issuers to fair value the retained interest and disclose the assumptions and values within the disclosure documents. Additionally, Regulation AB II asset-level disclosure requirements came into effect in November 2016. This requires ABS offerings backed by auto loans and leases issued in the public/SEC market to file loan-level data tapes with over 70 attributes at the time of issuance, and on an ongoing and monthly basis. Both regulations have had a muted effect on the market, as ABS Sponsors were capable of adapting quickly to the evolving regulatory landscape without dampening issuance levels.
- Consumer ABS asset performance weakened year-on-year in the wake of the benign post-crisis loss environment, yet losses remain considerably below crisis levels. Subprime auto and auto lease have gained the most attention in this regard. The shifting universe of subprime auto loan securitisation sponsors with increasingly smaller, less established issuers contributed to the weaker collateral performance in this space. On the lease side, the higher off-lease vehicle supply put pressure on used vehicle values, translating into marginally softer residual value loss performance for several lease ABS sponsors. Major auto securitisation sponsors showed a willingness to curb losses by improving the overall collateral profile of their transactions, a trend that is expected to continue into 2018. Despite the weaker asset performance observed this year across consumer ABS, investors remain comfortable participating in these products. For auto ABS in particular, investors point to the resilience of these transactions, given the level of structural protection embedded in these deals coupled with the rapidly deleveraging nature of the transactions. Nonetheless, rating performance across ABS has generally remained stable to positive in 2017, with continued momentum in rating upgrades on outstanding transactions.
- In summary, the US ABS market has been on a tear all year and it is unclear what catalyst could derail the positive momentum outside of significant geopolitical events – which have yet to put a dent into the market this year. As we head into 2018, the Fed is expected to raise rates again in December and another three times next year. In addition to the Fed's balance sheet unwind, we may finally be entering a rising rate environment, which could entice greater rate volatility and test overall liquidity in the sector.
- As a direct response to the President's February 2017 executive order to review prevailing financial regulation, the US Department of the Treasury published a report early October recommending a series of regulatory changes for capital markets. While it is too early to comment on the viability of the Treasury's proposals in relation to securitised products, and how or if the Securities and Exchange Commission (SEC) will ultimately review and accept any of the proposed changes, the Treasury's recommendations hint at possible alleviations in bank capital, liquidity, risk retention and Regulation AB II requirements.
- **US CMBS:** The non-agency CMBS market has seen increased issuance since last year. Approximately USD 69.2bn has priced to date for private-label CMBS, of which USD 36.6bn was in the form of conduit transactions. As a comparison, 2016 year-to-date private-label volume was around USD 47.45bn. Given the low interest rate environment, 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 incentivized to maintain velocity and price transactions shortly after origination, instead of holding the risk on the balance sheet for extended periods of time.
- With higher volumes and widening swap spreads, we have seen conduit spreads remain relatively stable throughout 2017. The AAA-rated, 30% subordinated, 10Y "Duper" class is currently pricing in the +83-85 bp area while it priced at wider levels closer to +95 bp area earlier this year; the BBB- classes have priced within the +300-450 bp range throughout the course of the year.
- **US CLO:** While the CLO market has been very active in primary issuance following the onset of new risk retention regulations, the real story of 2017 has been the increase in reset and refinancing transactions. With year-to-date primary issuance volume at USD 89.71bn, the market has already surpassed total 2016 issuance of USD 72.42bn and is on track to surpass 2015 issuance of USD 98bn as well. Meanwhile, over 200 refinancing transactions have priced year-to-date for USD 93.2bn of volume versus merely USD 20.5bn of refinancing volume in 2016. Year-to-date reset volume is USD 46.6bn versus 2016 full-year reset volume of USD 18.6bn. This year's dramatic increase in volume of refinancing and reset transactions is a direct result of majority equity holders seeking to optimize returns while overall interest rates remain low.

Syndicated Loan Market

2017 review

EMEA

- Syndicated loans in EMEA in the first nine months of 2017 totalled USD 664bn (source: Dealogic), down 13% on the same period in 2016, mostly due to a drop in investment grade corporate refinancing and a comparison effect with last year which included a jumbo deal of USD 57bn for Bayer's acquisition of Monsanto.

Western Europe

- Throughout the first nine months of the year, pricing continued to tighten for IG and non-IG companies, even if room for further decline has become very limited. Indeed, new lows continue to be reached as the syndicated loan market remains very favourable to borrowers. The relationship remains the key driver for liquidity in the European Loan Syndicated market, with banks looking at the whole relationship. The first half of the year was driven by acquisition volumes but they shrank in the last quarter (from 51% of total volumes in Q1 2017 to 7% in Q3) and were eventually down by 9% versus end of Q3 2016. General Corporate Purpose volumes, that started slowly, have gradually recovered throughout months and were laying 4% behind 2016 volumes at the end of September. Globally, volumes were down 9%.

CEEMEA

- CEEMEA 2017 volumes were significantly down versus 2016. Indeed, in the first nine months of the year, volumes reached just USD 80bn versus USD 194bn in 2016 over the same period. In the Middle East, CEE and Russia this lack of deal flow led to both regional and international lenders holding excess liquidity and as a result, a market where borrowers can achieve tight pricing and loose structures. This was further amplified by the strength of the capital markets over the same period which led to less loan issuance, as borrowers (in particular in the Middle East and Russia) are able to achieve tight levels in the bond markets at the expense of loan deals. Headwinds in 2017 included sanctions in Qatar (though Qatari loan issuance was in any event limited) and further US sanctions in Russia, although this has had a limited impact so far in the syndicated loan market. As in 2016, African volumes continue to suffer from low oil prices and in many countries, political instability.

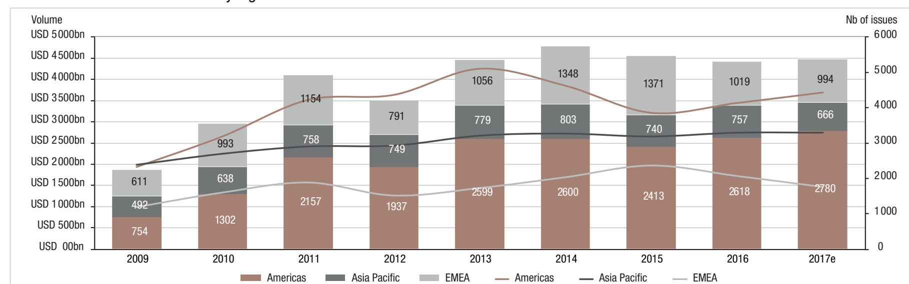
Americas

- US syndicated lending reached USD 1.75tr through the first nine months of the year, 25% above this time last year and the highest first three quarters of any year on record. Driving this growth was a 44% spike in leverage loan volume, fuelled by a 35% increase in leveraged M&A activity and a 46% increase in refinancings. Investment grade loan volume, however, is down 7% for the first nine months of 2017 despite a 4% increase in high grade M&A loan activity, as refinancing activity fell 11%.
- Investor demand for both high grade and below investment grade loans is high, with investors complaining about lack of new money deal flow.

APAC

- The Asia Pacific syndicated loan market volume for 2017 is expected to reach ~USD 666bn, which would be a decrease of ~12% versus 2016's USD 756bn. 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 expected to decrease by ~5% to USD 226bn. This is in line with the loan volume in APAC (excl. Japan), as it is expected to fall by ~15% to USD 440bn (vs. USD 517bn in 2016). As of end Q3 2017, Japan represented ~34% of the overall APAC volume.

International loan market volumes by region



Source: Dealogic

Regional focus

Western Europe

Corporate

- The slowdown trend in volumes observed in 2016 was confirmed in 2017. At the end of September 2017, volumes reached EUR 333bn for investment grade and crossover borrowers, down by 9% compared to the first nine months of 2016. However, it should be noted that September 2016 volumes were enhanced by the Bayer's transaction (Monsanto acquisition). Similarly, the number of operations dipped by 22%, standing at 498 transactions at the end of the third quarter.
- The third quarter of 2017 showed a shift in volumes: exceptional acquisition financings that previously compensated a massive drop in GCP transactions (-30% at the end of Q1) to exceed 2016 volumes are now trailing behind. Conversely, GCP volumes gradually recovered throughout the second and third quarters and thus, limited the drop in total volumes.
- In terms of countries, at the end of Q3 2017, volumes were up in the UK (+35%), France (+22%), Italy (+89%) and Spain (+46%), but down in Germany (-54%) and Switzerland (45%). Volumes in the UK are supported by the large acquisition financings of the first quarter (BAT and Reckitt) when Germany did not record any comparable for the Monsanto/Bayer acquisition of 2016. Similar story for Switzerland with the acquisition of Syngenta by ChemChina last year. France is one of the few countries to also benefit from a positive evolution concerning the number of transactions closed (+16%).
- Despite limited room for improvements, pricing has continued to tighten for both investment grade and crossover companies. New lows have been observed in terms of margins and fees, alongside looser terms in credit documentations, highlighting the strong liquidity available in the loan syndicated market and the sustained competition between banks.
- In terms of M&A, after a surge in H1 2017, volumes shrunk to 7% of total volumes for Q3. Acquisition volumes reached EUR 111bn at the end of September, driven by major transactions such as BAT (USD 25bn facility) and Reckitt (USD 21bn debt package) acquisitions, representing 13% of total volumes.

Leverage

- Year-to-date Q3 2017 total European leveraged loan volume has risen to EUR 84.9bn, a 71% increase year-on-year. This is a post-crisis year-to-date record since the same period in 2007. The first half of the year was tempered by a lack of new-money deals with the majority of issuances being for opportunistic transactions (largely refinancings and repricings which accounted for 52% of H1 2017 total issuance). However, a flow of new-money transactions over the summer brought a long-awaited boost in supply and helped partially rebalance the portion of deal purposes towards M&A-related transactions which are now catching up in terms of volume with opportunistic fundings (both representing ~43% of total leveraged volume as of year-to-date Q3 2017).
- In terms of leverage ratios, the overall favourable market backdrop put pressure on pricing and created a supportive environment for more borrower-friendly features and increased leverage levels. As of Q3 2017, first-lien leverage levels continued to climb with an average of 4.5x (vs. 4.4x in FY2016), which is the highest level since 2007 when leverage on this measure stood at 4.6x. Leverage levels through total debt reflect a similar trend reaching 5.0x (vs. 4.9x in FY2016), although it has not returned to historic highs (average total leverage of 6.1x in 2007).
- Cov-lite transactions are now the norm in Europe and have reached 64% of year-to-date Q3 2017 institutional volume versus 48% in the same period last year. Such transactions are now available to smaller and smaller companies. While a few years ago, cov-lite was limited to EUR 100m+ EBITDA businesses, we now see them creeping up in mid cap transactions, with EBITDA in the EUR 50m region across a wide range of sectors.
- Since H2 2015, most European second liens have been directly pre-placed by sponsors to avoid market risk and obtain better terms and conditions. However, the USD 1,245m second lien from Misys was one of the few to be syndicated and is understood to have been significantly oversubscribed (although the EUR piece was eventually dropped due to stronger appetite for USD).
- During the first half of the year, favourable technical conditions (investors long cash combined with a lack of new-money deals) led to pricing tightening with most deals flexing down. However, with so much supply lately, investors were under no pressure to buy every deal, and pricing levels kept diverging to reflect the different credit stories on offer. For more challenging credit stories, prices started to widen away from the lows seen during Q1 2017, and there was a greater evidence of flex and pushback on documentation terms deemed as aggressive. Nevertheless, market conditions remained issuer-friendly for, inter alia, well-favoured sectors, good credits and/or transactions with a strong existing syndicate backing.
- For typically B/B2 rated LBO transactions, EUR pricing currently stands in the 350-400bp (0% floor) context. On the GBP side, current pricing stands in the 475-500bp (0% floor) context. There is also a strong appeal from investors for issuers in the BB rating category, as shown by the weighted average bid for BB names currently standing in a 100.5 context vs. around 99.75 for single B assets. As we are seeing large/strong single-B issuers successfully tightening their pricing in the 300-325bp range, we may assume that there is room to improve on the margin for well-known BB issuers.

- For year-to-date Q3 2017, the level of cross-border issuance amounts to EUR 75.2bn eq., up 53% from the first three quarters of 2016 (EUR 49bn eq.). Within this overall cross-border activity, tranches syndicated in Europe as of year-to-date Q3 2017 amounts to EUR 25.8bn eq. (i.e. twice the EUR 12.4bn eq. from year-to-date Q3 2016). This translates into 34% of the total cross-border issuance, compared 25% in the same period from the previous year. Overall funding costs in Europe remain lower.
- In spite of the recent flurry of new-money issuance, there was no sign of liquidity shortage: CLO new issuance has remained active lately and year-to-date Q3 2017 issuance amounted to EUR 14.2bn from 35 deals vs. EUR 12.8bn from 31 vehicles for the same period last year. During the last quarter, continuing supportive conditions and a strong flow of deals helped total issuance get close to last year's record of EUR 16.8bn.
- On the arranging side, appetite did not decrease, 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.

Project & asset-backed finance

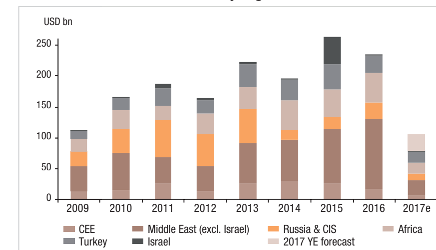
- Oil & Gas: Overall volumes are normally driven by jumbo mid-downstream transactions in the Middle East. In 2017, we have only seen a few medium-sized notable deals in this area, in particular in Oman for an LPG and a Methanol project. However, the upstream sector has rebounded strongly with total issuance reaching ~USD 16bn for the first nine months of the year which surpasses last year's full volume. This pick-up was driven by acquisitions of assets from oil majors by private equity sponsors, with several deals closing or in the process of closing. Upstream lending also saw increased activity in refinancing of existing loans and new capex, a notable development being the financings related to Leviathan, a giant gas field offshore Israel. Overall, there is ample liquidity in the EMEA reserve-based lending market, with most recent deals either oversubscribed or progressing well in syndication. We also continue to see banks returning to the market for primary transactions and secondary demand re-emerging from smaller banks. As a result, pricing compression has started in certain areas of the market, particularly for existing performing credits with assets in strong jurisdictions such as the North Sea. Nevertheless, certain jurisdictions in Africa continue to be challenging for most banks, with higher pricing reflecting this lower liquidity.
- Renewable Energy: Activity has been reasonably strong in 2017 with a number of offshore wind transactions closed across Europe. Although the activity is down on last year, the sector remains strategic for lenders, and as a result a plethora of liquidity has driven down pricing and weakened structures. The latest German offshore 'greenfield' deal closed with a pool of 10 banks and a pricing well below 200bp over a long tenor. For onshore wind and solar, most of the deals are smaller but we have seen a significant pick-up in activity in Italy as banks return to the Italian renewables market.
- Infrastructure: One of the most significant sectors for greenfield projects has been capex relating to Fibre Optic roll-out in order to meet Governmental targets. In August, the largest deal of its kind was closed: the EUR 776m financing of the Grand Est concession in France (SG Bookrunner). A number of other transactions have closed or are in bidding in France, Italy, Ireland and Holland. More traditional PPP infrastructure finance continues to be relatively slow but there are a few deals going ahead in France (e.g., university, prison transactions), the Netherlands (highways) and Germany (highways). Non-bank investors continued to show interest in infrastructure finance which has traditionally been a bank market in Europe (unlike the US where non-bank investors have historically been more active).
- Real Estate: The market remained very liquid and aggressive in terms of pricing, especially for prime deals. We saw margins for prime assets reach levels well below 100bp in Germany and France. We saw an increase in lending activity in France since the presidential elections, with an increasing volume of development and value-add financings. In addition, pricing in Northern Italy for prime assets is increasingly aggressive with the premium to Western Europe shrinking with every new deal. In the UK, margins decreased for prime assets and in some cases fell to pre-Brexit levels, but there is some discussion about the market starting to turn and valuations flattening. Generally though, liquidity is very strong from both bank and non-bank investors, with a number of debt funds seeking to deploy cash across the capital structure. We have also started to see loan-to-value (LTV) levels increase (a number of 65-75% LTV deals coming to market) but not to the levels seen pre-credit crisis.
- Aircraft: There continues to be a large number of transactions coming to market to support new deliveries. The senior debt market is driven almost entirely by a group of ~20-30 banks able to deploy liquidity secured by a mortgage on an aircraft (typically pricing below 200bp but it depends on the airline). LTVs tend to be at ~80% and most lenders are comfortable lending over 12 years. Shorter term financing for aircraft lessors has also been a feature – we expect more such transactions in future.

CEEMEA

CEEMEA 2017 volumes are significantly down versus 2016 at USD 80bn versus USD 194bn in 2016 over the same period (see chart below).

- **Middle East:** In 2017, volumes in the Middle East loan market were negatively impacted versus last year as a result of a) many borrowers having already refinanced in 2016 and b) the aggressive terms available in the bond market. In particular, this has meant less sovereign related loans as compared to last year. There has also been a small fall in volumes due to the latest sanctions in Qatar as imposed by Saudi Arabia and UAE. It is worth noting, however, that we are comparing to 2016 which was a particularly strong year driven by increased lending activity for Middle East borrowers seeking to raise funds as a result of low oil prices leading to funding gaps.
- **Africa:** Deal flow in Africa also saw a striking downturn in volume this year, 60% lower than volumes raised in the first three quarters of 2016. This is largely due to a lack of large O&G capital expenditure and instability across many countries leading to a difficult credit story for banks. We hope this will pick up into 2018, but our outlook for more significant deal flow is cautious.
- **Central and Eastern Europe:** CEE has also seen lower volumes in 2017. We were anticipating more M&A activity in 2017 but it has not materialised. We are hopeful that this will change in 2018, in particular in the Czech Republic and Poland where corporates and financial sponsors are seeking acquisition opportunities with relatively cheap finance available from local and international banks.
- **Russia:** Russia has seen continued improvement for Borrowers in 2017 with tightening of spreads and loosening of structures (pre-export finance structures to unsecured), in particular for the large metals/mining companies. International banks continue to return to the country (despite recent additional US sanctions) and Russian banks have also become very competitive in USD. The deal flow is not yet back to pre-sanction levels but appetite has strengthened significantly.
- **Turkey:** The lending market is still fuelled by Turkish FIs, which continue to close short to medium term loan facilities. Corporate borrowing has been limited to only the strongest credits due to overall instability in country. Some project financings have also closed, for example, hospitals, but with the support of development finance institutions alongside the commercial banks.

CEEMEA volumes breakdown by region



Source: Dealogic

Americas

Corporate

- At USD 564bn, investment grade lending is 7% below the first nine months of 2016 (USD 608bn) and is the lowest total for the first nine months of any year since 2013.
- While M&A related loan volume increased by 4% to USD 120bn, the number of acquisition related deals declined 14%, as uncertainty over the direction of US trade and tax policy and whether any kind of tax reform can be muscled through Washington have likely kept some M&A transactions on the sidelines as deal makers wait for some clarity. After an extremely slow start to the year, M&A loan volume increased in each quarter in 2017, as the initial shock and the implications of a Trump presidency were digested by the market
- Refinancing activity is off 11% for the first nine months, with issuers seeing little urgency to refresh tenors amid stable market conditions.
- With strong liquidity from banks, pricing remained relatively flat over the course of the year and 5Y tenors continued to be the norm for the majority of corporate revolving credit facilities, despite higher costs of lending and increased focus on return on capital due to continued phasing-in of Basel 3 regulations. Nevertheless, banks continue to carefully evaluate lending decisions especially with respect to revolving credit facilities that appeal primarily to relationship banks that justify participating in these relatively unprofitable facilities based on ancillary business opportunities.

Leverage

- The US leveraged loan markets were characterised by a positive and steadily improving market environment, in which positive supply-demand technicals and macroeconomic trends created an extremely borrower-friendly environment. The trends in the market generally followed and improved upon the market tone from Q1 2017 and overall were stable through the year.
- Leveraged loan volume at USD 512bn was up 42% for the first nine months of 2017, with this growth fuelled by a 34% increase in M&A activity to USD 245bn and a 45% increase in refinancings to USD 193bn. Financial sponsor driven volume accounted for 48% of the total up from 44% last year.
- Cross-border leveraged loan volume increased 60% to USD 75.2bn for the first nine months of 2017, with 66% of this volume syndicated to US investors and 34% syndicated in Europe versus 77% for the US and 25% for Europe during the same period in 2016.
- Syndicated second-lien term loan volume spiked to USD 21bn, a four-fold increase from 2016, with Q3 2017 being the highest of any quarter since Q2 2014. This increase is due not only to the overall increase in deal activity, but also to a shift away from privately placed second liens that dominated second-lien activity in the first half of 2016.

- Despite the strong volume growth, demand outstripped supply by USD 54bn, with new collateralised loan obligation (CLO) formation being the primary driver of this demand. CLOs accounted for 65% of the institutional investor base with loan mutual funds representing most of the remainder at 24%, and HY funds, Business Development Corporations (BDCs), hedge funds and insurance companies rounding out the market.
- Pricing has been on a general downward trajectory for all of 2017 with all-in average spreads for deals rated BB/BB- declining 39bp since year-end 2016 to 233bp, and spreads for deals rated B+/B declining 23bp to 383bp.
- The issuer-friendly technical imbalance combined with the overall positive tone in the market are not only putting downward pressure on pricing, but also leading to increasingly aggressive structural terms. Leverage levels are creeping up with the average Total Debt-to-Adjusted EBITDA figure for large corporate LBOs sitting at 6.1x for Q3 2017, roughly a half turn higher than 2016 and the highest level since 2007 when it reached 6.2x. In spite of the more aggressive leverage levels, low interest rates have resulted in healthy interest coverage ratios and equity levels are well above levels seen in 2007 right before the financial crisis.
- 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, have been a growing source of funding for the middle market transactions and a selective participant in larger deals. Starting in mid-2016 and accelerating into 2017, these players have become much more important in the market as funds flowing into Direct Lenders have increased, allowing them to participate on an increasingly greater scale and effectively compete with syndicated solutions. Further assisting the growth has been sponsors' growing awareness of the constraints the Leveraged Lending Guidelines have put on regulated banks, which in turn has driven sponsors to bring unregulated institutions into the mix. This trend applies to almost all deals under USD 50m of EBITDA, and many larger deals given the ability for multiple Direct Lenders to underwrite USD 500m or more, and hold hundreds of millions of dollars of exposure without the need to sell down.

Project finance and emerging markets

- North American project finance year-to-date volumes totalled USD 33bn through Q3 2017, up 31% from the same period in 2016 despite a decline in deal count from 81 to 72. Volume growth was driven by a 179% increase in institutional loan volume from USD 5bn to USD 14bn and accounted for 42% of total volume versus just 20% in 2016, although much of 2017's institutional volume was related to repricings and refinancings.
- Traditional project finance bank lenders continued to look for assets in a limited new issue environment, as bank loan volume declined 6% to USD 19bn. Financings for fully contracted conventional power assets are rare and as such attract significant interest from banks. Bank competition for renewable project financings is fierce, with individual banks committing 100% to transactions that are under USD 150m in total deal size, and subsequently bringing one or two banks in post-close.
- Given the lack of clarity on tax reform, and specifically tax policy around incentives related to renewable projects, renewable activity was modest over the first half of 2017, although an uptick was observed in Q3 with four solar and three wind projects closing bringing the year-to date renewable deal count to nine, of deals reported.
- Pricing for traditional contracted assets in the bank market was as low as Libor + 162.5bp with step-ups every three to four years. Short term renewable deals (i.e. bridge-to-tax equity deals with tenors of up to 18 months) are pricing at Libor + 125 to 137.5bp. Merchant gas-fired construction financings continued to be priced at initial margins as low as Libor + 325bp, all featuring a combination of a hedge and/or capacity payments.
- Mini-perm structures with tenors of 7 to 10 years continued to be the sweet spot for banks, as appetite for longer maturities continued to decrease.
- European, Canadian and major Asian banks continued to be the primary source of bank liquidity, although second-tier Japanese banks and US regional banks provide additional retail capacity and investment banks are active when capital markets opportunities are present. Asset managers and infrastructure funds continued to look opportunistically for floating rate project finance loans, albeit with yield requirements higher than banks, and Korean investors emerged as a source of liquidity for merchant power assets.
- An institutional investor universe that also is active in leverage finance loans existed for project finance loans with below investment grade credit profiles that are outside of the risk tolerance of most banks, including deals with higher merchant risk exposure or in structurally subordinated holding company structures.
- Year-to-date Latin American syndicated loan volume surged to USD 18.2bn for the first nine months of 2017 versus just USD 10.3bn for the same period in 2016, with more than half of this volume coming in Q3, and is already ahead of 2016's total of USD 15bn, which was the worst performance in more than 10 years following the dramatic fall off in activity in Brazil resulting from a severe recession, fallout from corruption scandals and political turmoil. And while activity in Brazil exhibited some growth compared to 2016, syndicated loan volumes continued to be well below levels recorded since 2011, as political turmoil continues to plague the nation.
- Mexico led Latin American issuance with roughly half the total at USD 9.5bn and which was more than double the same period in 2016. However, two-thirds of the issuance came in the third quarter with the majority of the volume coming from three large deals, including a USD 620m project finance transaction.

- Construction and mining led Latin American issuance, which was bolstered by jumbo refinancings for Cemex (USD 4bn) and Vale (USD 2bn).
- Like US loan markets, demand outstripped supply with lenders hungry for paper in this over-banked market.

APAC

Corporate

The 2017 Asia Pacific Corporate and Acquisitions loan volume is expected to record ~USD 512bn, a ~19% reduction from last year's level.

- Corporate and acquisition loans remained the key contributor to loan volume in APAC, representing 77% of the total loan volume in the region. Japan continued to top the league tables in Asia Pacific in terms of volume share, followed by China, Australia, Hong Kong and Singapore.
- Asia Pacific M&A volume is expected to reach ~USD 55bn in 2017, well below last year's USD 106bn, due primarily to the Chinese regulatory control on capital outflows. In Q1 to Q3 2017, Asia Pacific saw a substantial contraction in M&A financings for Chinese mainland corporates.
- Relevant corporate deals by size in 2017 are the EUR 7.4bn (USD 8bn) financing to support the acquisition of Anheuser-Busch InBev's European assets by Japanese beer maker Asahi Group Holdings Ltd, and the USD 5.2bn loan for Alibaba Group Holding Ltd to repay existing indebtedness and for general corporate and working capital purposes.

Leverage

In 2017, the Asia Pacific leveraged finance market is expected to record a total volume of ~USD 18bn, representing a ~59% year-on-year increase.

- As of end-Q3 2017, the Asia Pacific leveraged finance market recorded a total of USD 13bn in volume via 11 deals.
- The Hong Kong market (51% share) came into the spotlight at ~USD 7bn, after having closed no leveraged financings in Q1 to Q3 2016. Three deals were closed in 2017 to date: a HKD 28bn (USD 4bn) facility supporting the leveraged buyout of Belle International Holdings, a USD 2.3bn transaction supporting the secondary buyout of Nord Anglia Education Inc. from Baring Private Equity Asia and a USD 914m financing for the buyout of fixed line assets of Hutchison Telecommunications.
- Japan was the second largest market at a ~USD 5bn volume (36% share), demonstrating a 2,112% year on year increase (vs. USD 221m as of end Q3 2016).
- Australia represented 13% of market share, recording a volume of ~USD 2bn, a ~157% year-on-year increase.

Project Finance

- The Asia Pacific project finance market is expected to reach ~USD 93bn, a 27% increase 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.
- India was the second largest market at USD 19bn as of end Q3 2017, a 133% year-on-year increase. There has been a surge in renewable project financing, in which wind/solar projects accounted for about one third of the country's project financing volumes. However, the majority of these transactions were denominated in local currency.

2018 forecast

Western Europe

- We are forecasting the overall 2018 volumes in EMEA to grow by ~6% to USD 1,050bn.
- **In the EMEA corporate market**, we expect volumes to be rather in line with 2016 ones. We also expect margins to stabilise at their current low levels for investment grade companies, but the decline to slightly continue for crossover transactions, despite limited room for improvement. Refinancing activity is expected to rebound in 2018, as companies should start to renegotiate transactions signed in 2014. Moreover, liquidity should remain strong, with banks looking for new opportunities.
- **In the EMEA leveraged market**, we expect 2018 volume to be broadly in line with 2017. We expect many of the 2017 key themes to continue to be prevalent, such as increased pressure for cov-lite terms to be made available to always smaller companies, the increased competition from unitranche and direct lenders, and the implementation of the ECB guidelines.
- The **EMEA project and asset backed finance market** showed resilience in 2017 and we expect activity to remain relatively constant through 2018. 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 unclear.

- We expect further greenfield broadband infrastructure deals into 2018 and a few other PPP deals (such as tunnels and/or roads) in Western Europe. Otherwise, infrastructure activity will surround 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. Headwinds include the UK market where Brexit should start to have an impact and we might be reaching a low point on pricing in Western Europe.
- O&G refining/LNG projects continue to be a challenge (in particular LNG) but we do expect a few jumbo deals to come to market, including the Trans Adriatic Pipeline across southern Europe and the Duqm refinery in Oman. Reserve Based Lending should see continued activity for new developments and further acquisition activity.
- Renewables will see fewer greenfield developments (though a few still expected) but we anticipate a pick-up in refinancing activity as more projects complete the construction period and sponsors take advantage to re-leverage and reduce loan costs.

CEEMEA

Overall, we expect a similar picture in 2018 versus 2017 with the most growth coming from the CEE region.

- The Russian market in 2018 is highly dependent on geopolitical decisions, but as matters stand today, we expect continued activity for both structured and unsecured deals in the mining sector. Oil & gas is still subject to more sanctions and is more challenging. We may possibly also see more FI and corporate activity which has been particularly quiet in the international markets since the first set of sanctions were imposed. Overall, we expect flat volumes in 2018 versus 2017.
- With the strength of the bond market, we do not expect significant corporate activity in the Middle East in 2018. A few large O&G/Power deals may close (see above Project Finance section) but corporates and sovereigns are more likely to tap the bond market and we therefore expect a similar picture next year to 2017.
- We do expect a pick-up in lending in the CEE versus 2017. Strong liquidity and acquisitive corporates/ sponsors should lead to more M&A activity in 2018. Some corporates are also expected to come to market for refinancing.
- Turkey is likely to remain a market driven by short term deals for Turkish FIs.
- African is difficult to predict and will vary from country to country, but we do not expect a significant increase on 2017. We expect a few international deals to emerge in the more structured space but large international corporate deals are likely to be few and far between.

Americas

- In the **investment grade** space, we expect liquidity from banks to remain strong in 2018, although banks will continue to be disciplined about committing capital in the context of overall relationship profitability. Although shorter tenors are favoured by banks as a result of Basel regulations, we think it is unlikely that issuers will be pressured to reduce tenors below five years due to strong competition among lenders.
- While the outcome is highly uncertain, we do expect to see an uptick in M&A activity once the direction of US policy, including trade and especially tax, is clearer and which should come into better focus in Q1 of next year. Other investment decisions, such as capital expenditures, are also being impacted over this uncertainty.
- A one-time tax reprieve on the repatriation of cash from overseas is also being tossed around Washington. Should this become law, at least some of this cash will be used to reduce debt and borrowing needs.
- Given the strong overall liquidity in the market, it is unlikely that we are going to see any near-term increase in pricing, and jumbo deals should be easily absorbed by the market. In view of the strong appetite of US banks for drawn assets, the financing of large acquisitions through a combination of bridge-to-bonds and term loans should continue to be used. Assuming resolution around US tax policy and a resulting pickup in M&A activity, this 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. While geopolitical events such as rising tensions with North Korea, instability in Spain and uncertainty around US tax, trade policy, healthcare and immigration laws have the ability to destabilise the leveraged loan markets, such a reaction is not expected in the near to medium term, unless these events become much worse than currently expected. The market's reaction to Brexit and the US elections in 2016, as well as North Korean and healthcare news in 2017, has generally been short lived and benign, with the upward trends continuing shortly thereafter.
- 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 collateralized by leveraged loans). Therefore, barring a significant weakening in fundamental economic conditions, a major unexpected market shock, or a significant increase in new leveraged loan supply, we expect conditions to remain stable in 2018.

- In the **project finance and emerging markets space**, looking forward, the project finance volume is expected to be roughly flat to this year, with the visible forward pipeline comprised of LNG, renewable power, pipelines, and merchant-gas fired construction projects, although at slower pace than 2017. In addition, we expect to see projects that are taking advantage of the feedstock derivatives from natural gas production, such as ethane export facilities. We also expect to see a pick-up in LATAM project finance transactions, especially in the renewable space, with activity expected in Mexico, Chile and Colombia. In Peru, both sponsors and banks are awaiting the rebidding of the USD 6+ billion GSP pipeline by the Peruvian government; however, many believe the debt financing will not occur until at least 2019
- With no pick-up in supply expected, we expect banks will need to be more creative and willing to assume slightly more risk on transactions in order to meet their budgets. Despite strong demand, we do not expect to see pricing go lower, however, as lower pricing is unlikely going to meet banks' minimum return on capital hurdles.
- In Latin America, Mexico is expected to be the primary source of volume in 2017, although the outcome of 2018 presidential election and NAFTA negotiations with the US may impact activity adversely. Offsetting this is the need to rebuild after the devastating earthquake that hit Mexico City in September.
- 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 2018 which is expected to constrain new supply. Banks, however, are back in business there and are actively looking for deals.
- Argentina is now on banks' radar screen as banks cautiously evaluate when to re-enter the market for project financings.

APAC

- We are forecasting the 2018 volume in APAC to grow by ~5% to ca. USD 699bn.
- Corporate and acquisition activity should remain stable and be the key contributor to APAC loan volume in 2018. M&A financings may pick up again in 2018, as Chinese regulators are pushing for outbound investments that support the One Belt One Road strategy or help China develop its competitiveness. Investments related to high-tech, advanced manufacturing, agribusiness, resources and services sector investments are encouraged.
- The leveraged finance volume will remain modest 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 when judged by international standards. However, the recently proposed JPY 2trn (USD 18bn) leveraged buyout of the memory-chip business of Toshiba Corp by Bain Capital for Q4 2017 / early Q1 2018 may boost Asia Pacific leveraged finance volumes significantly.
- There are a large number of project financings under discussion, particularly for Australia and Indonesia. Debt volumes for Indonesia power plant projects can be challenging to forecast as lead times for such projects, especially in less developed economies, can be very protracted. Elsewhere, Australia's project financing pipeline continues to consist of renewable energy projects and infrastructure-related PPPs.

IMPORTANT DISCLAIMERS AND DISCLOSURES

This document has been prepared by Société Générale acting through its Global Banking & Investor Solutions Division ("SG") for information purposes only. It is not a product of SG's Research Department. This document is not intended to provide the sole basis for evaluating, and should not be considered as a recommendation or investment advice with respect to, any financial product, issuer, transaction or other matter. It does not constitute an offer, or the solicitation of an offer, to buy or sell any securities or other financial product, to participate in any transaction or to provide any investment banking or other services, and should not be deemed to be a commitment or undertaking of any kind on the part of SG or any of its subsidiaries to underwrite, place or purchase any securities or to provide any debt or equity financing or to participate in any transaction, or a recommendation to buy or sell any securities, to make any investment or to participate in any transaction or trading strategy.

In preparing this document, SG has used information available from public sources. No express or implied representation or warranty as to the accuracy or completeness of such information is made by SG, or any other party. SG is under no duty to update any of the information contained herein.

Any information in this document is purely indicative and has no contractual value. The contents of this document are subject to amendment or change at any time and SG has no duty or obligation to notify the recipients of any such amendment or change. SG has neither performed nor obtained any independent verification of information obtained from external sources. No responsibility or liability (express or implied) is accepted for any errors, omissions or misstatements by SG or for the consequences arising from the use of the information contained in this document, except in the case of fraud or any other liability which cannot lawfully be excluded. This document is of a commercial and not of a regulatory nature.

This document may include past performance and forecasts and/or involve significant elements of subjective judgment and analysis. Past performance is not necessarily a guide to future performance. No representations are made as to the accuracy of such forecasts, judgment and analysis or that all assumptions relating to such forecasts, judgment and analysis have been considered or stated or that such forecasts, judgment and analysis will be realised.

Any views, opinions or conclusions contained in this document are indicative only, are not based on independent research and do not represent any commitment (express or implied) from SG. SG may issue other reports that are inconsistent with, and reach different conclusions from, the information presented in this document and is under no obligation to ensure that such other reports are brought to the attention of any recipient of this document.

This document is not intended for use by or targeted to retail customers.

SG and its subsidiaries do not provide legal, tax, regulatory, investment, financial, credit or accounting advice. The commercial merits or suitability or benefit of any products or services described in this document to the recipient's particular situation should be independently determined by the recipient and any decision to receive services or products described in this document or to proceed with any transaction as a result of receiving this document shall be the sole responsibility of the recipient. Any such decision should involve an assessment of the legal, tax, accounting, regulatory, investment, financial, credit and other related aspects of any such products or services based on such information and advice from the recipient's own professional advisers and such other experts as the recipient deems relevant. SG shall not be liable for the content of, or any failure by the recipient to obtain, such information and advice. The recipient's attention is drawn to the fact that its tax treatment depends on its particular situation and may change in the future. Investments in general involve numerous risks, including, among others, market, credit and liquidity risks.

SG and its affiliates (the "SG Group") comprise a full service securities firm and commercial bank engaged in securities, commodities and derivatives trading, foreign exchange and other brokerage activities, as well as providing investment, corporate banking, asset and investment management, financing and strategic advisory services and other commercial services and products to a wide range of corporations, governments and institutions from which conflicting interests or duties, or a perception thereof, may arise. In the ordinary course of these activities, members of the SG Group at any time may invest on a principal basis or manage funds that invest, make or hold long or short positions, finance positions or trade or otherwise effect transactions, for their own accounts or the accounts of customers, in debt, equity or other securities or financial instruments (including derivatives, bank loans or other obligations) of institutional or corporate clients, potential counterparties or any other company that may be involved in a transaction, in all cases subject to applicable law, rules and regulations.

SG is not and will not be responsible to anyone other than its clients for providing the protections afforded to the clients of SG or for providing advice in relation to the arrangements, services or transactions referred to in this document.

This document is issued by SG. Société Générale Corporate & Investment Banking (SG CIB) is a marketing name for corporate and investment banking businesses of SG and its subsidiaries worldwide. SG is a French credit institution (bank) that is authorised and supervised by the European Central Bank ("ECB") and the Autorité de Contrôle Prudentiel et de Résolution ("ACPR") (the French Prudential Control and Resolution Authority) and regulated by the Autorité des marchés financiers (the French financial markets regulator) ("AMF"). Société Générale London Branch is authorised by the ECB, the ACPR and the Prudential Regulation Authority ("PRA") and subject to limited regulation by the Financial Conduct Authority ("FCA") and the PRA. Details about the extent of our authorization, supervision and regulation by the above mentioned authorities are available from us on request.

Capital markets and investment banking activities in the United States are offered through its U.S. registered broker-dealer and futures commission merchant, SG Americas Securities, LLC, a member of FINRA, NYSE, NFA and SIPC. Lending, derivatives and other commercial banking activities in the United States are performed by SG and its banking subsidiaries.

Société Générale S.A. Frankfurt Branch is registered in the Commercial Register at Amtsgericht Frankfurt under the number HRB 37465 as an European Branch according § 53b KWG (German Banking Act), supervised by the German regulator Bundesanstalt für Finanzdienstleistungsaufsicht and authorized by the French ACPR. In connection with the single supervisory mechanism SG is under direct supervision of the ECB.

Société Générale, Sucursal en España is authorised and regulated by the Comisión Nacional del Mercado de Valores (CNMV) for the conduct of its Securities Market activities in Spain.

SG is subject to limited regulation in Italy by the Commissione Nazionale per le Società e la Borsa. Details of the extent of SG's regulation by the Commissione Nazionale per le Società e la Borsa are available from SG on request.

For recipients in Poland: This document is issued in Poland by Societe Generale S.A. Oddzial w Polsce ("Branch") with its registered seat in Warsaw (Poland) at Marszalkowska 111 St. The Branch is supervised by the Polish Financial Supervision Authority and the French l'Autorité de Contrôle Prudentiel et de Résolution.

For recipients in Japan: This document is distributed in Japan by Societe Generale Securities Japan Limited, which is regulated by the Financial Ser¬vices Agency of Japan. The financial instruments and services described in this document may cost you fees and charges.

The value of the financial instruments or service described herein may be affected by fluctuations in foreign currency rates, interest rates, stock markets etc. and as a consequence you may incur losses by investing in such financial instruments or services.

It is your responsibility to read all pre-trade notifications, prospectuses or product explanations etc., relating to each financial instrument or service before making your decision to invest in this financial product or service in order to understand the risk(s) and fees associated with such financial instrument or service.

This document is not for public circulation, must not be copied, transferred nor its content be disclosed, in whole or in part, to any third party.

Societe Generale Securities Japan Limited

Financial Instruments Business Operator: Kanto Local Finance Bureau (kin-sho) No. 1770

Member of Japan Securities Dealers Association, Type II Financial Instruments Firms Association, Financial Futures Association of Japan, and Japan Investment Advisers Association

For recipients in Hong Kong: This document is distributed in Hong Kong by Societe Generale Hong Kong Branch, which is regulated by Hong Kong Monetary Authority. This document is issued solely to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance.

For recipients in Singapore: This document is distributed by the Monetary Authority of Singapore (MAS) licensed representatives of Societe Generale, Singapore Branch and may only be provided to accredited investors, expert investors and institutional investors, as defined in Section 4A of the Securities and Futures Act. If you wish to discuss this document or effect transactions in any security discussed herein, you should do so with or through MAS licensed representatives of Societe Generale, Singapore Branch.

If this document has been distributed in or from the Dubai International Financial Centre: This document has been distributed by Societe Generale - DIFC Branch. Societe Generale in the DIFC (Registered No. 0042) is regulated by the Dubai Financial Services Authority ("DFSA"). Societe Generale - DIFC Branch is authorised to undertake the financial services activities that fall within the scope of its existing DFSA license. Principal place of business in the DIFC: Gate Village Building No. 6, Level 4, PO Box 29600, Dubai, UAE. Related financial products or services are only available to Market Counterparties and Professional Clients as defined by the DFSA."

For recipients in Saudi Arabia: This document has been distributed by Societe Generale Saudi Arabia JSC ("SG SAR") which offices are located at 8th Floor, North Tower, Abraj Atta'awuneya PO Box 53828, Riyadh 11593, Kingdom of Saudi Arabia. SG SAR is an Authorised Person regulated by the Capital Market Authority of the Kingdom of Saudi Arabia (the "CMA"), license no. 37-09142, and is licensed to arrange and advise its customers on investments and transactions related to securities. The provision of the services or products described in this document may be subject to the signing of a client agreement between SG SAR and the prospective client.

Products and services that may be referenced in this document may be provided through one or more subsidiaries of SG and may not be available in all jurisdictions.

This document is to be treated in the strictest confidence and not to be disclosed directly or indirectly to any third party without SG's consent. It is not to be reproduced or redistributed in whole or in part, nor used for any purpose except as expressly authorised by SG.

Copyright 2017 Societe Generale (SG). All rights reserved.

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	Andrew Menzies	andrew.menzies@sgcib.com	+44 (0) 20 7676 8364
Head of DCM Financial Institutions Origination	Eric Meunier	eric.meunier@sgcib.com	+33 (0) 1 42 13 89 61
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
Co-Head of Capital Markets Engineering	Arnaud Mezrahi	arnaud.mezrahi@sgcib.com	+33 (0) 1 42 13 99 13
Co-Head of Capital Markets Engineering	Julien Brune	julien.brune@sgcib.com	+33 (0) 1 42 13 36 05
Regional Head of DCM CEEMEA	Cecile Camilli	cecile.camilli@sgcib.com	+33 (0) 1 58 98 13 82
Regional Head of DCM AMER IG	Jonathan Weinberger	jonathan.weinberger@sgcib.com	+1 212 278 6021
Regional Head of DCM AMER HY	Arnaud Achour	arnaud.achour@sgcib.com	+1 212 278 5365
Regional Head of DCM APAC	Laurent Morel	laurent.morel@sgcib.com	+852 21 66 56 76

SYNDICATE

Global Head of Syndicate	Terence Shanahan	terence.shanahan@sgcib.com	+44 (0) 20 7676 7207
Global Head of Loan Syndicate	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 21 66 56 07

ASSET BACKED PRODUCTS - SECURITISATION & DISTRIBUTION

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

TOURS SOCIETE GENERALE
75886 PARIS CEDEX 18 – FRANCE
WWW.SGCIB.COM

SOCIETE GENERALE
29 BOULEVARD HAUSSMANN, 75009 PARIS
WWW.SGCIB.COM
A FRENCH CORPORATION WITH SHARE CAPITAL OF EUR 1,009,641,917.50
552 120 222 RCS PARIS

Ref. (J) 710523 — Studio Societe Generale — © Photos: PeopleImages.com/GO Vision / GraphicObsession. 11/2017.

SOCIETE GENERALE
Corporate & Investment Banking

BUILDING TEAM SPIRIT
TOGETHER