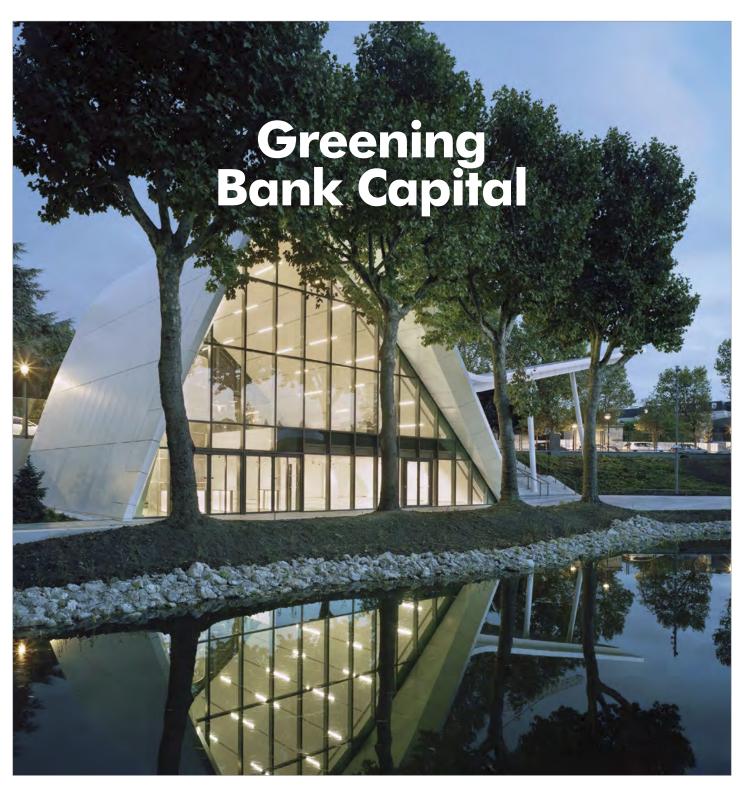
Bank+Insurance HybridCapital

With CRÉDIT AGRICOLE CORPORATE & INVESTMENT BANK





building together _



5.125% 30NC10 Subordinated Notes Due 2048

Joint Bookrunner







NC5.25

Joint Lead Manager



Joint Lead Manager









Choose a bank with a strong footprint in the insurance world.



Bank+Insurance HybridCapital

Contents



INTRODUCTION

3 A question of survival

Will banks take green bonds further down the capital stack? If the experience of the first green SNP and HoldCo bonds is anything to go by, they may find incentives for doing so — and do so they must.

MARKET NEWS

4 Scarred by volatility

- CGD T2 completes recap despite intra-day moves
- Dutch AT1 recover after tax status undermined
- Credit Suisse \$2bn AT1 hits pre-summer window
- Green SNP, HoldCo debuts outdo conventionals
- Nordea in Swedish-Finnish contractual SNP debut
- CNP sells first EUR500m RT1, Vivat joins market





FROM CACIB

14 Regulatory updates

EU Council adopts revised RRM • EBA-ESMA Statement on retail sales • BoE updates on MREL

• EIOPA launches the fourth stress test • Dodd-Frank recalibration • Plus more from Crédit Agricole CIB's DCM Solutions team

Bank+Insurance HybridCapital

Contents



BLUEBAY

20 Beware risks of QT

Investors are underestimating the risks that accompany the shift from an era of quantitative easing to quantitative tightening, according to David Riley, chief investment strategist at BlueBay Asset Management, who says episodes of volatility are increasingly likely. He argues for a focus on high conviction bottom-up picks, with European banks among his favoured sectors.

ROUNDTABLE

24 Greening bank capital

Recent inaugural green senior non-preferred issues could represent the first green steps down the capital stack by financial institutions. Crédit Agricole CIB and Bank+Insurance Hybrid Capital gathered together specialists in bank capital and green bonds to explore how green subordinated debt could work and help put the financial system on a path to sustainability.



36

DENMARK

36 Danske opens SNP

Since the country's MREL and senior non-preferred debt framework was firmed up in March, issuers have proceeded to plot their issuance strategies, with Danske Bank successfully opening the Danish SNP market on 14 May. Neil Day reports.

40 Hybrid data

45 Disclaimer

A question of survival



The green bond market must broaden or die.

That was the thrust of one investor's message at a special green bank capital roundtable hosted by Crédit Agricole CIB in June for *Bank+Insurance Hybrid Capital*. Why? Because investors cannot construct portfolios that will help the product become mainstream while the new sustainable asset class is dominated by large but low-yielding sovereign, supranational and agency green bonds, however inspiring these may be.

Fortunately, banks are entering the market as issuers in increasing numbers, launching inaugural and even repeat senior unsecured issues, and more recently taking their first steps into juicier senior non-preferred issuance.

Will they follow this by moving further down the capital stack? If the experience of the first green SNP and HoldCo bonds is anything to go by, they may find incentives for doing so.

Just as markets have become more volatile while quantitative easing measures are being withdrawn, green bonds increasingly appear to be an instrument that can insulate new issues from some of the vagaries of the primary market. Larger books and less price sensitivity would normally translate into lower new issue premiums, and green bonds all but ensure both of these.

However, higher beta instruments such as Tier 2 and especially Additional Tier 1— as well as Restricted Tier 1— are no ordinary bonds. Aligning their structures with not only green standards but regulatory requirements and banks' wider

balance sheets may take some imagination.

But innovate we must if the financial system is to become truly sustainable.

> Neil Day, Managing Editor

Bank-Insurance
HybridCapital

CREDIT AGRICOLE
CONFORME ANVISTMENT RAME

Greening
Bank Capital

Burber
Burber
Borner (rids of QT

Score by relatiny

Decreads

Cover image: Crédit Agricole's Evergreen Campus at Montrouge; Photo credit: LK Photographe

Bank+Insurance HybridCapital

Published by Newtype Media

Neil Day Managing Editor +44 20 7625 2175 nday@bihcapital.com

Tom Revell
Reporter
+44 20 3269 2058
trevell@bihcapital.com

In association with



Cécile Bidet

MD, Global Head of DCM Solutions & Advisory
cecile.bidet@ca-cib.com
+44 20 7214 5466

Vincent Hoarau MD, Head of FIG Syndicate vincent.hoarau@ca-cib.com +44 20 7214 6162

Christian Haller
MD, Head of DCM Financial Institutions
christian.haller@ca-cib.com
+49 69 78901680

Visit us at **bihcapital.com**

Please see important disclaimer on page 45

Fulfilment & distribution

Celeritas Solutions

Newtype Media

184 Acton Lane Park Royal London NW10 7NH United Kingdom +44 20 7625 2175

Market news

CGD T2 completes recap despite intra-day volatility

Caixa Geral de Depósitos (CGD) successfully completed a recapitalisation plan embarked upon last year with the execution of a EUR500m 10 year non-call five Tier 2 deal on 21 June, overcoming volatile markets to price its landmark issue with a modest new issue premium.

The subordinated issue comes after the Portuguese bank issued a EUR500m 10.75% perpetual non-call five AT1 in March 2017 as the second step in the recapitalisation plan, following a capital increase from the state at the start of that year.

After a three-day roadshow, CGD and its leads held a go/no-go call at 10.00 CET on Thursday, 21 July, with the market having been in risk-off mode against a backdrop of heightened trade war fears. On the back of a quiet open, it was decided to proceed with the EUR500m nogrow 10 year non-call five Tier 2 transaction, which was launched with initial price talk of the high 5% area.

The market then took a turn for the worse, as negative Italian political news catalysed negative sentiment, with BTPs widening as much as 40bp at the short end, also impacting a Spanish government bond auction. However, orders for CGD's Tier 2 crossed the EUR500m mark after around an hour and, in spite of the growing intra-day volatility, guidance of 5.75%-5.875% was released after two hours of bookbuilding, with orders at around EUR750m. The pricing was ultimately set at 5.75% and the book was closed in the afternoon at around EUR800m, comprising over 90 accounts.

"A level of 5.75% and such a quality book were definitely an excellent result for Caixa Geral and its long-awaited return in Tier 2 benchmark format," said Vincent Hoarau, head of FIG syndicate at joint bookrunner Crédit Agricole CIB.

"You could still feel the scars of the violent mark to market moves and negative returns investors suffered throughout H1. Volatile markets have made the sale of subordinated debt much harder at the



end of the semester and there was a lot of execution risks associated with this trade."

He put the new issue premium at around 37.5bp, which he noted was at the lower end of premiums being paid on contemporaneous hybrid trades from the bank, insurance and corporate sectors. The new issue premium calculation was based on the deal pricing equivalent to 550bp over mid-swaps and fair value around 513bp, taking into account BCP Tier 2 trading at 555bp over or 563bp adjusting for the curve, and CGD trading 50bp inside BCP.

'Definitely an excellent result for Caixa Geral'

Hoarau acknowledged that the ongoing market backdrop and intra-day volatility had discouraged some investors from participating in peripheral debt or placing as large orders as they might otherwise have done, but said that the level of demand was a testament to the very good work done by CGD on the roadshow and its credit story.

"The long-awaited announcement of the offering was met with an immediate, widespread interest from around 80 investors to participate in a roadshow that took place in Lisbon, Paris and London," he said. "This roadshow gave CGD the opportunity to exhibit the progress on its Strategic Plan 2020, namely in key areas of profitability, efficiency and asset quality.

"CGD's enhanced credit profile, and the improved macroeconomic environment in Portugal helped the issuer navigate rather unstable market conditions at the time of issuance concerning a global trade war and the prevailing uncertainties around rates in Europe."

Asset managers were allocated 71%, hedge funds 13%, banks and private banks 8%, and insurance companies 8%. The UK and Ireland took 38%, Portugal 26%, Spain and Italy 13%, France 8%, Switzerland 5%, Germany 3%, and the Benelux and elsewhere 7%.

CGD noted that the recapitalisation plan has resulted in the strengthening of its capital base by a total of EUR4.944bn following the Tier 2 issue.

"This rate is five percentage points lower than the AT1 issued in 2017," the issuer added, "reflecting the different nature of these securities and of their level of subordination, resulting from an agreement with DG Comp, as well as the progress achieved by CGD in terms of profitability, efficiency and solvency with the implementation of its Strategic Plan."

In the wake of CGD's success, Novo Banco announced it would hold investor meetings ahead of raising EUR400m of 10 year non-call five Tier 2, in conjunction with tender and exchange offers for outstanding senior bonds. The announcement came against the backdrop of ongoing investor legal action relating to certain senior bonds of the former Banco Espírito Santo having been reallocated from Novo Banco to the BES bad bank.

EUR909m of bonds were offered for exchange into EUR258.8m of the new notes, with the remaining EUR141.2m allocated to new money on the back of some EUR300m of demand. The Caa3 rated paper was priced at 8.5%, in line with initial guidance.

Dutch AT1 recover after tax status undermined

Dutch Additional Tier 1 prices were temporarily hit on 2 July as news emerged that, following a European Commission ruling, they will lose tax deductibility from 1 January 2019. They soon recovered as issuers announced they would not trigger tax calls, but the development leaves some question marks over the wider product.

Dutch banks have been able to achieve tax deductibility on AT1 coupons since 2014, when the government adopted rules allowing such beneficial tax treatment, with insurance companies doing likewise more recently for their Restricted Tier 1s (RT1s).

But the Dutch government announced on 29 June that CoCos will from 1 January 2019 no longer benefit thus, following a letter from the European Commission's Directorate-General for Competition on 22 June, which said that the advantageous treatment falls foul of State Aid rules. The Commission found that the treatment is illegal State Aid because the Dutch government's rules unjustifiably only apply to banks and insurance companies, rather than to the types of instruments, with companies in other sectors unable to benefit similarly. The Commission asked the Dutch government to remove the preferential treatment, reserving the right to initiate procedures if it did not — for example, requiring taxes be paid retroactively on outstanding AT1s and RT1s.

Reports also emerged from the Netherlands that the removal of tax deductibility was anyway in line with the government's agenda, with additional



annual revenues of an estimated EUR150m in store.

News of the planned change filtered out over the following weekend and on the morning of Monday, 2 July Dutch AT1 prices dropped, with market participants concerned that issuers could exercise tax call options in their documentation and redeem the bonds at par. Rabobank AT1, for example, was seen 1.5 to 2 points lower.

However, Rabobank and ABN Amro soon put out statements allaying such fears.

"The announced intention by the Ministry of Finance does not currently trigger any change in our views with regards to the role of Cocos as part of Rabobank's capital strategy nor does Rabobank intend to exercise a Tax Call if the Government's intention or the materialisation thereof would constitute a Tax Law Change (as defined in the relevant terms and conditions of the capital instruments in scope)," said Rabobank.

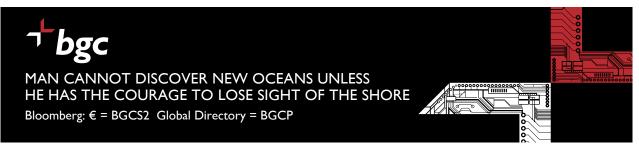
Dutch AT1 recovered around half of their lost ground later on the Monday and the rest on Tuesday. One market participant highlighted how this echoed the price action in Swedish subordinated debt after a similar discussion on tax treatment in September 2016, after which neither affected AT1s nor Tier 2s were called.

Dutch insurers ASR Nederland and Vivat later in the week also announced they do not intend to call RT1 issues.

The European Commission also told the Dutch government in its letter that it is examining the tax treatment of AT1 in other Member States, and could take similar action if such issues are identified elsewhere. Market participants have warned that the incident could therefore have wider repercussions.

"Where AT1 and RT1 tax deductibility would be different to that applicable to other sectors within the same Member State, it can be expected that AT1 and RT1 coupons would no longer be tax deductible in the near future," said Doncho Donchev, capital solutions, DCM, Crédit Agricole CIB. ●

Photo: Dutch parliament, The Hague; Credit: CEphoto/Uwe Aranas



Credit Suisse hits pre-summer window with \$2bn AT1

Credit Suisse took advantage of a possibly final pre-summer issuance window to sell a \$2bn (EUR1.7bn) Additional Tier 1 (AT1) on 9 July, but demonstrated the underlying unreliable nature of the market by going out with initial price thoughts incorporating a concession to fair value of as much as 100bp.

Weakness and widening in the face of episodes of volatility playing out against the backdrop of the anticipated end of QE in Europe had characterised the whole of the first half of the year, but conditions had become particularly febrile from 29 May, when fears over the agenda of the prospective Italian populist coalition government sparked panic, including the biggest one-day move in two year Italian yields since 1992.

"The market has been so volatile ever since," said Neel Shah, financial credit desk analyst at Crédit Agricole CIB. "The BTP-Bund intraday spread differential has moved plus or minus 20bp on average over the past two months, and at the most extreme 90bp intraday.

"Most days felt the market was taking a positive step forwards in the morning but closing weaker by the end of the day, driven by political headlines from the new Italian coalition government."

A consequence of the prevailing volatility was that no European AT1 or Tier 2 benchmarks hit the market in the following three weeks, until Danske Bank on 20 June launched a \$750m perpetual non-call seven AT1.

The transaction was executed after the bank had encountered encouraging demand on a \$1.75bn debut dollar senior non-preferred issue two weeks earlier (see Danish feature), and it was able to attract over \$2bn of orders from around 170 investors to its AT1 amid a stable market window. Following IPTs of the 7.125% area, a \$750m issue — the maximum targeted size — was priced at 7%, equivalent to a new issue premium of some 45bp-50bp.

"It was surprising to see these types of concessions from strong issuers, but it is evidence of the state of more or less the entire sub market these days and



likely to set a precedent for other issuers in this asset class looking at the market," said George Kalbin, director, FI syndicate at Crédit Agricole CIB.

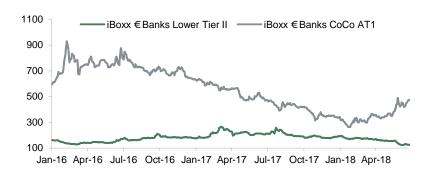
"Investors have remained cautious on AT1s and Tier 2s, with AT1 concerns being driven by the extension risk the instruments face, causing the market to look for a new pricing equilibrium."

But, coming on a day when a dozen

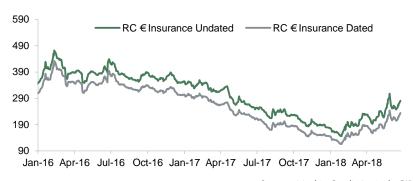
other deals hit the primary market, including hybrids from CNP Assurances (see separate article) and VW, the new issuance was taken as an encouraging sign, and further supply followed the next day, with Caixa Geral de Depósitos, for example, issuing a EUR500m Tier 2 (see separate article).

"Investors need a very high degree of conviction to participate in new issues,"

Secondary bank subordinated indices



Secondary insurance subordinated index



Source: Markit, Crédit Agricole CIB

said Kalbin, "but the good news is that cash is abundant and primary market works well when issuers demonstrate a consensual approach and relatively friendly attitude towards pricing."

The AT1 sector nevertheless continued to underperform, with Danske's US dollar issue trading at a cash price of 98 in early July, while a bellwether such as a \$2.35bn HSBC 6.25% perpetual noncall five sold in March was trading at a similar level, having fallen below par in the preceding couple of weeks.

However, an improvement in tone and secondary spreads in the first week of July capped by encouraging nonfarm payrolls on Friday, 6 July teed up an issuance window that Credit Suisse chose to take advantage of the following Monday.

The Swiss bank went out with initial price thoughts of the 7.875% area for its perpetual non-call five AT1 and ultimately priced a \$2bn deal at 7.5% on the back of a reported \$11bn of demand.

"It's relatively attractive versus the existing AT1s that were coming in the first quarter and the end of last year as



well," said a market participant. "The resets on AT1s have come wider and wider this year as the market has gotten weaker and weaker, and this one's coming rather wide relative to the recent deals, too, so we think it will reprice the secondary curves for those AT1s wider and this will be the new benchmark in terms of where investors feel comfortable."

Kalbin at CACIB meanwhile noted that the summer season was beginning to set in.

"Not only in the AT1 market, but also across the sub and senior space, there is a lot more focus on a pragmatic approach towards pricing in order to minimise execution risks," he added.

"The run-up to August is probably going to be characterised by covered bonds and maybe some senior unsecured, but I doubt we're going to see anything extravagant hitting the screens unless there's a very good market window." ●

League tables

Bookrunners all European FI hybrids (euros and US dollars) 1/1/2018 to 5/7/2018

1/1/2010 10 3/7/2010					
	Managing bank or group	No of issues	Total EUR m	Share (%)	
1	HSBC	12	4,867	13.2	
2	UBS	10	2,978	8.1	
3	BNP Paribas	12	2,814	7.6	
4	Crédit Agricole CIB	7	2,550	6.9	
5	Société Générale CIB	9	2,214	6.0	
6	JP Morgan	15	1,907	5.2	
7	Credit Suisse	10	1,585	4.3	
8	Morgan Stanley	10	1,567	4.3	
9	Barclays	9	1,566	4.3	
10	BofA Merrill Lynch	8	1,375	3.7	
11	Citi	9	1,372	3.7	
12	Deutsche Bank	10	1,293	3.5	
13	Goldman Sachs	8	1,230	3.3	
14	Lloyds Banking Group	2	999	2.7	
15	Santander	2	688	1.9	
	Total	95	36,859		

Source: Dealogic, Thomson Reuters, Crédit Agricole CIB

Bookrunners all financials (euros) 1/1/2018 to 5/7/2018

	Managing bank or group	No of issues	Total EUR m	Share (%)
1	UBS	25	11,534	10.4
2	BNP Paribas	42	10,239	9.3
3	Deutsche Bank	35	8,126	7.4
4	Société Générale CIB	29	7,632	6.9
5	Crédit Agricole CIB	22	6,447	5.8
6	HSBC	36	6,331	5.7
7	Natixis	15	5,600	5.1
8	JP Morgan	27	5,086	4.6
9	Morgan Stanley	21	4,483	4.1
10	Barclays	21	3,637	3.3
11	BofA Merrill Lynch	18	3,026	2.7
12	Goldman Sachs	18	2,886	2.6
13	RBS	12	2,668	2.4
14	Lloyds	6	2,659	2.4
15	UniCredit	18	2,650	2.4
	Total	179	110,440	

Includes banks, insurance companies and finance companies. Excludes equity-related, covered bonds, publicly owned institutions.

Green SNP, HoldCo debuts outdo conventionals

BBVA and KBC sold green senior non-preferred and green HoldCo debuts in May and June, respectively, after BNP Paribas in April issued the first green senior non-preferred bond, with the success of the three deals deemed increasing evidence that green bonds carry demand and pricing benefits.

Other banking groups had previously sold green bonds in HoldCo format contributing towards TLAC and MREL buffers, but BNP Paribas' was the first green bond within a specific senior non-preferred framework.

And while new issue premiums have in general been elevated this year amid more challenging market conditions, all three banks' choice of green bonds for their SNP/HoldCo issuance was deemed to have contributed to impressively tight pricing on the back of high levels of oversubscription.

Most recently KBC achieved a more than thrice-subscribed book for a EU-R500m green HoldCo debut on 20 June, despite being priced with a substantially smaller premium than recent conventional supply in choppy markets.

Following the completion of a European roadshow presenting the Belgian group's new green bond framework, KBC Group NV's EUR500m no-grow deal was launched with initial price thoughts of the low 80s over mid-swaps area. Guidance was later set at the 75bp area, plus or minus 3bp will price within range, with books over EUR1.4bn. The spread was subsequently set at 72bp.

The final book stood at EUR1.7bn, including 131 investors. Green accounts were allocated 71% of the deal.

Fund managers took 63%, insurance companies and pension funds 19%, central banks and official institutions 12%, banks and private banks 5%, and others 1%. Accounts in France were allocated 34%, the UK and Ireland 20%, the Benelux 19%, Germany, Austria and Switzerland 13%, the Nordics 9%, Southern Europe 4%, and others 1%.

"We are very happy with the outcome," said Enzo Soi, funding manager at KBC. "We have a deal that was more



than three times oversubscribed, which is a good success given that the market was quite volatile at the beginning of the week, with the tariff tensions between the US and China.

"Once the markets went green again on Wednesday, especially the stock markets but also the credit indices, we decided to go ahead with the transaction and the deal went smoothly. Even when we tightened the spread investors stayed in, showing they are happy with our credit and with our green framework."

'The market is becoming ripe for issuance'

Soi said demand for the deal was larger than KBC would probably have attracted with a conventional senior Hold-Co issue. He said this could be attributed to the green element and also potentially to the deal's limited size.

"But I think there was definitely some green benefit for the issuer, especially as the market was volatile in the previous days," he said.

George Kalbin, director, FI syndicate at Crédit Agricole CIB — joint green bond structuring advisor and joint bookrunner — said the "stellar" deal showed the advantages of having a green element to a transaction in volatile markets.

"KBC is a very good name, but it's still very impressive that we saw an order book of above EUR1.6bn staying sticky all the way down to 72bp," he added.

The deal was deemed to have paid a new issue premium of around 3bp based on KBC's conventional senior HoldCo curve, with syndicate bankers seeing KBC March 2022s at 60bp, mid, and October 2023s at 71bp. Kalbin noted that in recent weeks, new issue premiums for non-green deals in the senior unsecured market have averaged around 10bp.

"We haven't seen a concession as low as 3bp for some time in this market," he said. "The five year is a slightly defensive maturity, but I think very few investors would consider the senior non-preferred product defensive given their volatility when it comes to price.

"It's an astonishing success that we were able to achieve a minimal concession, which shows green investors acknowledged the high quality of the KBC green bond framework."

The new issue was the first green bond from a Belgian bank.

"This is the logical link we wanted to establish between green funding and our sustainability policy and the assets that we are generating thereunder," said Soi. "We are in this way giving extra financing power to our clients to engage in green projects, and that is the objective of this green framework."

KBC was also interested in joining the green bond market because of the potential investor diversification benefits it offers, he added.

"The market is becoming ripe for issuance," said Soi.

Green bonds can be issued under the framework via KBC Group NV, KBC Bank NV, or any of its other subsidiaries. The framework is intended to allow for secured and unsecured green issuance in various formats and currencies. Soi indicated that any green covered bonds KBC may issue in future would be linked to green residential loans in its cover pool.

KBC may consider issuing at least one green bond per year, said Soi, adding that the choice of format will depend on the group's funding needs.

BBVA debut thrives, sets record BBVA's EUR1bn seven year senior nonpreferred deal on 3 May was the largest green bond from a Eurozone bank and the first green senior non-preferred from Spain. It inaugurated a Sustainable Development Goals (SDGs) Bond Framework whereby the uses of proceeds are mapped to various SDGs.

"We are committed to sustainable finance, and this issue is yet another example," said BBVA CEO Carlos Torres Vila.

The seven year issue was launched with initial price thoughts of the midswaps plus 95bp area. After just over one hour and 20 minutes, the leads announced that books had surpassed EUR1bn.

Guidance was subsequently set at the 80bp-85bp area, will price within range, with books in excess of EUR2.3bn. The spread was then fixed at 80bp and the size at EUR1bn with books over EUR2.8bn, pre-reconciliation. The final book stood at over EUR2.5bn good at re-offer, with more than 200 orders.

Syndicate bankers described the result as being particularly impressive given market conditions, noting that heavy supply of TLAC/MREL-eligible debt in the first quarter had led to investor selectiveness, rising premiums and spread widening.



"I think this deal went incredibly well," said Kalbin at joint bookrunner CACIB, "especially against a softer backdrop and given this is a peripheral issuer — albeit a national champion opening the market after a slow period, with the senior unsecured asset class still only half recovered from a hangover on the back of the surge of supply we saw pre-Easter.

"In the end it was really well received by the wider investor community."

Just over half, 51%, of the bond was allocated to SRI investors. Fund managers took 77%, insurance companies and pension fund 18%, banks 9%, and others the balance. French accounts were allocated 40%, Germany and Austria 17%, the Nordics 11%, the Benelux 8%, and the UK and Ireland 8%.

Kalbin said interest in the trade was high given that it is the first green senior non-preferred (SNP) deal from Spain.

"I think this is going to be the first in a long series of green SNP issuances to come," he added. "We definitely saw very strong interest from dedicated SRI investors."

The bank said that the choice of a senior non-preferred issue to inaugurate its programme surprised investors more used to green bonds coming in senior preferred format or as mortgage-backed securities (MBS).

Kalbin added that demand was also

supported by the relative scarcity of BBVA issuance and its status as a national champion. The bank had previously announced plans to print EUR2.5bn-EUR3.5bn of senior non-preferred debt this year and had printed EUR1.5bn of this prior to the new issue.

Syndicate bankers at the leads said the deal was priced with no new issue premium, seeing Santander 2024s - a conventional senior non-preferred bond trading at 77bp-78bp, bid, and noting that BBVA is lower rated than Santander. BBVA's deal is expected to be rated Baa3/ BBB+/A- (Moody's/S&P/Fitch), while Santander's senior non-preferred issuance is rated Baa2/BBB+/A-.

"We haven't seen many 15bp pricing moves in recent months," added a syndicate banker away from the leads.

BNP Paribas first hits the spot BNP Paribas got the green senior non-

preferred ball rolling on 10 April. Its six year deal was launched with initial price thoughts of the 65bp over mid-swaps area. Guidance was then set at 55bp-60bp, will price within range, with books over EUR1bn, before the spread was fixed at 55bp for a size of EUR500m, with final books at around EUR1.1.bn. The size was later fixed at EUR500m.

Syndicate bankers at and away from the leads said the deal offered as little as 3bp of new issue premium, based on the issuer's senior curve, which was deemed notably small for a senior transaction, especially when compared to the premiums being paid on the same day for secured bonds in the form of non-green covered bonds for HSBC, Erste and Axa Bank Europe.

Syndicate bankers attributed the relatively strong demand for BNP Paribas' deal to its intermediate maturity, which they noted was more popular among investors in the prevailing difficult market environment, and its more attractive absolute spread.

"With the green factor and the six year maturity, this deal was pushing all the right buttons," said a syndicate banker away from the leads.

Nordea in Swedish-Finnish contractual SNP debut

Nordea issued the first senior nonpreferred debt out of Sweden on 15 June ahead of its re-domiciliation to Finland in October, attracting more than EUR3.25bn of demand to its EUR1bn five year after moving quickly to take advantage of positive post-ECB sentiment.

As a globally systemically important institution (G-SII), Nordea's TLAC requirement will begin to kick in from 1 January 2019 ahead of full implementation from 1 January 2022. Based on current projections, Nordea expects to raise EUR10bn equivalent by the latter deadline to meet its TLAC needs, according to Petra Mellor, chief treasury manager at Nordea. However, she notes that its needs could increase if its MREL requirement necessitates this once it is decided by the SRB, which is expected in the first half of next year after the planned re-domiciliation of the group's headquarters from Sweden to Finland in October.

"Given that we intend to raise EUR10bn over the next three and a half years, we felt it would be prudent to start the issuance of senior non-preferred in 2018," says Mellor.

Nordea began preparing its June debut and put together its senior non-preferred instrument on a contractual basis, with the relevant legislation not yet in place in either Sweden or Finland. Its documentation also took into account the planned re-domiciliation.

"Rather than pointing to a specific country in the documentation, we point to the relevant jurisdiction," says Mellor. "The reason we used a contractual format now was that the local implementation of the creditor hierarchy directive is neither in place in Sweden nor in Finland yet. However, it is likely to be in place in both countries by the end of this year and the notes are expected to be aligned to the local implementation once in place.

"We addressed our senior non-preferred plans in our investor presentation as well as how the ranking of the instrument will work."



After having thus laid the ground-work for its debut, Nordea spotted an opportunity to hit the market in the wake of the European Central Bank's 14 June meeting, when it announced a halving of its monthly asset purchases from September and the anticipated end of its programme in December.

"We thought that there could be a bit of a rally afterwards should the ECB be a little bit more dovish than the market expected, and that turned out to be the case," says Mellor, "Therefore, we de-

'They achieved a deal that worked very well'

cided to announce the transaction in the late afternoon after the ECB press conference for a potential trade the following day.

"The market opened up well on the Friday (15 June). What was also helpful was that we had that day more or less to ourselves."

After initial price thoughts of the mid-swaps plus 75bp area for a five year issue, rated Baa1/A/AA-, guidance was revised to 60bp-63bp, and the re-offer fixed at 60bp over on the back of more than EUR3.25bn of orders.

"We started off at the plus 75bp area," says Mellor. "That enabled a very

good momentum, allowing us to price at mid-swaps plus 60bp, a 15bp tightening from IPTs."

The re-offer of 60bp over was flat to the trading level of a EUR1.25bn five year inaugural Danish senior non-preferred issue Danske Bank had sold on 14 May at 53bp over mid-swaps (see Danish feature for more details). According to George Kalbin, director, FI syndicate at Crédit Agricole CIB, Nordea paid a theoretical new issue premium of the mid to high single-digits, in line with the average paid by similar trades in the preceding months.

"The deal was a great success," he says, "really well-timed with regards to coming straight after the ECB communication on tapering — which was taken very positively, providing some well-needed visibility — and not even waiting until the Monday but rather taking a free market window on a Friday. They got EUR1bn done on a book of EUR3.25bn and one of the bigger movements from IPTs to re-offer that we've seen for a senior non-preferred.

"They achieved a deal that worked very well, held up in secondary, and left some demand on the table to successfully establish their new senior non-preferred issuance."

While some issuers are not expected to be active in senior preferred while building up their MREL and/or TLAC buffers, this will not be the case for Nordea.

"We have almost EUR40bn outstanding of old-style senior preferred notes, and as I indicated we will need about EUR10bn of senior non-preferred for TLAC," says Mellor, "so we will continue to be active in the normal senior preferred market as well as in senior non-preferred markets going forward."

Kalbin anticipates strong demand for further Nordic senior non-preferred transactions.

"Both the Nordea trade and Danske trade were a clear testament to the fact that investors like these sort of safe haven assets," he says, "and that Nordic names still have a marginal benefit versus a lot of other names in Europe."



Going further together to meet your highest expectations.

STRENGTHENED EXPERTISE TO BETTER SUPPORT OUR INSTITUTIONAL CLIENTS

With the acquisition of Pioneer Investments, we have reinforced our expertise worldwide. We leverage on our research-driven investment culture to partner closely with our institutional and corporate clients. We have the tools you need to make smart investment decisions. Because that's what you expect from a trusted partner. Let's go further together.



amundi.com

CNP sells first EUR500m RT1, Vivat joins market

CNP Assurances sold the first benchmark Restricted Tier 1 in euros on 20 June, a EUR500m perpetual non-call 10 instrument that, together with a EUR300m RT1 for Vivat, showed the new insurance asset class to be gaining critical mass.

Prior to the two new issues, RT1 issuance in euros had been confined to just one transaction, a EUR300m perpetual non-call 10 for ASR Nederland launched in October 2017. SCOR RE had meanwhile sold the first benchmark-sized RT1, a \$625m (EUR507m) perpetual non-call 11 in March.

"It's nice to see the asset class develop further and to get more reference points, especially in euros as there was only ASR's EUR300m perpetual non-call 2027," said André Bonnal on Crédit Agricole CIB's FIG syndicate desk.

"Now, especially thanks to CNP, we have a liquid benchmark out there that is a prime reference for other issuers to look at."

Following initial price thoughts of the low 5% area for the perpetual non-call 10 RT1, guidance was set at 4.875% plus or minus 0.125%, will price in range, and the deal was ultimately priced with a coupon of 4.75%.

According to the French issuer, the deal — rated Baa3/BBB- by Moody's and S&P — was more than three times oversubscribed and quickly placed with 110 institutional investors.

"This transaction is the largest eurodenominated Restricted Tier 1 subordinated notes issued by a European insurer so far," it said. "Its success confirms the confidence of bond investors in the solidity of the CNP Assurances Group.

"This issuance will allow CNP Assurances to prepare next call dates and to optimize its capital structure," it added, "while maintaining its financial flexibility to issue Restricted Tier 1, Tier 2 and Tier 3 subordinated notes."

CACIB's Bonnal put the new issue premium at around 25bp, based on where ASR's euro RT1 was trading and the differential between RT1s and 30 non-call 10 Tier 2 structures, but also taking into



account its investment grade rating versus the Dutch insurer's sub-investment grade rating. He noted that the new issue premium was lower than those being paid elsewhere in subordinated debt, with Danske Bank, for example, paying 45bp-50bp on a \$750m perpetual non-call seven AT1 the same day.

"They achieved quite an impressive pricing," said Bonnal. "It then got caught up in the overall market underperformance, but is now trading well above

'Now we have a liquid benchmark out there'

par, and that's very good news for the asset class and issuers potentially looking at this market as it ensures investors' confidence in the product."

Vivat, the Dutch insurer owned by China's Anbang, had approached the market on 13 June with its perpetual non-call seven RT1, rated BB- by Fitch, seeking to raise up to EUR500m after a series of investor meetings.

It ultimately priced a EUR300m-sized deal at a coupon of 7%, in the middle of guidance of the 7% area, with the last book update citing orders in excess of EUR450m.

The 7% coupon is comfortably the highest on a RT1 yet across euros, dollars and sterling. According to Bonnal, the

pricing was some 2.5% wide of compatriot ASR and the theoretical new issue premium was 80bp to as much as 100bp, although difficult to calculate given that Vivat does not have any euro Tier 2 outstanding.

"It's quite a different animal," he added. "At the same time, it's the only subordinated trade that has performed lately, trading at 104.5 now, while everything else was underperforming."

Vivat said the proceeds of the issuance will be used to optimise its financing structure, including the repayment of EUR150m of EUR400m of subordinated notes due 2041 issued by subsidiary SRLEV NV that were subject to a tender offer.

In sterling, Phoenix Group Holdings on 19 April sold a £500m RT1, linked to the acquisition of Standard Life Aberdeen's insurance business. Following IPTs of the 6.125% area and guidance of the 5.875% area, the perpetual non-call 10 was priced at 5.75%. It was the first RT1 to be structured with a permanent write-down feature.

Meanwhile, Belgium's P&V Assurances and Italy's Vittoria Assicurazioni kept insurance Tier 2 ticking over on 4 July. P&V issued a EUR390m 10 year bullet at 5.5% and Vittoria a EUR250m 10 year priced at 5.75%.

"It's quite positive to see that even if it's the beginning of July the market is still receptive to these two small subordinated insurance trades," said Bonnal.



Bank+Insurance HybridCapital



Les Déjeuners du Capital AT1: To Call Or Not To Call?

Roundtable discussion

COMING SOON



Regulatory updates

MREL

EU Council adopts revised RRM

The Council of the European Union (EU Council) on 25 May adopted its version of the banking legislative package called Risk Reduction Measures (RRM), which encompasses comprehensive modifications to the whole corpus of EU bank legislation consisting of CRR2 (EU 575/2013), CRD IV (2013/36/EU), BRRD2 (2014/59/EU) and SRMR. The RRM aims to update EU bank legislation with (i) relevant international bank regulation agreements (e.g. TLAC, Leverage Ratio, FRTB, NSFR, LCR, SA-CCR, etc), and (ii) EU-specific bank legislation (e.g. MREL calibration and subordination). The European Commission initiated the RRM legislative process on 23 November 2016.

MREL Calibration

- MREL shall consist of Loss Absorption Amount (LAA) and Recapitalisation Amount (RA):
 - o On RWA basis: LAA = P1 + P2R + Combined Buffer Requirement (CBR); on Leverage Ratio basis: LAA = min LR of 3%
 o On RWA basis: RA = P1 + P2R + Market Confidence
 Buffer (MCB); on Leverage Ratio basis: RA = min LR of 3%
 o MCB = Combined Buffer Requirement minus Countercyclical Buffer (if applicable), but can be adjusted upwards or
- For small banks without any systemic impact, the preferred resolution strategy may be orderly liquidation → MREL capped at LAA
- For banks subject to partial transfer (e.g. Bad Bank/Good Bank split), the RA will be adjusted accordingly

MREL Subordination

- The EU Council compromise adopts the notion of Top Tier banks, i.e. G-SIBs and banks with total assets of greater than EUR100bn.
 - o Of note, resolution authorities have the flexibility to apply the Top Tier definition to banks with a Balance Sheet smaller than EUR100bn where such smaller banks are deemed to pose systemic risk in the national context
- For G-SIBs, there is a subordination floor that is equal to the TLAC requirements (18% of RWA and 6.75% of LRE) and where the 3.5% pari passu eligible debt exemptions (Senior Preferred/OpCo senior debt) can be taken into account if accepted by the resolution authority and subject to conditions (e.g. negligible litigation risk)
- For other Top Tier banks, the subordination floor is set at 13.5% of RWA and 5% of the Leverage Ratio Exposure
- G-SIBs/Top Tier Banks: On top of the subordination floor, the EU Council compromise introduces a general subordination cap that is set at least equal to 8% of Total Liabilities and Own Funds (TLOF), after permitted derivatives netting
 - o There is a possibility that the resolution authority, upon



- a demand by a resolution entity, reduces the 8%*TLOF subordination cap by taking into account up to 3.5%*RWA pari passu ranking eligible liabilities (recalculated on TLOF basis as per a new formula)
- This subordination cap can be extended to banks that are not G-SIB/Top Tier banks where NCWOL concerns prevail. The resolution authority may increase the soft subordination cap to the higher of 8%*TLOF and 2*(P1 + P2R) + CBR, under conditions (so-called framed discretion)
 - o Firstly, the higher subordination cap cannot impact more than 30% of the G-SIBs and Top Tier banks under the remit of a given resolution authority
 - o Secondly, within these 30% of a given sample, one of the following conditions must apply so that the higher subordination cap is justified:
 - Impacted banks are exhibiting Pillar 2R requirements in the highest 20% of the given jurisdiction; or
 - Substantive impediments to resolution have been identified and have not been removed by the institution or cannot be removed in any other way; or
 - Where the feasibility or credibility of the preferred resolution strategy would otherwise be limited.
 - o However, Member States can apply the higher subordination cap to more than 30% of their G-SIB/Top Tier banks after they take into account their national bank specifics

Certain considerations on Eligible Debt Instruments:

- For G-SIBs, the EU Council compromise confirms that floating rate notes tied to a regulated/widely applied benchmark index and callable notes are included in the list of eligible liabilities to meet both TLAC and MREL
- Structured Notes can be included in MREL for as long as the principal amount that can be bailed-in is known at any time, the embedded derivative is not subject to netting nor subject to valuation in accordance with Art. 49 (3) BRRD

Timeline for compliance with MREL:

- TLAC deadline (2022) for compliance with the minimum MREL requirement for G-SIBs (18% RWA/6.75% LRE) and Top Tier banks (13.5% RWA/5% LRE);
- Target date for compliance with both external and internal MREL: 1 January 2024;
- Intermediate target for external and internal MREL (based on linear interpolation of the final MREL target): 1 January 2022;
- Possibility to extend beyond deadline of 2024 on a bank by bank basis (based on conditions outlined in the legal text);
- Interim targets and deadlines for compliance with internal MREL aligned with those for external MREL

Legislative Procedure and Calendar

- Following Commission initiation, EU laws are adopted on the basis of agreement between the EU Council and the European Parliament
- Once the positions of the Council and Parliament in respect of the original Commission proposal are established at the level of each institution, the Council, the Parliament and the Commission enter into a so-called trilogue process to agree a common position on the proposed law, which is then finally adopted

EU Parliament (ECON) introduces a cap to MREL subordination requirement

- The ECON committee of the European Parliament voted on 19 June on the EU banking reform package, including the BRRD and the CRR
- Members of the European Parliament (MEPs) have introduced a cap to the subordination requirement at 18% of RWA (including the 3.5% senior preferred waiver, i.e. a net

requirement of 14.5%) or 6.75% leverage ratio exposures

- This is lower than the requirements included in the Council compromise from 25 May whereby the resolution authority may increase, under certain conditions, the subordination cap to the higher of 8%*TLOF or 2*(P1 + P2R) + CBR. The level of subordination is an important area of difference between the Parliament and Council positions, and will be a key part of the trilogue negotiation
- In terms of next steps, the trilogue negotiation between Commission, Parliament and Council are starting in July with the objective of agreeing a common version of the package. The potential finalisation date of the whole process is still expected in Q1 2019 with an implementation date in January 2020

Sweden's six mid-sized systemically important institutions shall meet the MREL requirement with subordinated liabilities

The Swedish National Debt Office (SNDO) on 18 June announced that the principle of subordinated liabilities shall also apply to the six mid-sized institutions, meaning that all liabilities used in order to meet the MREL requirement shall be subordinated. The mid-sized institutions are Landshypotek, Länsförsäkringar, SBAB, Skandiabanken, Sparbanken Skåne and Swedish Export Credit Corporation (SEK).

Luxembourg introduces SNP law (14 May)

A new bill that implements the Bank Creditor Hierarchy was introduced to the Luxembourg Parliament. The bill has an objective of establishing the eligibility criteria for subordinated liabilities that would comply with the MREL and TLAC requirements as well as setting out provisions on the ranking of unsecured debt instruments in case of insolvency.

	Council	EP	
All resolution entities	-	Maximum subordination set at higher of: 18% RWA (2.5%/3.5% pari passu exemptions can apply) 6.75% LRE	
G-SIBs	Higher of: 18% RWA (3.5% RWA pari passu exemptions can apply) 6.75% LRE 8% TLOF (3.5% RWA pari passu exemptions can apply)**	Captured above	
Non-G-SIB, Top Tier banks*	Higher of: 13.5% RWA 5% LRE 8% TLOF (3.5% RWA pari passu exemptions can apply)*	Captured above	
Other banks	No comments	Captured above	
Timeline	1 Jan 2024 for non-G-SIBs and G-SIBs where MREL>TLAC	1 Jan 2024 for non-G-SIBs, with intermediate targets	

The soft subordination floor may be increased under specific conditions ("framed discretion") by the resolution authority to 2*(P1+P2R)+CBRSource: Crédit Agricole CIB

Eligible Liabilities

EBA-ESMA Statement on retail sales

The European Banking Authority (EBA) and the European Securities & Markets Authority (ESMA) on 30 May issued a Statement on the treatment of retail holders of debt financial instruments in the context of the BRRD and MiFID II. This Statement covers banks' debt liabilities (senior unsecured, senior non-preferred, senior HoldCo, Tier 2 and AT1) owned directly by retail investors (i.e. investments via funds are not included in the Statement's scope).

EBA and ESMA issued recommendations to both banks and Market and Resolution authorities in terms of consumer protection and resolution planning.

- 1. Consumer protection
- MiFID II sets out requirements for both the existing stock and future issuances
- Banks are urged to provide all the relevant information on the potential treatment of the debt instruments under BRRD to existing retail holders via specific written communication
- Regarding future issuances, the Statement highlights that MREL-eligible debt is deemed "complex" and the target market should be identified with more detailed analysis and due diligence
- A requirement for a minimum denomination (EUR50K or EUR100K) could also be a valid option for addressing the issue of retail holdings, including a potential differentiation based on the ranking of the instrument
- 2. Treatment of retail holders in Resolution and resolution planning
- A large stock of retail holders does not in itself constitute an impediment to resolvability. However, the Statement highlights the risk of severe reactions in case of bail-in from retail holders (e.g. bank runs) which could affect financial stability
- As such, an exemption under Article 44(3) of the BRRD or Article 18(3) of the Single Resolution Mechanism Regulation (SRMR) could be applied. In that case, the loss-absorbing capacity of the bank could be impacted, up to and including affecting the credibility and feasibility of the resolution plan, and lead to a breach of the NCWO principle (in case the losses have to be covered by more senior liabilities)
 - o In such an event, which must always be decided on a caseby-case basis by the resolution authority, two potential remedies are considered to compensate for excluded retail debt:
 - Requiring the institution to issue more (pari passu) MREL-eligible debt instruments; or
 - Requiring the institution to issue more MREL-eligible debt instruments subordinated to retail debt
 - o Such additional MREL-eligible instrument issuance is not to be sold to retail investors
- Resolution planning could also provide an incentive to banks

to reduce the stock of legacy retail debt (e.g. conversion into savings deposits)

Key statistics:

- As of Q3 2017, retail investors of the euro area held EUR262.4bn or 12.7% of the EU bank debt securities issued to euro-area investors
- Nominal amount of retail holdings: Italy has the largest amount (EUR132.3bn), followed by Germany (EUR49.4bn) and then France (EUR31.7bn)
- As a proportion of banks' total debt, banks in Italy have the largest proportion of euro area retail holders (36.9%), followed by Austria (35.8%)

European Parliament (ECON) excludes certain types of retail debt from MREL-eligible liabilities

In its 19 June agreed version of CRR2, the Parliament introduced a provision prohibiting from inclusion in MREL-eligible liabilities debt with denominations of less than EUR10K and where aggregate investment exceeds 10% of the retail investor's financial instrument portfolio

EBA comments on financial institutions' Brexit preparations

EBA on 25 June published an opinion on the risks arising from the lack of preparation by financial institutions for the departure of the UK from the EU. EBA asks competent authorities to engage with financial institutions to ensure that a specific number of topics be addressed. From an MREL perspective, EBA mentions:

- Financial institutions that are subject to the BRRD should assess the extent to which their MREL-eligible liabilities are issued under UK law (for EU27 institutions) or under EU27 law (for UK institutions) as such issuances may cease to be eligible for MREL following Brexit
- "Financial institutions that choose to include contractual clauses recognising the eligibility of those instruments to be subject to the write-down and conversion powers of EU resolution authorities (for EU27 institutions) or UK resolution authorities (for UK institutions) in newly-issued instruments should be prepared to demonstrate that any decision of a relevant resolution authority would be effective in the UK (for EU27 institutions) or in the EU27 (for UK institutions) after the departure of the UK from the EU27. Financial institutions should engage with relevant resolution authorities as to the requirements of those resolution authorities in this regard"
- "Financial institutions that are subject to the BRRD should ensure that, where they choose to issue new non-MREL liabilities under UK law (for EU27 institutions) or EU27 law (for UK institutions) that might be subject to bail-in as part of a resolution action, these can credibly be written down or converted through the inclusion of bail-in recognition clauses"

UK

BoE published the responses to the consultation paper on internal MREL and an updated policy on BoE's approach to setting MREL requirements

On 13 June, the Bank of England (BoE) published responses to the Consultation Paper (CP) on "Internal MREL – the Bank of England's approach to setting MREL within groups and further issues" and a Statement of Policy (PS). Key feedback on the CP and our takeaways from the PS are:

Scope of Internal MREL

• Some respondents cautioned that branches should not be subject to internal MREL. The BoE indicated that it does not propose to set internal MREL for branches with the Banking Act also not providing for this

Calibration of internal MREL

- Respondents were supportive in general to BoE's proposed approach to set internal MREL with the scaling range being 75%-90%
 Surplus MREL
- The BoE has decided not to set requirements for the location and the form of surplus MREL at this stage
- o Surplus MREL constitutes "the difference in requirements between external MREL and the sum of what must be issued to the resolution entity as internal loss-absorbing resources" Ring-fenced bodies
- Respondents suggested that the proposed internal MREL calibration (90%) for the top entity of ring-fenced bodies (RFB) sub-groups was too high. The BoE considers though the 90% scaling consistent with the scaling of internal MREL for material subsidiaries as well as with the FSB's TLAC standard UK subsidiaries of foreign groups and non-UK subsidiaries of UK groups
- The BoE states that it will use crisis management groups (CMGs), resolution colleges and other forums to engage with overseas authorities and reach a joint decision on internal MREL Internal MREL instrument eligibility
- Holder of the instrument
 - o Respondents broadly supported the possibility for subsidiaries to issue internal MREL to the resolution entity directly or indirectly with some respondents arguing that subsidiaries should also be allowed to issue instruments outside of their group (external issuance). The BoE will proceed with the requirement that eligible liabilities issued by non-resolution entity subsidiaries will only count towards internal MREL if issued internally within the group that the subsidiaries belong to o Additionally, the BoE states that non-CET1 Own Funds instruments issued by non-resolution-entities (e.g. OpCos) to external investors, based on FSB's TLAC standard, should not count towards internal TLAC from 1 January 2022, contrary to internal MREL under BRRD. Although the BoE cannot demand that banks redeem, buy back or otherwise cancel such instruments, in the event of their continued existence post-2021YE



the BoE reserves the right to set higher end-state MREL requirements to compensate for those issuances (as they may represent impediments to resolution in the view of the Bank)

- Contractual triggers
 - o Although some respondents expressed reservations in respect of BoE's proposal to include contractual triggers in internal MREL instruments, the Bank considers that contractual triggers have an important role to play, as there is currently no statutory power to write down and/or convert internal MRELeligible liabilities without using resolution tools
 - o The Bank therefore expects that MREL-eligible liabilities issued by material subsidiaries will include contractual triggers o In general, the contractual trigger should be able to provide the resolution authority (BoE) with the ability to direct an immediate write-down or conversion to CET1 of the instrument where:
 - "any own funds instruments of the material subsidiary have been written down and/or converted into equity pursuant to any statutory or regulatory power linked to the financial condition or viability of the institution; provided that, in the case of eligible liability instruments issued by subsidiaries of non-UK groups, the Bank includes in its direction a statement that the home resolution authority has either consented or has not, within 24 hours of the Bank having given it notice, objected to the write-down or conversion"
 - "a resolution entity in the material subsidiary's group, which is a direct or indirect parent of the material subsidiary, is subject to resolution proceedings in the United Kingdom or elsewhere"
 - "The contractual trigger may be limited to provide for only write-down or only conversion if institutions can demonstrate to the Bank that this credibly supports the group resolution strategy and the passing of losses and recapitalisation needs to the resolution entity"

Insurance

EIOPA launches the fourth EU-wide insurance stress test

The European Insurance & Occupational Pensions Authority (EIOPA) on 14 May published the technical specifications of the fourth European insurance stress test, with 42 European insurance groups participating to the exercise, representing close to 78% of the total European market coverage. Key differences compared to the previous stress tests:

- This stress test focuses on insurance groups and not on solo undertakings as in the previous stress test in 2016. This will probably make the exercise more relevant to the sector's stakeholders
- The participating groups are requested to consent for the disclosure of selected post-stress results via their websites. This is the first time that individual stress test results would be disclosed (if insurance groups give their consent - EIOPA is not empowered by its regulation to request mandatory disclosure of the stress test results at individual participant level)
- Exposure to cyber risk and best practices in dealing with cyber risks will be assessed

The 2018 stress test comprises the following three scenarios:

- Yield curve up shock combined with lapse and provisions deficiency stress
- Low yield shock combined with longevity stress: a protracted period of extremely low interest rates
- Natural catastrophe scenario: A series of natural catastrophes (e.g. storms, earthquakes, flooding) occurring in Europe Timeframe:
- 15 May: Launch event of the Europe-wide stress test with industry representatives and publication of the specifications and reporting templates
- August 2018: Submission deadline for participating (re) insurance groups to the national supervisory authorities (NSAs)
- October 2018: Finalization of quality assurance of undertakings' data by NSAs and validation by EIOPA
- January 2019: Publication of the stress test report

Other developments

Banque de France raises the countercyclical capital buffer

Banque de France on 11 June raised for the first time the countercyclical capital buffer applicable to exposures for France, from 0% to 0.25%. Banks will have to comply with this requirement by July 2019 once the ECB gives the green light.

EBA to support Commission in Basel III implementation

The European Commission on 27 April invited EBA to provide all information considered relevant to inform its decision on the implementation of revisions to the Basel III framework finalised in December 2017. On 7 May EBA announced it will provide both a quantitative and qualitative assessment of the new framework by launching in July a data collection exercise from small and less complex banks as well as institutions with specific business models. The scope of the assessment includes the main sections of the December agreement (credit risk, operational risk and CVA risk) and the current review of market risk. More specifically:

- o The assessment must focus on the impact of each individual reform as well as on the overall impact of the finalised Basel III framework by category and type of exposure
- o The impacts should be clustered with respect to the size, location and business model of the institutions, where relevant. In addition, the impact should also be grouped by G-SIIs, O-SIIs and the rest of the institutions
- o The impact from a TLAC/MREL requirements perspective must also be estimated
- o On the output floor, EBA must assess which of the output floor or the leverage ratio would be the most restrictive metric for each institution

- o On market risk, EBA must assess whether the FRTB is appropriate for covered bonds
- o EBA will present the proposed rules' impact to the Commission in June 2019

EBA does not object to the Swedish FSA's proposed measures to address macroprudential risk

EBA on 28 June published its opinion on the Swedish FSA's (Finansinspektionen's) proposal to replace the current Pillar 2 requirement for Swedish mortgages with a requirement within the framework of Article 458 of the CRR. EBA does not object to the deployment by the Swedish FSA of the measures.

Finnish FSA imposes a systemic risk buffer

The Finnish FSA (Finanssivalvonta) on 29 June decided to impose a Systemic Risk Buffer (SRB) on credit institutions following an analysis showing that the structural systemic risks are high in Finland's financial system. The SRBs imposed are:

- o Nordea: 3.0%
- o OP Group: 2.0%
- o Municipality Finance plc: 1.5%
- o Other Credit Institutions: 1.0%

Additionally, the Finnish FSA reviewed the additional capital requirements for G-SIBs and O-SIIs. Nordea was identified as the only G-SIB, being imposed a capital requirement of 1.0%, with the O-SII requirements for Nordea, OP Group and Municipality Finance plc being 2.0%, 2.0% and 0.5%, respectively. The applicable buffer will be the higher of those imposed, with the SRB entering into effect on 1 July 2019.



Cécile Bidet Michael Benyaya **Doncho Donchev DCM Solutions** Crédit Agricole CIB dcmsolutions@ca-cib.com

US

Regulatory relief bill signed for the recalibration of Dodd-Frank Act requirements

On 24 May the Economic Growth, Regulatory Relief & Consumer Protection Act became law, containing the first major package of revisions to the Dodd-Frank Wall Street Reform & Consumer Protection Act of 2010. The most significant changes are:

Increased Asset Thresholds

The most significant reform of the Act is the increase to the threshold for subjecting a Banking Holding Company (BHC) to the Enhanced Prudential Standards (EPS) such as stresstesting, resolution planning and heightened risk management requirements. The threshold of US\$50bn in total consolidated assets has been increased to US\$250bn and more specifically:

- BHCs with less than US\$100bn in assets are immediately exempt from EPS
- BHCs with between US\$100bn and US\$250bn in assets are exempt 18 months following enactment
- The Federal Reserve Board (FRB) retains discretion to apply any or all EPS to BHCs with total consolidated assets of below US\$250bn
- A BHC that qualifies as G-SIB will remain subject to EPS regardless of its asset size

Recalibration of Stress-Testing Requirements

- Supervisory Stress Tests
 - o BHCs with more than US\$250bn in assets remain subject to annual supervisory stress test, with the Act reducing the number of stress test scenarios from three to two (adverse scenario is eliminated)
 - o BHCs with assets of US\$100bn-US\$250bn will be subject to periodic supervisory stress tests 18 months after enactment
 - o BHCs with less than US\$100bn are no longer subject to capital stress-testing
- Company-Run Stress Tests o All banking organisations with less than US\$250bn in total consolidated assets are exempted from the current

requirement to conduct company-run stress tests

- o Banking organisations with more than US\$250bn in assets are still required to conduct company-run stress tests but no longer required to do so on a semi-annual or annual basis
- o Additionally, the Act reduces the number of scenarios from three to two

Foreign Banking Organisations (FBOs)

- Asset Threshold: The Act applies the asset-based thresholds to domestic BHCs and FBOs as well (the threshold applies to FBOs based on their global assets rather than US assets) Regulatory Capital and Liquidity Requirements
- Supplementary Leverage Ratio: The Act requires the federal banking agencies to amend the Supplementary Leverage Ratio (SLR) by exempting from the denominator funds on deposit with certain central banks for BHCs and their subsidiaries that are predominantly engaged in custodian activities
- Liquidity Coverage Ratio: The banking agencies are required to amend their Liquidity Coverage Ratio (LCR) by permitting more favourable treatment of municipal bonds (as Level 2B high quality liquid assets - 50% haircut) if bonds are liquid, readily marketable and investment grade
- Risk Weight for Certain High-Risk Real Estate Loans: Federal banking agencies are prohibited from assigning increased risk weights to high volatility commercial real estate (HVCRE) exposures, unless they are classified as HVCRE acquisition, development and construction loans
 - o The current risk weight of 150% applied to HVCRE can potentially be lowered to 130%

Volcker Rule

- Banks and BHCs with US\$10bn or less in total consolidated assets and total trading assets and liabilities of 5% or less of total assets are exempt from the Volcker Rule Community Banks
- Banks and BHCs that have less than US\$10bn in total consolidated assets and that maintain a "community bank leverage ratio" (tangible equity capital to average total consolidated assets) of at least 8%-10% are exempt from Basel III rules ■

BlueBay Beware risks of QT

Investors are underestimating the risks that accompany the shift from an era of quantitative easing to quantitative tightening, according to David Riley, chief investment strategist at BlueBay Asset Management, who says episodes of volatility are increasingly likely. He argues for a focus on high conviction bottom-up picks, with European banks among his favoured sectors.

Neil Day, Bank+Insurance Hybrid Capital (BIHC): Were the ECB's latest announcements in line with your expectations? What sectors will the moves affect most?

David Riley, BlueBay: The ECB announcements were pretty much in line with our expectations. We weren't 100% that they were going to make those detailed policy announcements at the June meeting — there was a possibility they could have delayed the details until July — but the substance was in line with our expectations: a tapering of asset purchases during the final quarter of this year, but the ECB will continue to engage in the market with substantial reinvestments of maturing bonds. The latter are going to be in excess of EUR200bn during the course of 2019, so it's a mistake for investors to believe that the end of QE means the ECB will no longer be active in European government and corporate bond markets — they will be very active. They actually underscored their commitment to maintaining the size of their balance sheet and — based on our conversations and public comments from ECB officials — there is potentially considerable discretion around how they deploy those reinvestment proceeds. So a maturing Bund won't necessarily be reinvested back into another German bond — it could go into, say, a five year OAT or even into a corporate bond purchase.

One aspect where we were also on the more dovish side versus market expectations and where the ECB did meet our expectations was the strengthening of their forward guidance around interest rates, meaning they will remain unchanged at least through the summer of 2019. This was to us the most substantive policy announcement the ECB made. The market was anticipating that the ECB would start increasing policy rates from June/July 2019. Our base case was confirmed that it will be in September 2019 at the earliest. That forward guidance is very important, because it means that short term interest rate expectations in the euro area are very well anchored, rate volatility will be low, and the yield curve will remain relatively steep. And when you put that together, that's quite a positive backdrop for European credit — both high yield and investment grade — be-

cause the steepness of the curve is part of the attraction for the marginal buyer of additional corporate debt being issued over the rest of this year and into 2019 — with short rates being so low, hedging costs for Asian, Japanese, Taiwanese investors are very low, and when you take into account FX hedging costs, the steepness of the curve and the additional return you get from rolling down the curve, then at the margin it certainly makes European credit more attractive for international investors relative to US credit.

So the ECB June meeting was in line with our expectations with the strengthening of the forward guidance, particularly around interest rates, crucial for keeping volatility low, short rates low and the curve steep. That will attract continuing inflows from international investors rotating out of US credit, as well as maintaining the search for yield amongst European investors.

Day, BIHC: How does the European rate outlook now compare with that in the US? What do you consider the likelihood of an inflation shock in the US? And if the 10 year UST rises well above 3%, how might this affect valuations of risk assets?

Riley, BlueBay: One of the very interesting aspects of latest round of Fed and ECB meetings is the contrast between Fed Chair Jerome Powell and ECB President Mario Draghi in their respective press conferences. Powell was very bullish, very confident about the outlook for the US economy. He mentioned three or four times that the US economy was doing very well, was very strong, with a positive outlook — if you want a job you can find one. And that the Fed is therefore confident about the path for US interest rates, certainly over the remainder of this year and into the first part of next year, essentially on a quarterly path of Fed rate hikes. In contrast, Draghi was much more cautious, acknowledging that the economy and inflation are still yet to converge towards their targets, that policy needs to remain very easy for very long. I think that the ECB deposit rate will remain negative for another two years — even

if the ECB starts raising rates in September 2019, it is likely to be in 10bp or 15bp clips, so effectively another two years of negative rates. The contrast between the Powell and Draghi press conferences really did underscore the divergence in the interest rate outlook for the US and for Europe, and that's one of the reasons why the dollar gained against the euro. I do think that there's still a bit of a tailwind for the dollar. Obviously some of this divergence is now within the price and investors are arguably too pessimistic



about the outlook for growth outside the US, including Europe.

We do think that there is a potential for inflation to be higher in the US than currently expected, so there is some benefit for investors in holding TIPS. In our discussions with corporate management of US firms whose debt we invest in, a recurring theme in management calls is a shortage of skilled and unskilled labour, difficulties in ramping up production, and pressure building on wages. The bias is for inflation to be somewhat higher than is currently being priced, and potentially higher than the Fed itself expects, and that also gives an upwards skew in the rate outlook.

And we do think that the 10 year is likely to reach the 3% mark as it did earlier this year. Why not higher than that? In part it's difficult for it to go dramatically higher than that because global bond yields are so low, and there's still a lot of disinflationary forces coming from Europe, emerging markets and the rest of the world. If it moves above, say, 3.25% you will start getting buyers, international as well as domestic. It does mean that US cash will become increasingly attractive as an asset and that the Treasury yield curve will continue to flatten.

The impact this will have on risk assets obviously depends on a lot of other things that are going on. If that move higher in rates is being driven more by inflation shocks than growth shocks in the US, then that is going to be a headwind for risk assets, for equities and for US credit, and also for other dollar assets, like emerging markets. If the Treasury yield curve inverts, investors may take it as a signal of a pending US recession and risk assets will suffer as a result. If higher US rates and Treasury yields are driven by still very strong corporate earnings growth and above-expectation US and global economic growth, then risk assets will perform positively.

Day, BIHC: Early in the year volatility rose quite dramatically, and then recently again there was the Italy episode, in Europe, at least. Particularly against the backdrop of QE being gradually wound down, is this a period where we are likely to see more such episodes?

Riley, BlueBay: One of the key investment themes we had coming into this year was a transition of investment regime from the quantitative easing era to a quantitative tightening era, led by the Fed. Not only is the Fed raising interest rates, but it is shrinking its balance sheet, and the pace at which the Fed reduces its balance sheet is going to increase through time as the scale of redemptions of assets it holds increases. And not only is the Fed raising interest rates, but we think that the so-called "Fed put" — the

notion that the Fed will always come to the market's rescue — is increasingly out of the money, so to speak, because the Fed is clearly much more confident that the economy is near full capacity with unemployment at a multi-decade low, inflation around its 2% target, and the US economy growing above trend. Against that backdrop, and with a balance sheet that continues to shrink, the Fed is going to be much less sensitive to market moves when it comes to potentially delaying any further policy tightening. What does that mean taken together? QE suppressed market volatility and asset price dispersion, and QT — quantitative tightening — will be the reverse as the Fed's "short volatility" position is wound down.

And we've seen that, as you alluded to. We saw that in the short volatility ETF blow-up, the widening in US Libor over risk-free rates; we've seen that within emerging markets, and we've seen it in Italy. That's not to say that each of those episodes didn't have their own catalyst, but the market reaction to those idiosyncratic risks is much more violent because the Fed in particular but also other central banks including the ECB have less room for manoeuvre now to provide additional support to markets. The ECB is providing as much support as it can and trying to supress volatility with its forward guidance, but it is on a path, albeit gradual, towards exiting that QE era.

So we are definitely going to see more of these episodes of volatility in global financial markets during the course of this year and into next, and that's a fundamental shift in the investment regime that investors are still having to adjust to.

Day, BIHC: How are you adjusting to it?

Riley, BlueBay: In our regular review of portfolios we are shifting towards more concentrated positions in high conviction bottom-up picks, relative value and where we think there is a fundamental mispricing. There is even more emphasis on individual corporate credit and country selection, and looking to benefit on the short side as well as the long side from the increased idiosyncratic risk and volatility in the market.



Along with that we are having fewer portfolio fillers, taking more cash, and actively using liquid hedges to manage our market risk through those episodes of volatility. For example, during the recent Italian BTP spread-widening we were using the iTraxx senior financials index and Crossover as a way to manage and reduce the mark to market drawdowns on some of the risk exposures that were impacted by volatility in BTPs. Something else that we're constantly reiterating is that you need to be clear about, as part of your selection, the targets and the stop-losses that you have in place, and be disciplined in adhering to those stop-losses and booking profits when you've realised your targets.

Then we've been doing a lot of sort of stress-testing around our portfolios. One of the challenges with value at risk type models is, as you know, that they place a lot of weight on recent correlations and levels of volatility, so we do think that a lot of investors relying on VAR models are actually to some extent underestimating the amount of volatility and market risk they have within their portfolios, because the underlying data and assumptions in those models reflect what has been a low volatility environment. So we have been stress-testing based on higher volatility environments, and sizing our positioning in our portfolios accordingly.

And another final aspect is that in a higher volatility regime associated with the end of QE era, we are seeing investors shift into alternative strategies that are focused on generating positive absolute returns and capital preservation and away from portfolios tracking benchmarks that have more rate risk than yield and bias investors towards the largest and most indebted borrowers. Global multi-asset, long-short and unconstrained strategies or those with greater leeway to run significant tracking error against benchmarks are, we think, best placed to perform in the transition from QE to quantitative tightening.

Day, BIHC: Geopolitics — it's unpredictable, but on balance do you feel that, firstly, it's more unpredictable than you were expecting at the beginning of the year? And secondly, are the things that are most challenging going to fundamentally affect the macroeconomic outlook?

Riley, BlueBay: This is a difficult one that we do grapple with. Taking a step back, we recognise that politics in general is becoming more populist, and that renders politics and policy more important and less predictable, and this does spill over into international relations and geopolitics. We're clearly seeing that played out right now in Europe, we saw that play out with Brexit, and also with President Trump and his actions, and of course we have ongoing risk as part of that, for example in the Middle East. So it is something that is an ongoing drum-beat and potential source of worry that markets have to face, and a source of uncertainty investors have to deal with.

In practice, it's very difficult to construct portfolios around tail risk events like a potential conflict on the Korean peninsula. It's just very, very difficult to do that. So until those geopolitical tail risks becomes fatter, if you like, there's not much, frankly, investors can do to prepare for that, other than having — as every diversified portfolio should have — some safe haven assets, or assets that are less correlated, and a diversification of sources of return along with the ability to actively hedge and manage your market risk using liquid derivatives.

The biggest single concern that we have — and when I'm talking to asset allocators they also raise this with me — is the potential for a global trade war, for US-EU as well as US-China trade conflict to escalate and trigger a global economic downturn. I think that remains very much a tail risk, but trade barriers are stagflationary — in the short term at least, it implies higher inflation and lower growth. Equity and other growthsensitive assets will suffer but core fixed income will provide only limited diversification in portfolios because of higher inflation and rates. The risk is clearly greater, but we still consider a full global trade war that would have meaningful global macro effects to be a tail risk rather than a central one. And most of our focus on the trade side has been where we think there are individual countries or sectors that are potentially vulnerable, and where there might be opportunities for us to take a position, either on a relative value basis or in long-short strategies.

Day, BIHC: You have previously said that bank debt is something you favour and you used the phrase "European bank healing". Given where we were 10 year ago, you'd have hoped things might have healed a bit. But what particularly are you thinking of there?

Riley, BlueBay: There are two fundamental but related drivers of our view on the European banking sector, and the opportunities that it offers investors.

One is that European banks in aggregate are dramatically stronger than they were prior to the financial crisis — even if there clearly is a lot of dispersion across the industry and within national banking sectors. It's typical that the sector that was at the centre of a credit blow-up tends to be the one that makes the biggest adjustment — either forced on it by regulation, or by management, shareholders and creditors who are scarred by the experience. So when the next credit downturn comes, that's actually the sector that tends to do the best and proves to be the

most resilient. Banks are much better capitalised and much more liquid than in the run-up to the global financial crisis. Nonperforming asset quality is continuing to improve, because of growth, but also as banks reduce their non-core, non-performing assets through asset sales and restructuring programmes. In our view, there is a structural shift to a much more resilient banking sector that still has some room to go.

In addition — and linked to the regulatory changes that banks are facing — is a secular trend of disintermediation of European banks. As in the US, banks will not be the primary source of finance for the corporate sector and Europe is following suit. Although European banks are lending again, the growth rate and actual overall lending to the corporate sector, especially small and mid-sized business, remains low. So in our view banks are improving from a creditor point of view, but they are also gradually being disintermediated.

And there are ways in which you can access this theme of European bank healing as investors. One is through direct lending, and we've been engaged in that since 2011 with a direct lending programme, lending to small and mid-sized businesses across Europe, providing them with flexible capital that banks are no longer able or willing to provide. Depending on the risk and liquidity profile of the end investor, that's one way in which you can tap into this thematic and get paid for being a provider of liquidity in addition to credit risk. Another way is through stressed and distressed credit strategies, buying packaged loans that might be performing but still have distressed credits within them, and then working with those businesses to restructure their businesses and generate value.

And then a third way you can tap into this theme, which is the most liquid way, is through European bank capital strategies, directly accessing the various tiers of European bank debt capital and the opportunities that provides both as a source of yield, of income, and some capital appreciation and alpha generation, too, which we believe there is room for over the medium term.

Day, BIHC: There have been some names that are still difficult — can you drill down a bit? And what do you make of the kind of returns that are available on instruments like AT1?

Riley, BlueBay: Our approach in European bank capital is that we would rather have the national champions and move down their capital structure than have weaker institutions and be more senior in the capital structure. One of the reasons for this is that we do think there is an ongoing mispricing between some of the senior and legacy subordinated bank debt versus CoCos or Additional Tier 1. The experience so far — with Banco Popular and some of the restructurings we saw in Italy, for example — has been that if a bank does get into severe trouble and require restructuring then in practice not only is the equity wiped out, not only are the CoCos, but actually you can then get the Lower Tier 2 and even the most senior parts of the capital structure being subject to some level of loss. So we would rather take exposure in to what we consider solid institutions with



an improving credit profile — including those in the so-called periphery — and then move down the capital structure rather than have weaker banks and imagine we are being mitigated against that risk by holding the senior debt. Santander in Spain, HSBC in the UK, UniCredit in Italy — these are the sort of institutions that have strong and improving fundamentals, and where you are still getting an attractive level of yield, 5% plus, in holding their subordinated debt and in particular their CoCos.

Day, BIHC: Are there any particular other risk factors to watch out for looking ahead, or risks you consider either overdone or underestimated?

Riley, BlueBay: There are a lot of moving parts for investors to have to contend with, and this in an environment where volatility is going to be greater structurally.

Systemic risk in Italy is one of the risks that's still currently overstated, with too much priced in. In our view the current Italian government is likely to prove more durable than many expect. It is more focused on immigration and electoral reform than a wild or big fiscal easing and confrontation with Brussels and the rest of Europe over its very large deficit. And the commitment to the euro is actually still very strong within Italy, both among the political class and the public, so that risk is overestimated.

Regarding any risks that are underestimated, investors are still in my opinion underestimating the significance of the increase in cash rates in the US and the transition to a post-QE regime as the Fed hikes rates and shrinks the balance sheet. The re-emergence of cash as an asset class for US investors at least and more episodes of volatility is leading to a broader repricing of risk premia and assets more generally. In a world characterised by greater volatility and uncertainty despite positive macro fundamentals, investors are going to have to be more nimble and flexible in their approach to portfolio construction.

> Photo credits: Trump-Powell: The White House/Flickr; Juncker-Conte: Etienne Ansotte/EC; Copyright EU

Greening the capital stack

Recent inaugural green senior non-preferred issues could represent the first green steps down the capital stack by financial institutions. Crédit Agricole CIB and Bank+Insurance Hybrid Capital gathered together specialists in bank capital and green bonds to explore how green subordinated debt could work and help put the financial system on a path to sustainability.

Neil Day, Bank+Insurance Hybrid Capital: This is quite a new topic that we are discussing, with very little in the way of concrete examples so far. However, there are signs that green or sustainable bank capital could be coming along and reasons to consider its feasibility. Cécile, perhaps I could start by asking you to provide a backdrop to the discussion by outlining the trends that have brought green bank capital into focus.

Cecile Bidet, Crédit Agricole CIB: The market for green and social bonds is booming. More than EUR100bn was issued last year, with financial institutions representing roughly a quarter of that.

When it comes to green hybrid issuance, on the corporate side we have already had quite a lot of supply — from issuers such as Engie and Iberdrola that we were involved in — while on the insurance side we have seen some issuance, such as QBE with a gender equality bond that we were a bookrunner for.

On the bank side, green hybrid capital would be something completely new — although we have seen green senior non-preferred (SNP), which could be considered as capital as it is bail-in-able. We were part of the inaugural green BBVA SNP a couple of weeks ago. And we've had green Tier 2 from a Turkish bank, TSKB.

Is the banking sector going to catch up with corporates and insurance companies? This will partly depend on whether any impediments arise on the regulatory side. You can argue that senior non-preferred and Tier 2 are a gone concern instruments and that regulators may not have any issues with green versions, but for Additional Tier 1 (AT1) things may be more problematic.

Day, BIHC: Perhaps we should start off by defining what we consider as green or sustainable capital. Do you think that senior non-preferred should be included since it is bail-in-able?

Bidet, CACIB: If you think about the loss-absorbing quality, you could consider SNP as capital. But that would be too simplistic. I think that if we are talking about capital, we are not talking about a funding instrument; we are talking about an instrument that is covering risk on the asset side. So we are moving away from funding to a leverage instrument, and the calibration has to be different. So, I would not consider SNP as a capital instrument. Capital is something that very clearly has to answer some regulatory rules on capital.

Bodo Winkler, Berlin Hyp: As a German bank we have thus far only been able to issue green bonds as senior non-preferred and not senior preferred — existing senior unsecured bonds are by law subordinate to deposits since Germany reacted early on to the forthcoming MREL requirements. So this was the only format in which we could do benchmark senior funding — any senior preferred would have had to be structured in some way and would not have appealed to the wider market. I'm therefore sympathetic to the view that this is a funding instrument — ultimately it creates liquidity and our intention was not to meet regulatory ratios or anything like that — and I would not consider it as capital.

Stéphane Herndl, La Banque Postale Asset Management:

The German case is a bit peculiar because of the route the authorities decided to take.

I would argue that in some other European jurisdictions the only reason senior non-preferred was created was to protect a pure funding instrument. If these TLAC and MREL regulations were not there, banks would not issue senior non-preferred because there is a cost attached to it — they would just issue plain vanilla senior unsecured. In this respect the regulatory value should be the one that prevails.

And it's the regulatory aspect which means there might be some issues with labelling such an instrument as green, because



The roundtable was hosted by Crédit Agricole CIB on 1 June in Paris, featuring as speakers:

Michael Benyaya, DCM Solutions, Crédit Agricole CIB

Cécile Bidet, Head of DCM Solutions & Advisory, Crédit Agricole CIB

Thomas Canel, Credit Analyst, HSBC Global Asset Management

Philippe Cazenave, Partner, Axiom Alternative Investments

Tanguy Claquin, Head of Sustainable Banking, Crédit Agricole CIB

Neil Day, Managing Editor, Bank+Insurance Hybrid Capital Stéphane Herndl, Senior Credit Analyst, La Banque Postale Asset Management

Vincent Hoarau, Head of FI Syndicate, Crédit Agricole CIB

Laurent Le Mouel, Vice President, Senior Analyst, Moody's

Marjolaine Marzouk, Credit Sales, Crédit Agricole CIB

Erwan Ollivier, Fixed Income Portfolio Manager, HSBC Global Asset Management

John Arne Wang, Head of Funding & Liquidity Management, SEB

Bodo Winkler, Head of Funding & Investor Relations, Berlin Hyp

there are strings attached to it. The proceeds are earmarked to fund certain green assets, and what happens if those assets are no longer there? Would that create some additional risks for the holders, like an incentive to redeem? At some point the regulators will have their say on this type of instrument and the risks that are created from such green implications.

John Arne Wang, SEB: Personally, I don't see any issue with doing a green senior non-preferred, and it would be a continuation of what we have already done. But while I can agree that it is a funding instrument, it's also specifically set up in order to fulfil a buffer requirement.

And while legally there's no encumbrance as such in relation to green assets, you can always argue that you have moral encumbrance in terms of what you have actually issued, i.e. a green senior non-preferred. In a resolution situation the regulator should not differentiate between the green and the nongreen senior non-preferred, but considering what has happened in some countries in terms of treatment of retail-distributed bonds, there is a risk that a political aspect could come into play under certain circumstances in some jurisdictions. One

should not expect it to come into play, but again it may depend on how the regulatory and political climate develops vis-à-vis sustainable financing. As the asset class increases in volume, it should eventually become like any other instrument, meaning there won't be any concerns about bailing in such instruments.

Tanguy Claquin, Crédit Agricole CIB: In the green bond market, whatever the instrument, it is always done in a way that the green instrument is pari passu to the others, so in the case of resolution it would be pari passu, too. That's clearly the promise that is made to investors. You are buying a credit that is the same as the credit you would otherwise be buying if it were not a green bond, so by definition it is pari passu. Indeed, if you are buying an EDF green bond, for example, you know that the asset base that is supporting your bond is not only the renewable one, but the full balance sheet.

Winkler, Berlin Hyp: When we speak of green bonds, we speak of "use of proceeds" bonds. That means I take the proceeds of these bonds to finance or to refinance something. So if my funding instrument is cheaper than a capital instrument,



there is no need to take the proceeds of a capital instrument and channel them to finance or refinance green assets when I could refinance them through a covered bond, for instance, if they are eligible for my cover pool, or, if they are not, via senior unsecured — and senior preferred if it is available.

Laurent Le Mouel, Moody's: We clearly consider senior non-preferred to be a funding instrument. We make a clear difference between the ability of an instrument to absorb losses on a going concern basis — which is a characteristic of capital — and those instruments that absorb losses on a gone concern

basis at the point of non-viability of a bank, which includes senior non-preferred. The first, capital, is something that reduces the probability of default of a bank,

and we reflect that in our methodology in the intrinsic rating of the bank — the higher capital buffer, the higher the intrinsic rating. Whereas senior non-preferred simply ranks in a particular place in the payment waterfall in a resolution scenario, and the loss attached to this instrument is reflected in the final rating of the particular instrument.

The fact that an instrument is green or not doesn't change much in this respect. As Tanguy said, what is important is the credit risk attached to the instrument.

Winkler, Berlin Hyp: And I think there is one other aspect, because even as a German issuer who starts with a very high MREL ratio, once our new insolvency regime is in place, we will still have the need in the future at some point to issue senior non-preferred even if we are well above my MREL requirement, just to make senior preferred not too expensive to fund in the end.

Day, BIHC: Moving on to the instruments that I think everyone would agree are capital, like AT1, how do they

need to work to be considered green capital? Can they be issued one-for-one against a pool of assets like green bonds to date, or should they reflect the capital requirement generated in relation to green assets, meeting the leverage component rather than the funding?

Claquin, **CACIB**: Suppose that a bank raises EUR100m of AT1. This will be used to finance more than EUR100m of loans, so allocating it to just EUR100m of loans — as you would with a senior green bond — conveys a mismatch between what you are doing on the two sides of your balance sheet.

So far we have seen different approaches. At Crédit Agricole, for example, we financed a large green loan book through a small equity tranche of a synthetic securitisation. That's one way of looking at things. And then there have been transactions like QBE's, where it was done on a one-to-one basis, despite the fact that on the one side you have an AT1 and on the other you have a portfolio of bonds — we know that QBE is using this capital for more than this portfolio, so there is a mismatch.

Which is the right approach? It's not an easy question. If you took an extreme case of a bank that only has green loans on the asset side, then of course they would be able to raise senior debt in green format and also AT1 in green format — globally they would have a one-to-one allocation and it would work. Unfortunately for the moment banks are not completely green — even if it will come — and so we need to manage that with a consistent message.

I think it will be easier to raise a green AT1 if you are a bank that already has a large amount of senior unsecured outstanding, so you can say that you are raising AT1 to support

your loan portfolio that is also supported by senior unsecured green bonds. It would in this way be possible to build a consistent message with a combination

of instruments. It becomes a bit tricky if you have only green bonds outstanding and no green capital instruments, or only green capital instruments with no green senior unsecured.

Winkler, Berlin Hyp: But what is the use of proceeds in that specific example? I would not really use the proceeds of AT1 or Tier 2 issuance to finance commercial real estate loans because I have cheaper instruments for doing so. But there is liquidity coming in when we issue these instruments, so what should I do with this?

And the other thing, of course, is that given the low share of green assets on banks' balance sheets so far, what are we speaking about here, a niche market?

Claquin, **CACIB**: Yes, you are right: for the moment, it's probably still a small market. But the size of green loan portfolios on banks' balance sheets is growing.

And regarding the use of proceeds, yes, the further you go down the balance sheet and into the capital instruments, the more difficult it is to allocate it. But if you want to be consistent, you need

to have this leverage that Cécile has mentioned, and you need to communicate about this leverage in some shape or form. Because at the end of the day, when Berlin Hyp is extending a mortgage loan to anyone, it is financed, let's say, 90% by senior debt, 5% by hybrid capital and 5% by some capital. So you should be able to communicate around this, even if it's more difficult.

Wang, SEB: The way we look at the green side of the balance sheet is as a virtual green balance sheet, i.e. both assets and liabilities marked green and the related hedges. As this virtual green balance sheet grows, you could introduce the same thinking when it comes to the capital to cover it.

There are a number of challenges. One of them is that currently almost all green bond frameworks are very specific when it comes to use of proceeds and earmarking of proceeds — this has been an important principle since SEB initiated the green bond and when we ourselves introduced our framework as an issuer. And that aspect does not work well when it comes to capital instruments. As you said, if you raise green AT1 capital and use the proceeds, i.e. the same nominal amount, to finance for instance green buildings or wind turbines, that feels very challenging considering the actual instrument that you have issued. There is a significant mismatch right there.

It would not surprise me if some banks opportunistically look at green capital instruments because they think it can give them a slightly different investor base or maybe even pricing benefits. But in order to move ahead with green capital instruments you first of all need to have a very sizeable green balance sheet, and then you have to develop the next step beyond current green bond frameworks, because the current

use of proceeds concept does not work for a capital instrument in my view definitely not for an AT1.

Just to state the obvious,

when it comes to AT1s, you don't have perpetual assets, so then you have to default back to a very sizeable virtual green balance sheet to enable such instruments based on a new type of framework. As a dated instrument, Tier 2 could be easier.

Claquin, CACIB: It's true that the current frameworks are really linked to the assets, and in the case of banks, to the loans you are extending in the green sector. And it's true that if you look at a perpetual instrument it creates an additional burden for the issuer, that they need to commit to continually replenishing and maintaining their portfolio. I think it's not impossible to include that in the frameworks that already exist. Berlin Hyp has shown that it's possible to have a living framework and improve it over time, and banks will have to go this way. But it's true that there are some specificities that would be necessary for a framework for a green capital instrument.

Michael Benyaya, CACIB: On the insurance side, which is an industry where we see green activity in general developing, we should move away from the funding aspect. What could work



for them is a pure risk angle, where you take a look at your risk on the assets and liabilities — because effectively Solvency II is a full balance sheet approach — and you could effectively cover a pocket of green or sustainable risk with a specific green capital instrument. That is something that could potentially work for an insurance company more than the funding approach that we have seen so far with QBE and Manulife — that works on paper, which is fine, but it doesn't really fit within the business model of the insurance company itself.

You have to keep in mind that when an insurance company does an investment, they don't invest their own money, they

We have identified some potential

regulatory hurdles

invest the policy-holders' cash, i.e. the premiums that they have received from their policy holders. Insurance companies of course

also issue bonds — actually mostly subordinated bonds but in fairly low volumes — but when they do that they aren't doing it to make investments or provide loans in the manner of banks; they do that mostly for regulatory reasons, and very often they have very tight capital management guidelines which basically say they have to invest the proceeds of the bonds that they raise in super-high quality investments. So there is not a direct link between the big portfolio you see on the asset side and the

Day, BIHC: The possibility of the green nature of a capital instrument affecting its regulatory treatment was raised earlier. What specific issues might arise?

bonds that have been issued on the capital markets.

Benyaya, CACIB: We have identified some potential regulatory hurdles when it comes to issuing green regulatory capital.

The first one — which we have already touched on — is the concept of fungibility of capital. Bodo, I believe you said that capital is here to cover the full balance sheet and not only a small portion of it. That one is probably easier to address, in



the sense that at the end of the day to me it's more a question of communication than there being a pure segregation of assets and liabilities. You could communicate on equivalent amounts; you don't need to have a segregated green capital allocation to a specific green capital requirement to make it work.

Another potential hurdle that is probably more difficult is the concept of incentive to redeem, which Stéphane mentioned earlier. Because an incentive to redeem is not only a financial incentive to redeem — the definition can be pretty broad and could include a variety of items, and the regulator actually has full flexibility to interpret what constitutes an incentive to redeem in the context of a capital instrument. You could well

imagine a situation where a bank or an insurance company issues a green capital instrument, and a few years later something happens,

An incentive to redeem is not only a financial incentive to redeem

there is a full restructuring of the company, and the capital instrument ends up in the part where there are no more green assets. In that situation investors would probably put some pressure on the issuer to exert the call and buy back the instrument, simply because the initial purpose is no longer there. We think that one is something that could be a major hurdle for regulators to approve the issuance of green hybrid capital.

Day, BIHC: I believe there was a utility that did a green bond but which is currently selling the relevant green assets. Even if that's a corporate and not hybrid capital, it possibly offers an example of a similar thing happening.

Claquin, CACIB: Innogy issued a green bond, but as a consequence of its acquisition by E.ON, its renewable assets could be transferred to RWE. Innogy green bond-holders may end up holding some E.ON green assets, but which remain to be defined and will be different from Innogy's.

So indeed, there is a question — not only linked to capital — about what becomes of a green bond if there are no more green assets. There are several answers to that. There is the pure legal answer, and if you look at the documentation of green bonds, most of the time the issuer has the right wording to cover for those situations, so that if they are not able to allocate appropriate green assets, they would allocate the proceeds to standard assets, or it's on a best efforts basis — the wording is usually protective.

The second thing is that this market relies more on the transparency and the accountability that the green bond creates at the issuer level, rather than the detail of the legal documentation. So it's more a moral commitment than a legal commitment. And I would say that if an issuer is in this situation — which would typically be because of a major shift in their business plan — then if they are able to communicate the rationale transparently to investors they have done the largest part of the job.

Then there is a further question, which is, is it possible to change the documentation of a bond so that you remove the green label? Can you change the use of proceeds of a bond during its lifetime to cover for this eventuality? This is a situation that we have studied, but the other way around, for some issuers that were considering transforming outstanding bonds into green bonds. They saw this market develop after they had issued but some part of their operation was already green, and they were considering transforming a large portion of their debt into green bonds, and it seems to be feasible in this direction. So why not the other way around?

So without going into the specific resolution scenario that you have raised, I think that ultimately there are solutions issu-

ers can find to manage such situations.

Philippe Cazenave, Axiom: Clearly the trend glob-

ally speaking is that the regulators don't want any kind of obstacle to resolution, so it's very difficult for me to imagine a green capital bond that could have some seniority to classic AT1. Clearly it would be treated pari passu, and if it's treated pari passu, there is basically no obstacle to resolution, no incentive to redeem, that's very clear.

Then, if it's done on some sort of best efforts basis, why not? Let's say I'm a bank with green ambitions, I want 20% of my global balance sheet to be green and 20% of the projects I'm financing to be green, so why not have 20% of some sort of green capital? It's more on a best efforts basis so, as you said, it's a question of communication. But I hardly see the regulator entering into a distinction between two capital instruments.

Herndl, LBP AM: But wouldn't the issuance of this type of instrument, even though it's a soft commitment, create a reputational incentive to redeem because of the communication? You have built your whole communication on the fact that you are a green bank and then you have a problem, and you have to

change the terms and conditions of your bond. Even if you are legally allowed to make these changes and you have only made a soft commitment to investors, I think there is clearly an issue there that will affect whether the supervisor considers that capital to be permanent.

Cazenave, Axiom: This reminds me of the retail/non-retail distinction on capital instruments. Clearly from a regulator's point of view, whether it is retail or non-retail is not important — it just has to be bail-in-able. But you're right: from the issuer point of view there is some sort of incentive not to bail in the retail instrument.

Herndl, LBP AM: Or even to just redeem the instrument if you lose the relevant assets for some reason. I think we agree that in resolution the treatment would be the same. But if, to ensure the permanence of capital, the regulator forces you to change the terms to make sure the capital remains in place and your bond is no longer green, what are the second round effects going to be on your cost of funding, because maybe your green investor base doesn't trust you anymore? It's a bit far-fetched, perhaps, but I think these are questions that need to be raised.

Day, BIHC: Will the planned EU Green Bond label potentially make the best efforts more of a contractual obligation?

Claquin, CACIB: The European Commission Expert Group will work on the taxonomy - what is green and what is not green, what is eligible as an asset in a green bond and what is not — and on the documentation aspect — what needs to

be documented in various green bonds documents. Indeed they could also go into this area, i.e. the level of commitment that is un-

dertaken in the documentation. Their mandate is still to be decided.

Marjolaine Marzouk, CACIB: Last week we held the first conference on corporate hybrid debt and one of the panellists was Hervé Boiral, who is head of credit for Amundi, and a point he made was that for him what is more important when making an investment decision is the sustainability or "greenness" of an issuer, rather than the specificities of the green bond of the issuer. That's how they are analysing the market and how they would like to see the market evolve, having green or sustainable issuers that have sustainable policies.

Erwan Ollivier, HSBC Global Asset Management: That's why there were difficulties with oil companies issuing a green bond.

At the moment such considerations might not be that important, but they are becoming more and more so. Many clients are asking about ESG-related aspects, including the "greenness"



of bonds, the carbon intensity of the issuer, and so on.

The green universe is growing but it is still a small part of bond markets at the moment. It will probably take quite some time to develop without more pro-active industry initiatives or further regulatory changes.

Cazenave, Axiom: As an individual, as a citizen, I'm very happy to see these discussions between rating agencies, issuers, asset managers around the environment. Then, as an asset manager, I do what my client actually needs, and what they are asking me today are two things. First, to make money — that's the first point. So I try to be as efficient as possible.

> But what I have clearly noticed over the last three to four years is the vast majority of my institutional investors asking me, how

SRI are you? What are you really doing?

What becomes of a green bond if

there are no more green assets?

Is it useful from a money-making perspective, green bonds for the financial industry? I don't want to be a controversial, but, frankly, I'm not so sure. But there is definitely a strong trend, so we can't avoid at least considering these questions, and then seeing what we can do.

In terms of SRI, clearly the consideration for us today when it comes to the financial industry is not really the environmental aspect, but much more governance, where we see a lot of risks.

For the time being there aren't really any or only very few green capital instruments and we only invest in capital instruments, but we are very happy to follow the trend.

Wang, SEB: When it comes to green capital, it's also important to take a step back and say, why do we issue a green bond in the first place? Most banks have very specific sustainability goals to support the overall climate goals. So in light of this aim, does capital have a role to play in this or not?



I think it probably does in the next step, which is to say when there are incentives in place for green bond issuance and maybe even variable risk weight treatment, i.e. green supporting factors, which is ideally what should happen. If green incentives are implemented — which I think could be reality maybe not next year, but over the next few years — then green capital or at least further steps in the capital structure will come as a natural add-on as volumes of green loans are likely to increase significantly and at the same time it could make sense to discriminate between different parts of your lending, i.e. charging more for non-green lending. Green becomes the new normal.

Winkler, Berlin Hyp: But then it would not even be green capital, but normal capital, because everything we do in the future

would be green — anything else would be brown capital.

I like the beginning of what you just said, why did we start issuing green bonds? And John gave the answer as well, it was to contribute to meeting certain overall targets, to help reach the not more than two degrees goal, for instance. And that task has already been fulfilled by originating the assets and refinancing them via a green bond. So what then is the task of the capital?

Claquin, CACIB: Bodo, you ask this question, but you have the answer. Berlin Hyp is one of the examples where the issuance of a green senior bond — which may be seen by many as no more than a gimmick — has been a tool to transform the company. The management were convinced, made sure that green loans were incentivised on the lending side, green senior, green Pfandbriefe — the bank I know today is different from the bank I knew five years ago. And clearly if you start issuing green capital, it's going to be a step further, because in fact you need this leverage.

Green bonds is a governance instrument more than a green

instrument, from an ESG perspective, because it's a tool that transforms the way people are working, linking the treasury operations to the business operations, for example, and it's even more true at the capital level.

We have been discussing whether green capital makes sense for an issuer, but the green bond market has also developed a lot because investors were looking for green paper to invest in. One of the rationales for the first sovereign bond, for example, was that we saw it was not possible to do portfolio management in green bonds without this liquid instrument. So I would like to hear from the investors here if they would welcome the development of a green hybrid capital instrument? Is it something that would help you design new marketing angles and meet your clients' interest in ESG?

Ollivier, HSBC GAM: Our belief as a credit asset manager is that the green bond market must spread to other segments such as emerging markets or high yield. The amount of assets under management in green funds is not exploding — it's OK, but you need to find some new opportunities, and at the moment the saleability of green bond funds continues to be undermined by their asset concentration (by industry) and by their very low beta and low yield, below 0.8% for the euro assets of the MSCI Green Bond Index today.

Investors were expecting the green part of the business to develop more on the credit side. Quite the contrary: the inclusion of two recent sovereign deals into the MSCI Green Bond Index caused some disruptions. Notably, the EUR7bn of France Green OAT 2039 caused the index duration to jump from five to seven years. It is challenging for end-clients to not know what risk they will hold in the coming years. So we need to

develop and to spread the greenness of the market to the widest possible range of products as possible, taking into account regula-

tions and so on. We need to have a greater number of corporate issuers that will permit us to create a product that is easier to manage and sell.

Yes, there is a pricing advantage in

favour of green transactions

Day, BIHC: There have been suggestions that issuers might save a basis point or two when issuing green bonds. Is this the case?

Vincent Hoarau, CACIB: When it comes to pricing, there is a never-ending debate. And there is the academic answer, and there is reality.

The academic answer is that for a given issuer we are facing the same type of risk, so there should be no difference in terms of pricing between a conventional bond and a green bond. And in primary we see investors, including green investors, passing on deals if the new issue premium or the risk/reward associated with the transaction is not appropriate.

But at the end of the day, the reality is a bit different. The answer on pricing would have been different a year ago, but the

momentum around this asset class is growing and everyone around this table confirmed the fact that more and more end investors are delivering investment mandates to asset managers where the green and sustainable elements are becoming essential. I think that at some stage we may get to a point where there is an imbalance in the green demand/green supply dynamic in favour of issuers. And we may be there sooner rather than later Should this happen, this technical element will deliver a pricing advantage to issuers — even if it is in contradiction with the fact that both types of debt are pari passu. Bottom line? A green bond in primary means a greater investor base for the issuer, a greater level of granularity in the order book, and ultimately positive traction for the pricing.

I think this pricing advantage will continue to be symbolic — if you ask me to put a number around this green premium, I would say it is in the low single-digits. If I screen the green curves we have in the secondary market today — the likes of SEB, Berlin Hyp, Rabobank, MUFG in HoldCo format — there is a differential of 3bp-5bp on a curve-adjusted basis — it can even go up to 8bp for names like Rabobank. Cécile mentioned at the beginning of the discussion the recent hybrid bonds from Iberdrola and Engie — clearly you see an outperformance of those bonds versus peers in stable but also in volatile markets. When I speak to traders, clearly they are not at all inclined to go short a green bond.

So, due to all these positive elements, yes, there is a pricing advantage in favour of green transactions. It is still symbolic, but I suspect that it may grow because the need for green investments continues to increase, and I'm not sure that issuers will deliver as quickly as requested. Going forward, a greater number of investors may be inclined to sacrifice price for the green element. In

primary we have seen traditional investors approaching pricing with a lower level of price sensitivity, simply

because it's a green bond, and because they suspect the bookbuilding dynamic to be different. Finally, in the event of a negative mark to market, you may not face the same type of pressure from management when handling a green bond.

Marzouk, CACIB: We have regular discussions with investors who are collating data on the secondary market to see how green or sustainable bonds trade versus non-sustainable bonds, and at the moment there is no clear differentiation between the two. If you look at a specific issuer — for example in the utilities market, which has been pretty active when it comes to sustainable bonds — some green bonds are trading tighter than nonsustainable, and some others are trading wider. And if you look at the way traders send their runs — the Engie, Iberdrola runs, for example — it's not specified if bonds are green or not, so it's not something that is easy for investors to spot when they trade paper.

This may indeed change as green considerations are growing strongly among investors. Insurers, for example, are really put-



ting this at the top of their communications.

We have issuers using the green element

to try to approach pricing aggressively

For now, when we price a green bond, alongside green investors we have some non-green investors coming in just because they like the issuer, the maturity and all the other parameters, but what we notice is that issuers — not syndicate but issuers — tend to differentiate green mandates from non-green where possible, and sometimes give them a slightly better allocation, to help further develop this green community among issuers and investors.

Hoarau, **CACIB**: From time to time — and this is where I see potential danger — we have issuers using the green element to

try to approach pricing aggressively, and this is a road that we should be very careful about, and that should

not be taken. Berlin Hyp is absolutely on the other side of the spectrum, and tends to be consensual towards pricing and investor-friendly when issuing green bonds.

Winkler, Berlin Hyp: I always find this quite an academic dis-

cussion because I'm not in the market with two identical instruments at the same time, one green and the other not. When we issued our last green senior bond we had the same discussions as if it had been a conventional bond: banks were telling us, OK, you have to add a new issue premium of such and such. But then at one point there was a question, what exactly do you mean by a new issue premium in a market that is more or less

on your screens underpinned by trades, or are they just quotes with nothing actually happening? That's another argument why it is a little bit academic.

sold out, where there is no liquidity anymore? Are these levels

And that is even more true when you go further down the hierarchy, because then you come to instruments that by nature do not have the same size, where there are even fewer compa-



rables from issuers, and in many cases issuers do not have a curve of capital instruments that could serve as a basis for pricing something off. So then it becomes really quite hypothetical, trying to work out how the pricing of a green capital instrument — be it Tier 2 or AT1 — might compare with a non-green one.

As Vincent said, our intention is to have successful deals and also see investors return in the next one. And if you squeeze the investor in the primary market, there is a very good chance that they will not return, and then over the long term your deal can't be considered to have been successful. Therefore there has been no difference between our green deals and the conventional ones when it comes to pricing.

And one argument I hear quite often from investors, which I really appreciate, is that if they are buying my name because it is a green bond, why should they be treated worse than another

investor when they are buying the same credit? They should get equal treatment.

In general we had

larger order books for the green bonds, which of course helped the process. And what we've definitely seen is outperformance in secondaries.

Wang, SEB: We have only issued one green bond so far — we will most likely issue another one later this year — and on this first one, I actually held back when it came to pricing. On the roadshow we preached about transparency, credibility and responsibility in what we are presenting within sustainability — it's what we stand for, therefore it felt out of place to take advantage of the occasion to try to squeeze investors in terms of pricing. Clearly there is a mismatch between supply and demand, so I think it's really up to issuers to show some responsibility in that respect. The funny thing is that several banks who were not on the deal openly criticised me afterwards for being too moderate in the final pricing.

Winkler, Berlin Hyp: Don't listen to them.

Wang, SEB: Indeed, it's more amusing than anything else.

When you issue a green bond — just like when we talked about the capital element and the potential regulatory implications — there is a bigger responsibility that goes along with it. And if you conduct yourself in a manner that does not match your ESG language or what you are trying to preach, this should have some impact in the long run. You basically have to be transparent and responsible throughout the whole process. So I don't see issuing green bonds in a beneficial perspective when it comes to pricing; I see this from a more strategic and moral angle.

Moreover, I think that much of the pricing aspect — also the fact that no one dares short them — is because many of the issues are too small. Ideally we typically issue EUR750m up to EUR1.25bn in senior bonds, and ideally I would also like to issue EUR1bn in green bonds, but again it depends on the growth of green assets on the balance sheet. That's really the factor limiting more large scale issuance.

I can imagine that many of the representatives here from the investor side have to look at green senior even if they are not necessarily forced to buy it, due to client demand and requirements. In terms of green capital, this is far less obvious. We are not there yet — there are no natural demands to fill in your funds. So we could see a more interesting pricing exercise from that perspective. And then it's a lot more to do with transparency, responsibility, how credible you are as a whole in terms of ESG, I would think. So overall it would be a very different price discovery type exercise than what we typically seen in the green bond format so far.

Claquin, CACIB: Our dedicated green bond analyst looked at precisely this pricing issue last month and his conclusion was

When you issue a green bond there is

a bigger responsibility

that there is a consistent 1bp-2bp statistically significant difference in the secondary market, with green bonds trading

tighter, but not in the primary market. However, it is statistically significant only for SSAs — where we have large volumes and a bit more liquidity — while for financial institutions and corporates we are more within the standard deviation so it's difficult to draw a conclusion.

Vincent is right that one year ago, one a half years ago we were not able to discover any price difference. We are now able to see something. It's a moment in history that may change in the future, because of this taxonomy and EU Green Bond label that may be introduced. Once we have a quasi-regulation of this market with a list of eligible assets, documentation that is endorsed by the EU, and so on, then the incentives will be stronger and pricing could be influenced by the regulations. So we may then see larger price differences, based on whether or not bonds follow these rules, rather than technicals like supply and demand.

Hoarau, CACIB: I would like to come back to BBVA's recent senior non-preferred as an example. This transaction came to the market when we were already in a period of heightened volatility, and it was just a great deal in terms of momentum, book size, diversity and granularity, but also in terms of price tension and new issue premium. And BBVA's green SNP priced on Santander's conventional curve while similar issuers were paying new issue premiums in the double-digits in primary.

Herndl, LBP AM: That's definitely what we also see in the market. But — if I can play devil's advocate here — there is still a risk attached to it.

If you invest in a bond just because of its greenness, there is a risk that if the issuer behaves in a manner that is not ESG-compliant there will be controversy around the bond or it loses its green label, and that it underperforms. So on the technical side, yes, it does perform for now on the secondary market — when I talk to my portfolio managers they say they can sell green bonds on the secondary market more easily just because of the sheer demand for this type of assets — but at the same time it comes with tail risk. And that's why we need to differentiate between bonds issued by issuers we consider ESG-compliant and those done on an opportunistic basis.

Thomas Canel, HSBC Global Asset Management: Do you think that the price difference between green bond and conventional new issues will be higher for an issuer that is not itself deemed to be very ESG-compliant?

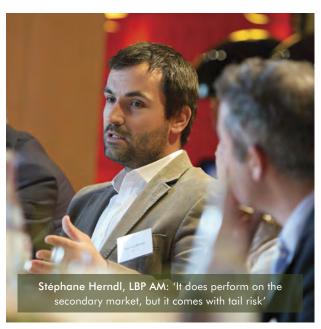
Hoarau, CACIB: I think the benefit for such issuers will be limited. In the end, what matters the most is whether or not the borrower is considered as responsible towards environmental, social and governance criteria due to the nature of the business it conducts and how it conducts this business. Corporate image and reputation must be aligned with the overall funding strate-

gy if the borrower expects a full impact of issuance in green format.

Claquin, CACIB: In fact

what this market has demonstrated over the last 12 months is that it's about the assets more than the issuer, and Repsol is one of the examples of that. Repsol is very well rated from an ESG standpoint and is one of the best players in the oil and gas industry in terms of ESG procedures and standards. One of the reasons there was a debate about their bonds is because they financed some gasoline-related assets, so the question is about the relevance of the assets and gasoline value chain in a two degree perspective rather than on the quality of Repsol.

On the other hand, we saw a green bond from China Three Gorges, a utility, that encountered controversy because of the Three Gorges Dam. Some analysts may have a negative view on what they did on the Yangtze River, but Three Gorges is also now a large utility and their green bond was done in relation to renewable assets purchased from EDP. There was no debate



about the green quality of these assets and their trade was quite well received.

And so to come back to your question, if an issuer which is not the best in terms of ESG comes with a transaction but the assets are prime assets, then I think — if it's well done — there is a good chance that it is well received by investors.

Day, BIHC: Would green capital be appropriate for private placements?

Wang, SEB: We have not issued bank capital in anything other than benchmark format over the recent years, so you could say that in principle private placements from a capital perspective are not preferred. They are possible of course — a lot of issuers do them in certain currencies — but we try to keep things very simple as well since capital instruments should match the

Once we have a quasi-regulation,

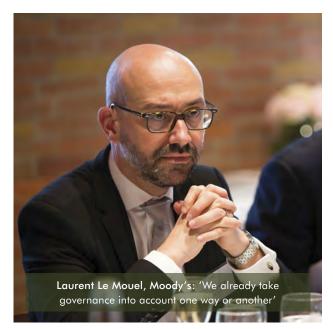
then pricing could be influenced by it

requirements on the balance sheet.

If we one day were to issue green capital then, while it won't necessarily

be in private placement format, it will be in small sizes — unless we see the whole balance sheet becoming green, which is very unlikely to happen any time soon. The green capital to match our green balance sheet would for practical purposes be small amounts and way too small for any actual transactions as it looks now. Longer term this could obviously and hopefully change.

What could very well happen in the end is issuance in niche currencies like Singapore dollars or Hong Kong dollars, where there are already numerous private placement capital issues although these markets are not where you find the larger green investors, i.e. not necessarily the natural green investor habitats. In the main markets — the US market, the euro market — you could very well have to pay extra for small capital issues because there is no secondary liquidity and investors basically have very limited chance of getting out if needed.



Green capital would also be about messaging, and that means that you don't want to do a kind of camouflaged deal — that doesn't make any sense. So from that perspective, it's hard to deviate from a benchmark-like transaction.

Winkler, Berlin Hyp: If I take this scheme Cécile prepared, the stylised green capital calculations we referred to at the start,

nothing but a private placement would be possible for us, because in between I calculated that I would end up with EUR35m of Tier 2 and

EUR26m of AT1, and that is clearly private placement sizes.

On a more general basis, for many issuers green bonds are showcase transactions, and that means you want to make them visible to a wider public, so you don't want to have them as private placements, because then nobody would know about them except one investor. That's the case for us and is what I hear from a lot of other issuers: you use your best assets, so make sure you take the full marketing benefit from them.

Claquin, CACIB: You are right, issuers have tended to favour benchmarks. But we have so many reverse enquiries for private placements and we have also seen some issuers achieving some good publicity in connection with private placements, so I would say this is a boundary that has been breached some time ago.

Marzouk, CACIB: A few years ago we printed a green private placement for Schneider Electric, a 10 year, and the spectrum of investors who participated in the book was a bit larger than usual thanks to the green aspect, and the size reached EUR300m.

Claquin, **CACIB**: Some insurance companies, for example, have targets to build a green bond pocket, and that's a way for them to reach this type of name — Schneider is not a regular

issuer and this was a way for them to buy into the credit.

We used to have a market where we didn't see many private placements; we see many more of them right now. For instance, the supras, and they are big issuers of green private placements — some banks, too, but less so on the corporate side.

John Arne mentioned the Singapore dollar market — there was a green Tier 2 from Manulife in Sing dollars. You might not qualify it as a private placement, but it was more of a club deal than a widely distributed benchmark.

Hoarau, CACIB: When this imbalance between green supply and green demand crystallises, issuers may be tempted to accept cheap and tailor-made funding delivered by investors struggling to find assets and ready to scarify liquidity in addition to yield.

Ollivier, HSBC GAM: To me, when it comes to green capital private placements, an important question, besides green or not green, is whether we can do private placements in funds. We need to have something that is liquid to enter UCITS vehicles. If not, we need to offer alternative vehicles and clients must accept renouncing liquidity to achieve more diversified green exposures.

Bidet, CACIB: For banks that are issuing green bonds — with green capital being the ultimate green — shouldn't that be taken into account in ratings? Because those are banks that have better

corporate governance, and we know that governance is very topical at the moment. Laurent, how do you factor that in? And shouldn't we

see some uplift, maybe not in the instrument, but in the overall issuer credit rating?

Le Mouel, Moody's: We already take governance into account one way or another in our scorecard for banks. This can be if better governance leads to better financials — it can have a direct positive impact on profitability or asset risk, for instance. Or, if we think that one bank's governance is better than another's, we discriminate with a qualitative adjustment, and we could go down this route with banks issuing green bonds if

Winkler, Berlin Hyp: What I found interesting in the last credit opinion published by Moody's on Berlin Hyp was that for the first time they mentioned in a positive way that we are an issuer of green bonds, even if this was not explicitly linked to any rating impact.

there is evidence that it reflects better governance.

Bidet, CACIB: Indeed, it's not necessarily about the issuance of green bonds; it's more the governance and the philosophy behind it, with green bonds being a symptom of such governance.

Le Mouel, **Moody's**: Overall this is quite a new topic for rating agencies. There is certainly now a higher sensitivity to these

issues in our assessment compared to a few years ago.

We also look at how sustainable and green factors directly impact the issuer, either positively — which can also be in governance as I just mentioned — or negatively, such as when a change in the regulatory environment potentially impacts car manufacturers, for instance.

Then we have green or sustainable ratings attached directly to a particular instrument, such as green bonds. We have developed a green bond assessment where we assess how the bank is able to manage the green assets, to manage the proceeds, to report to the public, etc.

Day, BIHC: To conclude: when are we going to see a green capital deal? Is this going to be a market that is going to take six months, a year, five years to develop? And are you likely to be getting involved?

Bidet, **CACIB**: I strongly believe that within the next two years we are going to see something in the market. Banks are growing in this direction, the market is developing, and we've heard that we need to source more assets for investors. 2018 is a no-no, but it's something for maybe 2019, or 2020 at the latest.

Winkler, Berlin Hyp: You've heard my thoughts and it is simply not the same thing as green bonds. So potential issuers and investors first have to get their heads around the idea. I've spoken to some bond investors already, just to ask how they feel

about it, and although many like green bonds, they said no, I cannot imagine it so far; that could change, of course. So it's not for today

or tomorrow; it's something for the future — but perhaps not too far into the future.

Hoarau, CACIB: The day we have a deeply subordinated transaction in green format, you will tick so many boxes that the pricing differential will be substantial. The extra yield combined with the green element will attract deep green pockets. This is typically why BBVA went so well in quite challenging market conditions.

Herndl, LBP AM: The further you go down the capital structure, the higher the chance you tap a different investor base. My understanding is that there's a strong overlap between insurance investors and green, so while you may still be able to access this investor base with Tier 2 — with a bullet structure rather than callable because of the ALM constraints they have on the insurance side — I am less sure about AT1.



Hoarau, CACIB: I fully agree with you. The only obstacle that may not be overcome by some traditional green investors is related to rating limits. How far you can go down the capital structure is a real question.

Herndl, LBP AM: And don't forget that we've seen recent capital trades being priced quite aggressively that have not really performed, so there is anyway a possible repricing taking

> place. And at the same time this is a new instrument, and for new instruments there is always a question of price discovery. So I hear

the argument about the investor base being much bigger and there being this technical element that should support the performance of a bond, but at the same time there needs to be price discovery in a challenging environment with everything being very tight. So I'm not sure how this is going to balance out - and it also depends on what the market looks like at the time.

Cazenave, Axiom: If there is at some point a green capital issuance, obviously we would be happy to have a look at it. I'm quite sensitive to your argument that there may be a wider range of investors involved in these. But, to be cynical, Tier 1 capital is a very technical instrument and if you have a wider range of investors, maybe you will have people that don't fully understand the risks — not that this is a problem for us; we would be very happy to see more players on the ground.

Why not visit us online at bihcapital.com?

We've seen recent capital trades

being priced quite aggressively

Denmark Danske opens SNP

The differing business models of Danish banking groups have resulted in a matrix of evolving bail-in regulation. But since the country's MREL and senior non-preferred debt framework was firmed up in March, issuers have been able to plan more definitively, with Danske Bank successfully opening the Danish SNP market on 14 May. Neil Day reports.

Finanstilsynet, the Danish FSA, announced MREL requirements and resolution plans for Danske, Jyske Bank and Sydbank on 26 March. The overall MREL requirement for systemically important financial institutions (SIFIs) was set at twice the solvency requirement plus twice the combined buffer requirement, with the total requirement always constituting at least 8% of total liabilities and own funds.

A bill to introduce senior non-preferred and give banks a statutory instrument to help meet these requirements was then passed and came into force on 1 July.

"We think the Danish legislative bodies have found a very good statutory solution for Denmark, allowing Danish banks to issue non-preferred senior notes," says Bent Callisen, head of group funding at Danske. "The new Danish legislation effectively creates a new class of unsubordinated debt, non-preferred senior, which is positioned between the old senior and Tier 2s.

"In our view that resembles what we have seen elsewhere in Europe."

However, he notes that the MREL requirement — which is equivalent to 33% of risk-weighted exposures for Danske — is relatively high in a European context.

"In fact we may have one of the highest requirements in Europe," adds Callisen, "and because of that we will have to replace basically all of our preferred senior with the new non-preferred senior instrument. Looking at the balance sheet right now, we will not be issuing preferred senior in the foreseeable future, but only non-preferred."

The bank has put its estimated senior non-preferred needs at around DKK100bn (EUR13.4bn), based on its 2017 balance sheet. Old-style outstanding senior preferred bonds will be grandfathered and count towards MREL requirements when they become effective on 1 July 2019 until the end of 2021.

Alpesh Varsani, director, DCM solutions and advisory at Crédit Agricole CIB, notes that the Danish framework stipulates that the SIFIs must fulfil their MREL requirements fully with subordinated instruments by January 2022. However, the ongoing Trilogue nego-

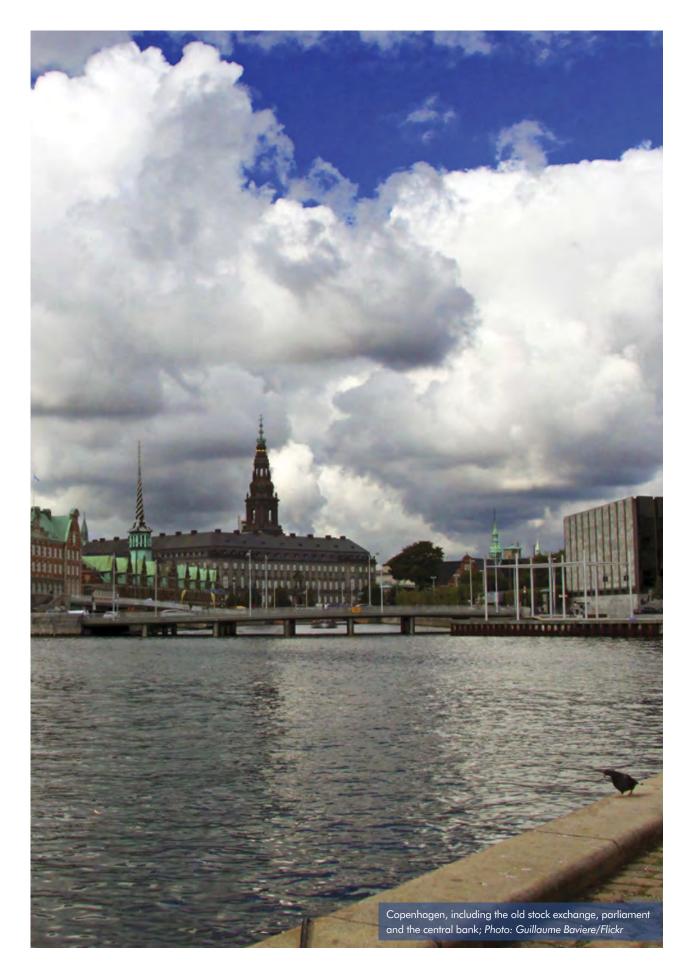
tiations regarding the "risk reduction measures" legislative package being considered at an EU level may eventually limit the ability of national authorities to demand that MREL requirements be met fully with subordinated instruments and completely exclude senior preferred debt and other liabilities pari passu with senior preferred debt (see Regulatory Updates section for more details).

"The outcome of the Trilogue negotiations will be followed closely over the coming months, and some national regulators will be hoping to see some scope for national discretion in the final package," he says.

Danske's Callisen says he hopes that if and when there is further clarity on a European level the FSA will follow this lead and put the Danish banks on a level playing field.

Danske opens Danish market

Denmark's legislation, although coming into force on 1 July, was effective retroactively from 1 January 2018, easing the way for banks to begin building up their buffers before July once they





had amended their documentation. And Danske on 30 April announced the mandate for its first senior non-preferred transaction, targeting a five year euro benchmark.

It then approached the market on 14 May with its debut, rated Baa1/A-/A by Moody's, S&P and Fitch (relative to issuer ratings of A1/A/A).

After initial price thoughts of the 65bp over mid-swaps area, guidance was set at the 55bp area, plus or minus 2bp will price within range, on the back of more than EUR2bn of demand. A EUR1.25bn (DKK9.31bn) five year deal was ultimately priced at 53bp over, with around EUR2.8bn of orders good at re-offer.

"Investors received us incredibly well," says Callisen. "They had no concerns about the format. As we see it, it was only a question of relative value, and we think investors were pleased to have the opportunity to buy a Nordic senior unsecured note with a bit of extra spread.

"We had more than 200 investors in the book, putting in close to EUR3bn of orders. It's one of the best books we've had recently."

The execution process involved a degree of price discovery given the novelty of the product.

"There are multiple ways of looking at pricing," says Callisen. "One is to compare with similar banks, but there wasn't a true comparable given that we were the first Nordic out there. The other way would be to look at non-pre-

ferred as part of the Tier 2 spread.

"Investors formed their opinion based on those and potential other reference points before deciding what the right price was. The eventual pricing of 53bp was roughly in line with where we had anticipated before going to the market"

George Kalbin, director, FI syndicate at Crédit Agricole CIB, puts the new issue concession paid by Danske at around 10bp, based on a theoretical spread between preferred and non-preferred senior, and says this is in line with the average paid on similar issues throughout the year.

"All in all still a very successful trade," he says. "They got a book of some EUR2.8bn and took out a chunky EUR1.25bn, so clearly generated a lot of interest and opted for size."

The week after its debut, Danske on 18 May launched a SEK 4.25bn (EUR407m, DKK3.03bn) senior non-preferred issue split into fixed and floating rate tranches and priced at 73bp over the respective benchmark rates.

Then on 5 June it made its senior non-preferred debut in the US dollar market with a \$1.75bn (DKK11.2bn, EUR1.50bn) triple tranche transaction split into \$850m fixed and \$400m floating rate 5.25 year tranches and a \$500m 10 year fixed rate deal, priced at 120bp over Treasuries, 106bp over Libor and 148bp over Treasuries, respectively. The combined book totalled almost \$4bn.

"Our experience in the Swedish and US dollar market in 144A format resem-

bled that on the inaugural euro deal," says Callisen.

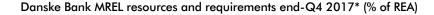
The three deals mean Danske has already raised some DKK23.5bn (EUR3.16bn) of senior non-preferred debt. And on 20 June the bank went on to sell a \$750m AT1.

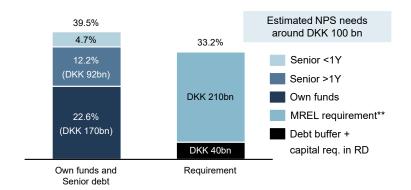
"Normally we try to distribute the funding throughout the year," says Callisen, "but this year we had to wait for the non-preferred senior legislation and hence we've issued a relatively large amount in the second quarter. We have a funding need this year of DKK60bn-DKK80bn and are more than halfway.

"The market has taught us once again that when conditions are stable and investor demand is there, we may as well issue, and that consideration was also what led us to issue our Additional Tier 1 now."

When Nordea sold its inaugural senior non-preferred transaction, a EUR1bn five year, on 15 June, it paid 60bp over mid-swaps, illustrating the continuing widening of spreads that acted as a backdrop to Danske's issuance (see News section for more on Nordea).

"Danske recognised that in these markets there is a first-mover advantage and effectively utilized that when a good market window opened up," says Kalbin at CACIB. "They followed up with a highly-successful Swedish krona bond, to become the first Nordic issuer to utilise that market for senior non-preferred issuance, and then capitalised on the momentum they had in the US market as well."





^{*} Includes structured notes; ** Estimate for Q4 2017 based on DFSA methodology Source: Danske Bank

Nykredit needs rise on 8% rule

Standalone mortgage credit institutions, not being deposit-taking institutions, had been exempted from MREL, with the FSA instead making them subject to a "debt buffer" requirement of 2% of their mortgage assets.

Nykredit Realkredit begun building up this buffer in June 2016, with a EUR500m "senior resolution note" (SRN) that was deemed the first bailin-type senior instrument — while also helping the issuer's ratings. The instrument was structured to contractually fit correctly into the creditor hierarchy, and also taken up by the smaller DLR Kredit.

However, Danmarks Nationalbank, the Danish central bank, had suggested that the mortgage credit institutions should have a bigger buffer, while there were concerns that unless they had 8% bail-in-able liabilities they would not qualify for the resolution fund. And in the same legislation introducing Denmark's senior non-preferred instrument, a new requirement was introduced that for SIFI mortgage credit institutions that are not part of a group, the debt buffer must be above 2% and the sum of the institution's capital requirement and debt buffer requirement must be above 8% of the institution's total liabilities. For mortgage credit institutions that are part of a group, the 8% requirement is applicable on a group level.

According to Morten Bækmand Nielsen, head of investor relations at Nykredit, the introduction of the 8% requirement means the issuer will require some DKK20bn-DKK30bn more of senior non-preferred issuance, with its related costs.

"It was expensive news," he says. "We were of course a little bit disappointed that, having at first been exempt from MREL, we still saw our requirements for bail-in-able debt increase."

Nykredit's EUR1.8bn of outstanding senior resolution notes will now convert into the new statutory senior non-preferred Danish instrument that has been introduced thanks to an alignment clause in their documentation.

The issuer has given guidance that it expects to raise up to DKK5bn of new senior non-preferred debt by year-end



and, as with its SRNs, will focus on euros.

"Given that we know this is an instrument we know we are going to be consistently issuing, we have been eager to build up a curve in order to make sure that we have something to price off," says Nielsen, "and we have been quite open with investors about our plans."

Nykredit has already begun meeting with investors in non-deal related road-showing to prepare the ground for its first issuance since the legislation was introduced.

Jyske set for SNP from autumn

Jyske Bank is also eyeing its first senior non-preferred issuance in the second half of the year.

The bank's MREL requirement is equivalent to 28.1% of risk-weighted exposures and, according to Jyske's calculations, it already meets the 8% bail-in-able liabilities requirement thanks to the grandfathering of outstanding senior preferred issued before the beginning of this year.

Indeed the bank sold a EUR500m five year old-style senior bond in November just before the cut-off date.

"We did a second senior preferred issue in 2017 in order to be able to include it in our MREL requirement until the end of 2021," says Merete Poller Novak, head of debt investor relations and capital markets funding at Jyske Bank, "and we were able to achieve extraordinarily tight pricing on that."

The issuer will now be replacing its stock of senior preferred debt ahead of 1 January 2022 by which time MREL requirements must be met with only subordinated instruments, with an estimated EUR2bn-EUR2.5bn to be raised in aggregate by the deadline.

"We are in no hurry to issue our first senior non-preferred," says Novak. "But we would like to issue during the window from September to year-end, as we have a positive outlook on our senior preferred short and long term ratings [A- and A-2] from S&P based on the assumption that there will be this gradual build-up of our MREL that we have communicated.

"Furthermore, we consider it of very high strategic importance for our long term investor recognition to show our name in the euro primary market at least once a year."

S&P revised its outlook on the ratings of Danske Bank (A/A-1) and Jyske Bank to positive on April 5, in the wake of the Danish FSA announcing their MREL requirements.

"We anticipate that Danske Bank and Jyske Bank will replace significant portions of maturing senior unsecured debt with senior non-preferred debt from mid-year 2018," it said, "thereby accumulating a material amount of ALAC capacity."

Novak notes that any upgrade would be positive for the bank even if it will not be issuing much senior preferred debt, with any improvement in its short term rating helping in derivatives and commercial paper, for example. The extent to which Jyske might issue senior preferred depends on several factors.

"It's a question of how the balance sheet develops, if bank lending and deposits stay the same or change, and if the growth is in mortgage lending only or bank lending will grow, too," says Novak. "If we just need something from a pure NSFR or S&P SFR perspective, then we will top up with senior preferred because it's cheaper.

"And then we don't know just how the regulations will ultimately end up, with this talk of TLAC-MREL harmonisation and the like."

Currencies, structures and distribution



Source: Crédit Agricole CIB

SUSTAINABONDS

GREEN & SOCIAL BANK FINANCE



A new, free publication covering one of the most exciting areas of the capital markets

News and analysis of the latest developments in green and social bond issuance





A focus on European bank funding and related initiatives — whether covered, senior or RMBS, EeMAP, PRI or TCFD

From the publisher of Bank+Insurance Hybrid Capital



SUSTAINABONDS.COM

Photo credits (top to bottom): Monique Wüstenhagen/DKB; UNFCCC; Rick Bajornas/UN; Berlin Hyp

AT1, RT1 monitoring

Launch	Issuer	Issue ratings	Currency	Amount	Coupon	Maturity	First call	Principal loss	Trigger	Price	I-Spread	Yield	Yield to	Rese
_00101	133061	issue runnigs	Correlicy	(m)	Соорон	date	date	absorption	ggci	11100	i-opieuu	to call	maturity	spred
20-Jun-18	DANBNK	-/-/BB+	USD	750	7.000%	Perpetual	26-Jun-25	EC	7.000%	97.96	448	7.38	6.73	413
0-May-18	HOFISS	-/-/-	EUR	40	8.000%	Perpetual	01-Sep-23	-	5.125%	100.69	755	7.84	8.83	76
3-May-18	SYDBDC	Ba1/-/-	EUR	100	5.250%	Perpetual	25-Aug-25	PWD	7.000%	100.60	466	5.15	5.23	46
?2-May-18	VORHYP	-/-/-	EUR	40	6.125%	Perpetual	28-Jun-30	TWD	7.000%	95.59	574	6.66	6.74	50
?1-May-18	CFG	-/BB+/BB-	USD	300	6.000%	Perpetual	06-Jul-23	-	-	100.75	293	5.82	5.82	30
18-Apr-18	BGAV	Ba1/-/-	EUR	300	5.000%	Perpetual	14-May-25	TWD	5.125%	91.90	607	6.48	6.34	44
17-Apr-18	KBCBB	-/BB/BB+	EUR	1,000	4.250%	Perpetual	24-Oct-25	TWD	5.125%	91.81	514	5.63	5.46	35
12-Apr-18	WESTBR	-/-/-	GBP	22	11.000%	12-Apr-38	12-Apr-33	-	-	100.00	938	10.99	11.00	-
12-Apr-18	PBBGR	-/BB-/-	EUR	300	5.750%	Perpetual	28-Apr-23	TWD	7.000%	94.18	698	7.22	7.06	53
04-Apr-18	SOCGEN	Ba2/BB+/-	USD	1,250	6.750%	Perpetual	06-Apr-28	TWD	5.125%	92.70	492	7.83	7.28	39
27-Mar-18	CAZAR	-/B-/B	EUR	350	7.000%	Perpetual	06-Apr-23	TWD	5.125%	98.47	736	7.38	8.39	68
9-Mar-18	HSBC	Baa3/-/BBB	USD	1,800	6.500%	Perpetual	23-Mar-28	EC	7.000%	96.33	411	7.03	6.70	36
9-Mar-18	HSBC	Baa3/-/BBB	USD	2,350	6.250%	Perpetual	23-Mar-23	EC	7.000%	98.23	380	6.69	6.40	34
3-Mar-18	CABKSM	B1u/BB/-	EUR	1,250	5.250%	Perpetual	23-Mar-26	EC	5.125%	92.35	606	6.52	6.49	45
2-Mar-18	ITAU	B2/-/B	USD	750	6.500%	Perpetual	19-Mar-23	PWD	5.125%	94.38	507	7.96	7.05	38
2-Mar-18	SANTAN	Ba1/-/-	EUR	1,500	4.750%	Perpetual	19-Mar-25	EC	5.125%	92.66	574	6.09	6.02	49
27-Feb-18	HBAN	Baa3/BB+/BB	USD	500	5.700%	Perpetual	15-Apr-23	-	-	98.60	320	6.04	5.78	28
12-Feb-18	ALBRK	-/-/-	USD	205	10.000%	Perpetual	20-Feb-23	-	-	102.62	639	9.28	9.88	73
25-Jan-18	CCBGBB	Ba2/BB/-	EUR	500	3.625%	Perpetual	16-Apr-25	TWD	5.125%	85.58	586	6.27	5.11	29
24-Jan-18	UBS	Balu/BB/BBB-	USD	2,000	5.000%	Perpetual	31-Jan-23	PWD	7.000%	88.19	514	8.20	5.81	24
25-Jan-18	ALFARU	B2/-/B	USD	500	6.950%	Perpetual	30-Apr-23	PWD	5.125%	94.37	558	8.38	7.76	45
17-Jan-18	RBIAV	Ba3/-/-	EUR	500	4.500%	Perpetual	15-Jun-25	TWD	5.125%	85.63	677	7.17	6.18	38
3-Dec-17	UCGIM	B1u/-/B+	EUR	1,000	5.375%	Perpetual	03-Jun-25	TWD	5.125%	91.05	663	7.03	6.90	49
)1-Dec-17	SHAWLN	-/-/-	GBP	125	7.875%	Perpetual	08-Dec-22	PWD	7.000%	92.64	870	9.97	8.91	67
80-Nov-17	BANVOR	-/CCC/-	USD	300	8.250%	Perpetual	07-Dec-22	PWD	5.125%	93.20	731	10.20	9.38	61
?7-Nov-17	ETFC	Ba2/BB/-	USD	300	5.300%	Perpetual	15-Mar-23	-	-	97.50	302	5.91	5.96	31
21-Nov-17	CREAL	-/B+/BB-	USD	230	9.125%	Perpetual	29-Nov-22	- TI (ID	- 105%	93.86	803	10.92	10.27	70
21-Nov-17	NDASS	Ba1u/BBB/BBB	EUR	750	3.500%	Perpetual	12-Mar-25	TWD	5.125%	91.71	449	4.99	4.74	30
21-Nov-17	CHIYBK	-/-/- (DD /	USD	250	5.250%	Perpetual	29-Nov-22	-	- 105%	89.89	514	8.03	6.46	31
0-Nov-17	SABSM	-/BB-/-	EUR	400	6.125%	Perpetual	23-Nov-22	EC	5.125%	100.02	608	6.12	7.47	60
)7-Nov-17	STI	Baa3/BB+/BB	USD	500	5.125%	Perpetual	15-Dec-27	- TMD	- 1050/	94.88	293	5.84	5.67	27
)7-Nov-17	BNP	Ba1/BBB-/BBB-	USD	750 570	5.125%	Perpetual	15-Nov-27	TWD	5.125%	88.50	390	6.81	6.12	28
26-Oct-17	DFS	Ba3/BB-/BB- Baa2/BBB/BB+	USD	570	5.500%	Perpetual	30-Oct-27	-	-	97.34	296	5.87	5.87	30
25-Oct-17	SCHW JZCITY		USD	500	5.000%	Perpetual	01-Dec-27 27-Oct-22	-	- E 1050/	96.02	264	5.55	5.42	25
20-Oct-17 19-Oct-17	CHINAM	-/-/- -/BB-/-	USD USD	1,496 1,000	5.500%	Perpetual Perpetual		EC EC	5.125%	85.00 92.39	682 349	9.94	7.08	34
	JPM				4.400%	Perpetual	25-Oct-22 01-Nov-22		5.125%			6.48	5.43	24
13-Oct-17	UOBSP	Baa3/-/BBB Baa1/-/BBB	USD	1,258 650	4.625%	Perpetual Perpetual		- PWD	-	92.88	366	6.55	5.62	25 17
11-Oct-17 10-Oct-17	CBZHZH		USD	1,191	3.875% 5.500%	Perpetual Perpetual	19-Oct-23 18-Oct-22	EC	5.125%	92.67 88.78	260 568	5.49 8.75	4.78 6.85	35
		-/-/- D==2/DDD /												
04-Oct-17 28-Sep-17	BNS INVPLN	Baa3/BBB-/- Ba2/-/-	USD GBP	1,250	4.650%	Perpetual Perpetual	12-Oct-22 05-Dec-24	EC PWD	7 000%	90.60	436 534	7.25	5.83	26 57
28-Sep-17 27-Sep-17	ABNANV	Ba1u/-/BB+	EUR	250 1,000	6.750% 4.750%	Perpetual Perpetual	22-Sep-27	TWD	7.000% 5.125%	100.39 95.63	534	6.67 5.36	7.20 5.58	39
						·					464 521			
26-Sep-17	SANTAN	Ba1/-/BB	EUR	1,000	5.250%	Perpetual Perpetual	29-Sep-23	EC TWD	5.125%	99.33	521 587	5.40	6.46	50
2-Sep-17	NIBCAP	-/BB-/-	EUR	200	6.000%	Perpetual	15-Oct-24	TWD	5.125%	98.86	587	6.22	7.03	55
1-Sep-17	POSABK	Ba2/-/-	USD	7,250	4.500%	Perpetual	27-Sep-22	EC	5.125%	91.55	387	6.87	5.66	26

 $Principal\ loss\ absorption:\ CE=conversion\ into\ equity;\ TWD=temporary\ write-down;\ PWD=permanent\ write-down$

				RT	1 perfor	mance m	onitoring	(as at 8/7/1	8)				
Launch	Issuer	Issue ratings	Currency	Amount (m)	Coupon	Maturity date	First call date	Principal loss absorption	Price	I-Spread	Yield to call	Yield to maturity	Reset spread
20-Jun-18	CNPFP	Baa3/BBB-/-	EUR	500	4.750%	Perpetual	27-Jun-28	PPWD	99.67	398	4.79	5.33	391
13-Jun-18	VIVATN	-/-/BB-	EUR	300	7.000%	Perpetual	19-Jun-25	PWD	103.25	598	6.41	7.28	646
19-Apr-18	PHNXLN	-/-/BBB-	GBP	500	5.750%	Perpetual	26-Apr-28	PWD	91.57	543	6.95	6.29	417
06-Mar-18	SCOR	Baalu/A-/-	USD	625	5.250%	Perpetual	13-Mar-29	TWD	89.20	376	6.68	5.80	237
01-Dec-17	DLGLN	Ba1u/BB/-	GBP	350	4.750%	Perpetual	07-Dec-27	EC	90.90	453	6.03	5.37	339
12-Oct-17	ASRNED	-/BB/-	EUR	300	4.625%	Perpetual	19-Oct-27	EC	95.45	452	5.25	5.47	379

Source: Crédit Agricole CIB

Tier 2 bank, insurance hybrids

Bank Tier 2 performance monitoring (as at 8/7/18)												
Launch	Issuer	Issue ratings	Currency	Amount (m)	Coupon	Maturity date	First call date	I-Spread	Yield to call	Yield to maturity	Reset spread	
25-Jun-18	SWEDA	Baa1/A-/-	JPY	11,000	0.950%	29-Jun-28	29-Jun-23	83	0.95	1.09	85	
21-Jun-18	CXGD	B2/-/B+	EUR	500	5.750%	28-Jun-28	28-Jun-23	526	5.52	6.15	550	
18-Jun-18	MTROLN	-/-/-	GBP	250	5.500%	26-Jun-28	26-Jun-23	504	6.35	4.53	446	
18-Jun-18	DBSSP	A3 *+/-/-	JPY	7,300	0.850%	25-Jun-28	25-Jun-23	73	0.85	0.98	74	
08-Jun-18 29-May-18	PSSPO AASLN	-/-/- -/-/-	EUR GBP	15 37	2.132% 2.250%	15-Jun-28	-	- 88	-	2.13 2.29	-	
04-Jun-18	DBSSP	A3 *+/-/A+	USD	750	4.520%	31-May-25 11-Dec-28	- 11-Dec-23	146	4.35	4.43	- 159	
23-May-18	OAKNBK	-/-/-	GBP	50	7.750%	01-Jun-28	01-Jun-23	-	-	-	685	
16-May-18	BBVASM	Baa3/BBB/BBB+	USD	300	5.250%	29-May-33	-	227	-	5.21	-	
08-May-18	DBSSP	A3 *+/-/A+	CNY	950	5.250%	15-May-28	15-May-23	40	5.29	5.27	-	
07-May-18	LBBW	Baa2/-/BBB	AUD	250	5.000%	17-May-28	-	215	-	4.84	-	
26-Apr-18	SWEDA	Baa1/A-/A+	SEK	1,200	1.588%	08-May-28	08-May-23	113	1.60	2.21	103	
18-Apr-18	BGASJ	Ba2/-/BB	USD	400	6.250%	25-Apr-28	25-Apr-23	440	7.29	6.93	352	
18-Apr-18	LEED	Baa2/-/BBB+	GBP	200	3.750%	25-Apr-29	25-Apr-28	271	4.22	4.21	229	
16-Apr-18 10-Apr-18	FSRSJ CABKSM	Ba2/-/- Ba2/BBB-/BBB-	USD EUR	500 1,000	6.250% 2.250%	23-Apr-28 17-Apr-30	23-Apr-23 17-Apr-25	361 273	6.50 3.23	6.50 3.31	356 168	
04-Apr-18	DBSSP	A3 *+/-/A+	EUR	600	1.500%	17-Apr-30 11-Apr-28	17-Apr-23 11-Apr-23	157	1.81	2.21	120	
22-Mar-18	GS	Baa2/BBB-/A-	JPY	15,000	0.880%	27-Mar-28	-	100	-	1.25	-	
23-Mar-18	LUSOIB	-/-/-	USD	93	5.375%	28-Dec-27	28-Jun-23	312	6.01	6.08	-	
05-Mar-18	VKBNIE	-/-/-	EUR	12	3.230%	15-Mar-28	-	205	-	2.89	-	
19-Mar-18	SHNHAN	Baa1/BBB+/BBB+	USD	400	4.500%	26-Mar-28	-	180	-	4.72	-	
15-Mar-18	INTNED	Baa2/BBB/A	EUR	750	2.000%	22-Mar-30	22-Mar-25	182	2.31	2.60	135	
15-Mar-18	INTNED	Baa2/BBB/A	USD	1,250	4.700%	22-Mar-28	22-Mar-23	202	4.91	4.87	194	
13-Mar-18	DNBNO	-/A-/-	EUR	600	1.125%	20-Mar-28	20-Mar-23	133	1.55	1.88	77	
12-Mar-18	STANLN	Baa1/BBB-/A-	USD	500	4.866%	15-Mar-33	15-Mar-28	230	5.21	5.14	197	
06-Mar-18 08-Mar-18	CIT CCBGBB	Ba2/BB/BB Baa3/-/-	USD EUR	400 200	6.125% 1.625%	09-Mar-28 15-Mar-28	- 15-Mar-23	283 194	2.16	5.74 1.80	- 123	
05-Mar-18	DNBNO	-/A-/-	SEK	700	0.669%	13-Mar-28	13-Mar-23	-	1.10	0.90	-	
05-Mar-18	DNBNO	-/A-/-	SEK	300	1.610%	13-Mar-28	13-Mar-23	132	1.76	1.79	106	
05-Mar-18	DNBNO	-/A-/-	NOK	900	2.130%	13-Mar-28	13-Mar-23	-	1.86	1.99	-	
28-Feb-18	LLOYDS	Baa1/BBB-/A-	EUR	750	1.750%	07-Sep-28	07-Sep-23	203	2.33	2.55	130	
23-Feb-18	SHBASS	A3/A-/AA-	EUR	750	1.250%	02-Mar-28	02-Mar-23	122	1.44	1.83	80	
22-Feb-18	BNP	Baa2/BBB+/A	USD	1,250	4.375%	01-Mar-33	01-Mar-28	225	5.16	4.98	148	
20-Feb-18	AKBNK	B3 *-/-/BB *-	USD	400	6.797%	27-Apr-28	27-Apr-23	769	10.58	9.04	403	
20-Feb-18	LANSBK	-/BBB+/-	SEK	400	1.750%	01-Mar-28	01-Mar-23	71	1.95	1.85	-	
		Insurai	nce Tier 2	performan	ce monito	ring (as at 8/	7/18)					
Launch	Issuer	Issue ratings	Currency	Amount (m)	Coupon	Maturity date	First call date	I-Spread	Yield to call	Yield to maturity	Reset spread	
14-May-18	KHLIIN	-/-/BB	USD	200	7.500%	21-May-48	21-May-23	613	9.02	8.06	465.8	
19-Apr-18	MYLIFE	A3/BBB+/-	USD	1,000	5.100%	26-Apr-48	26-Apr-28	208	5.00	5.51	315	
17-Apr-18	ZURNVX	A2/A/A-u	USD	500	5.125%	01-Jun-48	01-Jun-28	256	5.55	5.76	326.5	
16-Apr-18	HLINSU	A3/-/A-	USD	1,000	4.700%	23-Apr-48	23-Apr-23	353	6.42	5.32	326.5	
04-Apr-18 22-Mar-18	AEGON AIZ	Baa1/BBB/BBB- Ba1/BB+/-	USD USD	800 400	5.500% 7.000%	11-Apr-48 27-Mar-48	11-Apr-28 27-Mar-28	314 392	6.06 6.83	6.22 6.93	354 413.5	
21-Mar-18	AXASA	A3/BBB+ *-/BBB	EUR	2,000	3.250%	27-Mar-48 28-May-49	27-Mar-28 28-May-29	264	3.59	4.32	320	
21-Mar-18	STBNO	-/BBB-/-	SEK	900	2.146%	27-Mar-48	27-Mar-25	-	2.37	2.80	-	
22-Feb-18	USIMIT	Ba1 *-/-/BB+	EUR	500	3.875%	01-Mar-28	-	476		5.59	-	
25-Jan-18	FWDINS	Ba2/-/BB+	USD	200	5.500%	Perpetual	01-Feb-23	474	7.63	6.29	307.5	
22-Jan-18	ACAFP	-/BBB-/-	EUR	1,000	2.625%	29-Jan-48	29-Jan-28	296	3.79	4.18	265	
12-Jan-18	LAMON	-/BBB/-	USD	310	4.800%	18-Jan-48	18-Jan-28	376	6.67	6.42	323.5	
14-Dec-17	LAMON	-/BBB/-	USD	400	4.800%	21-Dec-47	21-Dec-27	302	5.93	6.14	344	
05-Dec-17	CASSIM	-/BB+/-	EUR	500	4.250%	14-Dec-47	14-Dec-27	384	4.65	5.34	445.5	
01-Dec-17	DLGLN	Balu/BB/-	GBP	350	4.750%	Perpetual	07-Dec-27	453	6.03	5.37	339.4	
28-Nov-17	TALANX	-/BBB/- /BBB/	EUR	750 750	2.250%	05-Dec-47	05-Dec-27	150	3.44	3.92	325	
22-Nov-17 14-Nov-17	BNP MFCCN	-/BBB/- -/A-/BBB+	EUR SGD	750 500	1.000% 3.000%	29-Nov-24 21-Nov-29	- 21-Nov-24	150 136	3.66	1.96 3.68	- 83	
09-Nov-17	VIVATN	-/A-/BBB+ -/-/BB	USD	575	6.250%	Perpetual	16-Nov-22	339	6.28	6.83	63 417	
07-Nov-17	STBNO	-/-/BB -/BBB-/-	SEK	1,000	1.619%	21-Nov-47	21-Nov-22	-	1.95	2.32	300	
02-Nov-17	HUKLFI	Baa3/-/BBB-	USD	500	4.475%	09-Nov-47	09-Nov-22	514	8.03	6.08	247	

Source: Crédit Agricole CIB

SNP, HoldCo issuance

			SNP per	formance m	onitoring	(as at 8/7	7/18)				
Launch	Issuer	Issue i	atings	Currency	Amount	(m) Co	Jpon Ma	turity date	I-Spread	Yield	to maturity
04-Jul-18	FRLBP	-/BBE	3/A-e	EUR		750 2.0	00% 1	3-Jul-28	112		1.99
15-Jun-18	NDASS	Baa1/	A/AA-	EUR	1,	8.0 000	75% 20	5-Jun-23	66		0.93
05-Jun-18	DANBNK	Baa1	/A-/A	USD		400 3.3	86% 12	?-Sep-23	-		3.39
05-Jun-18	DANBNK	Baa1	/A-/A	USD		850 3.8	75% 12	?-Sep-23	114		4.03
05-Jun-18	DANBNK	Baa1,		USD				2-Jun-28	147		4.38
18-May-18	DANBNK	Baa1,		SEK				5-Jan-23	-		0.41
18-May-18	DANBNK	Baa1		SEK				5-Jan-23	70		1.12
14-May-18 03-May-18	DANBNK BBVASM	Baa1, Baa2/B		EUR EUR				-May-23 -May-25	74 118		0.99 1.69
10-Apr-18	BNP	Baa1/s		EUR				7-Apr-24	92		1.30
12-Mar-18	BPCEGP	Baa2/B		EUR				8-Mar-26	110		1.72
12-Mar-18	BPCEGP	Baa2/B		EUR				8-Mar-23	-		0.50
06-Mar-18	ACAFP	Baa2/BE	BB+/A+	EUR	1,	000 1.3	75% 13	8-Mar-25	101		1.50
01-Mar-18	NWIDE	Baa1/B	BBB+/A	EUR	1,	000 1.5	00% 08	8-Mar-26	125		1.81
26-Feb-18	ACAFP	Baa2/BE	BB+/A+	EUR	1,	250 0.2	79% 06	5-Mar-23	-		0.51
22-Jan-18	BPCEGP	Baa2/B		EUR				-Jan-28	106		1.89
22-Jan-18	BPCEGP	Baa2/B		EUR				-Jan-24	93		1.28
16-Jan-18	BNP	Baa1/		EUR				7-Jan-23	-		0.49
16-Jan-18	SOCGEN	Baa2/B		EUR				3-Jan-25	98		1.46
09-Jan-18 09-Jan-18	DB DB	Baa2/BB Baa2/BB		GBP EUR				5-Dec-21 7-Jan-28	153 179		2.73 2.62
09-Jan-18	DB	Baa2/BB		EUR				3-Jan-21	148		1.38
04-Jan-18	BNP	Baa1/2		EUR				-Jun-26	104		1.69
02-Jan-18	BNP	Baa 1/2		USD				7-Jan-25	143		4.32
01-Dec-17	SANTAN	Baa1/		JPY				-Jan-23	69		0.80
16-Nov-17	BNP	Baa1/	A-/A+	EUR	1,	000 1.5	00% 23	-May-28	98		1.84
09-Nov-17	BNP	Baa1/	A-/A+	USD	1,	500 3.5	00% 16	-Nov-27	148		4.39
08-Nov-17	SOCGEN	Baa2/B	BB+/A	EUR		750 1.3	75% 13	3-Jan-28	95		1.78
08-Nov-17	SOCGEN	Baa2/B	BB+/A	EUR		750 0.5	00% 13	3-Jan-23	82		1.02
			1-1-1-0	erformance		/	/7/10\				
			ioiaco pe	enormance	mommorm	ig (us ui o	/ / / 10)				
Launch											
	Issuer	Issue ratings	Currency	Amount (m)	Coupon	Maturity date	First call date	I-Spread	Yield to call	Yield to maturity	Reset spread
26-Jun-18	Issuer	Issue ratings Ba2/BB+/BBB-	Currency EUR	Amount (m)	Coupon 2.250%			I-Spread			
20-Jun-18	AIB RBS	Ba2/BB+/BBB- Baa3/BBB-/BBB+	EUR USD	500 1,250	2.250% 4.519%	date 03-Jul-25 25-Jun-24	date - 25-Jun-23	180 163	call - 4.52	2.34 4.50	
20-Jun-18 20-Jun-18	AIB RBS RBS	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+	EUR USD USD	500 1,250 750	2.250% 4.519% 3.885%	date 03-Jul-25 25-Jun-24 25-Jun-24	date - 25-Jun-23 25-Jun-23	180 163 -	call - 4.52 3.89	2.34 4.50 3.89	spread - 155 -
20-Jun-18 20-Jun-18 15-Jun-18	AIB RBS RBS HSBC	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA-	EUR USD USD GBP	500 1,250 750 1,000	2.250% 4.519% 3.885% 2.175%	date 03-Jul-25 25-Jun-24 25-Jun-24 27-Jun-23	date - 25-Jun-23	180 163 - 105	call - 4.52 3.89 2.30	2.34 4.50 3.89 2.03	spread -
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18	AIB RBS RBS HSBC LLOYDS	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+	EUR USD USD GBP USD	500 1,250 750 1,000 500	2.250% 4.519% 3.885% 2.175% 3.130%	date 03-Jul-25 25-Jun-24 25-Jun-24 27-Jun-23 21-Jun-21	date - 25-Jun-23 25-Jun-23 27-Jun-22 -	180 163 - 105	call - 4.52 3.89 2.30 -	maturity 2.34 4.50 3.89 2.03 3.10	spread - 155 - 94 -
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18	AIB RBS RBS HSBC LLOYDS HSBC	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA-	EUR USD USD GBP USD USD	500 1,250 750 1,000 500 3,000	2.250% 4.519% 3.885% 2.175% 3.130% 4.583%	date 03-Jul-25 25-Jun-24 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-29	date - 25-Jun-23 25-Jun-23 27-Jun-22 - 19-Jun-28	180 163 - 105 - 152	call - 4.52 3.89 2.30 - 4.43	maturity 2.34 4.50 3.89 2.03 3.10 4.44	spread - 155 -
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18	AIB RBS RBS HSBC LLOYDS HSBC CS	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA- Baa2/BBB+/A-	EUR USD USD GBP USD USD USD	500 1,250 750 1,000 500 3,000 750	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566%	date 03-Jul-25 25-Jun-24 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-29 12-Jun-24	date - 25-Jun-23 25-Jun-23 27-Jun-22 - 19-Jun-28 12-Jun-23	180 163 - 105 - 152	call - 4.52 3.89 2.30 - 4.43 3.76	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73	spread - 155 - 94 -
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18	AIB RBS RBS HSBC LLOYDS HSBC	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA-	EUR USD USD GBP USD USD	500 1,250 750 1,000 500 3,000	2.250% 4.519% 3.885% 2.175% 3.130% 4.583%	date 03-Jul-25 25-Jun-24 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-29	date - 25-Jun-23 25-Jun-23 27-Jun-22 - 19-Jun-28	180 163 - 105 - 152	call - 4.52 3.89 2.30 - 4.43	maturity 2.34 4.50 3.89 2.03 3.10 4.44	spread - 155 - 94 - 154 -
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18	AIB RBS RBS HSBC LLOYDS HSBC CS	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA- Baa2/BBB+/A- Baa2/BBB+/A-	EUR USD USD GBP USD USD USD USD USD	500 1,250 750 1,000 500 3,000 750 1,250	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207%	date 03-Jul-25 25-Jun-24 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-29 12-Jun-24 12-Jun-24	date - 25-Jun-23 25-Jun-23 27-Jun-22 - 19-Jun-28 12-Jun-23 -	180 163 - 105 - 152 -	call - 4.52 3.89 2.30 - 4.43 3.76 4.23	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21	spread - 155 - 94 - 154 -
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 06-Jun-18 07-Jun-18	AIB RBS RBS HSBC LLOYDS HSBC CS CS BACR	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA- Baa2/BBB+/A- Baa3/BBB+/A- Baa3/BBB/A	EUR USD USD GBP USD USD USD USD USD USD AUD	500 1,250 750 1,000 500 3,000 750 1,250 225	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.859%	date 03-Jul-25 25-Jun-24 25-Jun-23 21-Jun-21 19-Jun-29 12-Jun-24 12-Jun-24 15-Jun-23	date - 25-Jun-23 25-Jun-23 27-Jun-22 - 19-Jun-28 12-Jun-23 - 12-Jun-23	180 163 - 105 - 152 - 134	call - 4.52 3.89 2.30 - 4.43 3.76 4.23	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13	spread - 155 - 94 - 154 - 124
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 06-Jun-18 07-Jun-18	AIB RBS RBS HSBC LLOYDS HSBC CS CS BACR CS	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA- Baa2/BBB+/A- Baa3/BBB/A Baa3/BBB/A	EUR USD USD GBP USD USD USD USD USD USD USD USD	500 1,250 750 1,000 500 3,000 750 1,250 225 750	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.859% 3.566%	date 03-Jul-25 25-Jun-24 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-24 12-Jun-24 15-Jun-23 12-Jun-24	date - 25-Jun-23 25-Jun-22 27-Jun-22 - 19-Jun-28 12-Jun-23 - 12-Jun-23	180 163 - 105 - 152 - 134 -	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65	spread - 155 - 94 - 154 - 124
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 06-Jun-18 06-Jun-18 07-Jun-18 07-Jun-18	AIB RBS RBS HSBC LLOYDS HSBC CS CS BACR CS BACR CS BACR CS CS	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA- Baa2/BBB+/A- Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A	EUR USD USD USD USD USD USD USD USD USD AUD USD AUD USD AUD AUD USD	500 1,250 750 1,000 500 3,000 750 1,250 225 750 200 175 1,250	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.859% 3.566% 4.327% 5.244% 4.207%	date 03-Jul-25 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-24 12-Jun-24 15-Jun-24 15-Jun-23 15-Jun-28 12-Jun-28	date - 25-Jun-23 25-Jun-22 27-Jun-22 - 19-Jun-28 12-Jun-23 - 12-Jun-23 - 12-Jun-23 - 12-Jun-23	180 163 - 105 - 152 - 134 - - 184 235 147	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66 -	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65 4.18 5.04 4.32	spread - 155 - 94 - 154 - 124
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 06-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 06-Jun-18	AIB RBS RBS HSBC LLOYDS HSBC CS CS BACR CS BACR CS BACR CS BACR CS KBCBB	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA- Baa2/BBB+/A- Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A	EUR USD USD USD USD USD USD USD USD AUD USD AUD USD AUD EUR	500 1,250 750 1,000 500 3,000 750 1,250 225 750 200 175 1,250 500	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.859% 3.566% 4.327% 5.244% 4.207% 0.875%	date 03-Jul-25 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-24 12-Jun-24 15-Jun-23 15-Jun-28 15-Jun-28 12-Jun-24 15-Jun-28	date - 25-Jun-23 25-Jun-22 27-Jun-28 12-Jun-23 12-Jun-23 - 12-Jun-23 - 12-Jun-23 - 12-Jun-23 12-Jun-23	180 163 - 105 - 152 - 134 - - 184 235 147 67	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66 4.36	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65 4.18 5.04 4.32 0.93	spread - 155 - 94 - 154 - 124
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 20-Jun-18	AIB RBS RBS HSBC LLOYDS HSBC CS CS BACR CS BACR CS BACR CS BACR ESC BACR BACR LLOYDS	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA- Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A	EUR USD USD USD USD USD USD USD USD AUD USD AUD USD AUD AUD USD EUR JPY	500 1,250 750 1,000 500 3,000 750 1,250 225 750 200 175 1,250 500 131,900	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.859% 3.566% 4.327% 5.244% 4.207% 0.875% 0.650%	date 03-Jul-25 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-24 12-Jun-24 15-Jun-23 15-Jun-28 12-Jun-24 27-Jun-23 30-May-23	date - 25-Jun-23 25-Jun-22 27-Jun-28 12-Jun-23 12-Jun-23 - 12-Jun-23 - 12-Jun-23 - 12-Jun-23 12-Jun-23	180 163 - 105 - 152 - 134 - - 184 235 147 67 50	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66 4.36	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65 4.18 5.04 4.32 0.93 0.62	spread - 155 - 94 - 154 - 124
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 20-Jun-18 24-May-18	AIB RBS RBS HSBC LLOYDS HSBC CS CS BACR CS BACR CS BACR CS BACR LLOYDS LLOYDS LLOYDS LLOYDS	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA- Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A ABaa3/BBB-/A- A3/BBB+/A- A3/BBB+/A+ A3/BBB+/A+	EUR USD USD USD USD USD USD USD AUD USD AUD USD AUD AUD USD AUD USD AUD YSD	500 1,250 750 1,000 500 3,000 750 1,250 225 750 200 175 1,250 500 131,900 31,300	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.859% 3.566% 4.327% 5.244% 4.207% 0.875% 0.650% 0.968%	date 03-Jul-25 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-24 12-Jun-24 15-Jun-23 15-Jun-28 12-Jun-24 27-Jun-23 30-May-25 30-May-26	date - 25-Jun-23 25-Jun-22 27-Jun-28 12-Jun-23 12-Jun-23 - 12-Jun-23 - 12-Jun-23 - 12-Jun-23 - 12-Jun-23	180 163 - 105 - 152 - 134 - - 184 235 147 67 50 74	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66 4.36	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65 4.18 5.04 4.32 0.93 0.62 0.99	spread - 155 - 94 - 154 - 124
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 20-Jun-18 24-May-18 24-May-18	AIB RBS RBS HSBC LLOYDS HSBC CS CS BACR CS BACR CS BACR ENCE BACR LLOYDS LLOYDS LLOYDS LLOYDS LLOYDS	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA- Baa2/BBB+/A- Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB+/A- Baa1/BBB+/A- A3/BBB+/A+ A3/BBB+/A+ A3/BBB+/A+	EUR USD USD USD USD USD USD USD AUD USD AUD USD AUD AUD USD EUR JPY JPY	500 1,250 750 1,000 500 3,000 750 1,250 225 750 200 175 1,250 500 131,900 31,300 5,800	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.859% 3.566% 4.327% 5.244% 4.207% 0.875% 0.650% 0.968% 1.182%	date 03-Jul-25 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-24 12-Jun-24 15-Jun-23 15-Jun-28 12-Jun-24 27-Jun-23 30-May-23 30-May-28 30-May-33	date - 25-Jun-23 25-Jun-22 27-Jun-28 12-Jun-23 12-Jun-23 - 12-Jun-23 - 12-Jun-23 - 12-Jun-23 - 12-Jun-23	180 163 - 105 - 152 - 134 184 235 147 67 50 74 73	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66 4.36	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65 4.18 5.04 4.32 0.93 0.62 0.99 1.18	spread - 155 - 94 - 154 - 124 124 124
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 20-Jun-18 24-May-18 24-May-18 24-May-18	AIB RBS RBS HSBC LLOYDS HSBC CS CS BACR CS BACR CS BACR LLOYDS LLOYDS LLOYDS LLOYDS RBS	Ba2/BB+/BBB- Baa3/BBB-/BBB+ Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA- Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A Baa3/BBB/A ABaa3/BBB-/A- A3/BBB+/A- A3/BBB+/A+ A3/BBB+/A+	EUR USD USD USD USD USD USD USD AUD USD AUD USD AUD AUD USD EUR JPY JPY USD	500 1,250 750 1,000 500 3,000 750 1,250 225 750 200 175 1,250 500 131,900 31,300 5,800 1,750	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.859% 3.566% 4.327% 5.244% 4.207% 0.875% 0.650% 0.968% 1.182% 4.892%	date 03-Jul-25 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-24 12-Jun-24 15-Jun-23 15-Jun-28 12-Jun-24 27-Jun-23 30-May-25 30-May-25 30-May-25 30-May-25	date - 25-Jun-23 25-Jun-22 27-Jun-28 12-Jun-23 12-Jun-23 - 12-Jun-23 - 12-Jun-23 - 12-Jun-23 - 12-Jun-23	180 163 - 105 - 152 - 134 - - 184 235 147 67 50 74	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66 4.36	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65 4.18 5.04 4.32 0.93 0.62 0.99	spread - 155 - 94 - 154 - 124 124 124 -
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 20-Jun-18 24-May-18 24-May-18	AIB RBS RBS HSBC LLOYDS HSBC CS CS BACR CS BACR CS BACR ENCE BACR LLOYDS LLOYDS LLOYDS LLOYDS LLOYDS	Ba2/BB+/BBB- Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA- Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baba2/BBB+/A- Baba3/BBB-/A- Baba3/BBB-/A- Baba3/BBB-/A- Baba3/BBB-/BBB+/A-	EUR USD USD USD USD USD USD USD AUD USD AUD USD AUD AUD USD EUR JPY JPY	500 1,250 750 1,000 500 3,000 750 1,250 225 750 200 175 1,250 500 131,900 31,300 5,800	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.859% 3.566% 4.327% 5.244% 4.207% 0.875% 0.650% 0.968% 1.182%	date 03-Jul-25 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-24 12-Jun-24 15-Jun-23 15-Jun-28 12-Jun-24 27-Jun-23 30-May-23 30-May-28 30-May-33	date - 25-Jun-23 25-Jun-22 27-Jun-22 - 19-Jun-28 12-Jun-23 - 12-Jun-23 12-Jun-23 12-Jun-23 12-Jun-23 12-Jun-23	180 163 - 105 - 152 - 134 - - 184 235 147 67 50 74 73 200	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66 4.36 4.36 4.92	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65 4.18 5.04 4.32 0.93 0.62 0.99 1.18 4.90	spread - 155 - 94 - 154 - 124 124 124
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 20-Jun-18 24-May-18 24-May-18 24-May-18 15-May-18	AIB RBS RBS HSBC LLOYDS HSBC CS CS BACR CS BACR CS KBCBB LLOYDS LLOYDS LLOYDS RBS LLOYDS	Bo2/BB+/BBB- Boa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A- Boa2/BBB+/A- Boa2/BBB+/A- Boa3/BBB/A- Boa3/BBB/A- Boa3/BBB/A- Boa2/BBB+/A- Boa1/BBB+/A- Boa1/BBB+/A- Boa1/BBB+/A- A3/BBB+/A+ A3/BBB+/A+ A3/BBB+/A+ A3/BBB+/A+ A3/BBB+/A+ Boa3/BBB+/A+	EUR USD USD USD USD USD USD USD AUD AUD USD AUD AUD USD AUD AUD AUD AUD AUD AUD AUD AUD AUD AU	500 1,250 750 1,000 500 3,000 750 1,250 225 750 200 175 1,250 500 131,900 31,300 5,800 1,750 150	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.859% 3.566% 4.327% 5.244% 4.207% 0.875% 0.650% 0.968% 1.182% 4.892% 4.750%	date 03-Jul-25 25-Jun-24 27-Jun-23 21-Jun-24 12-Jun-24 15-Jun-24 15-Jun-24 15-Jun-23 12-Jun-24 27-Jun-24 30-May-23 30-May-25 30-May-25 23-May-26	date - 25-Jun-23 25-Jun-22 - 19-Jun-28 12-Jun-23 - 12-Jun-23 - 12-Jun-23 12-Jun-23 12-Jun-23 12-Jun-23	180 163 - 105 - 152 - 134 - - 184 235 147 67 50 74 73 200 195	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66 4.36 4.36 4.92 -	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65 4.18 5.04 4.32 0.93 0.62 0.99 1.18 4.90 4.64	spread - 155 - 94 - 154 - 124 124 124
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 20-Jun-18 24-May-18 24-May-18 24-May-18 15-May-18 16-May-18	AIB RBS RBS HSBC LLOYDS HSBC CS CS BACR CS BACR CS KBCBB LLOYDS	Bo2/BB+/BBB- Boa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A- Boa2/BBB+/A- Boa2/BBB+/A- Boa3/BBB/A- Boa3/BBB/A- Boa3/BBB/A- Boa3/BBB/A- Boa3/BBB-/A- Boa1/BBB+/A- Boa1/BBB+/A- A3/BBB+/A+	EUR USD USD USD USD USD USD USD AUD AUD USD EUR JPY JPY USD AUD AUD	500 1,250 750 1,000 500 3,000 750 1,250 225 750 200 175 1,250 500 131,900 31,300 5,800 1,750 150 250	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.859% 3.566% 4.327% 5.244% 4.207% 0.875% 0.650% 0.968% 1.182% 4.892% 4.750% 3.900%	date 03-Jul-25 25-Jun-24 27-Jun-23 21-Jun-29 12-Jun-24 15-Jun-24 15-Jun-24 15-Jun-23 12-Jun-24 27-Jun-24 30-May-23 30-May-25 30-May-25 23-May-26 23-Nov-23	date - 25-Jun-23 25-Jun-22 - 19-Jun-28 12-Jun-23 - 12-Jun-23 12-Jun-23 11-Jun-23 11-Jun-23 11-Jun-23 11-Jun-23 11-Jun-23 11-Jun-23	180 163 - 105 - 152 - 134 - - 184 235 147 67 50 74 73 200 195 152	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66 4.36 4.92 -	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65 4.18 5.04 4.32 0.93 0.62 0.99 1.18 4.90 4.64 3.90	spread - 155 - 94 - 154 - 124 124 175 -
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 20-Jun-18 24-May-18 24-May-18 24-May-18 15-May-18 16-May-18 10-May-18	AIB RBS RBS HSBC LLOYDS HSBC CS CS BACR CS BACR CS LLOYDS	Ba2/BB+/BBB- Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A+ A2/A/AA- Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB-/A Baa3/BBB-/A Baa3/BBB-/A+ A3/BBB+/A+	EUR USD USD USD USD USD USD USD USD AUD USD AUD USD EUR JPY JPY USD AUD USD	500 1,250 750 1,000 500 3,000 750 1,250 225 750 200 175 1,250 500 131,900 31,300 5,800 1,750 150 250 2,000	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.859% 3.566% 4.327% 5.244% 4.207% 0.875% 0.650% 0.968% 1.182% 4.892% 4.750% 3.900% 3.326%	date 03-Jul-25 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-24 12-Jun-24 15-Jun-23 12-Jun-24 15-Jun-23 13-Jun-24 27-Jun-24 27-Jun-24 30-May-25 30-May-25 30-May-25 31-May-26 23-Noy-26 18-May-24	date - 25-Jun-23 25-Jun-22 - 19-Jun-28 12-Jun-23 - 12-Jun-23 12-Jun-23 12-Jun-23 11-Jun-23	180 163 - 105 - 152 - 134 184 235 147 67 50 74 73 200 195 152 -	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66 4.36 4.92 - 3.40	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65 4.18 5.04 4.32 0.93 0.62 0.99 1.18 4.90 4.64 3.90 3.39	spread
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 20-Jun-18 24-May-18 24-May-18 15-May-18 16-May-18 10-May-18	AIB RBS RBS HSBC LLOYDS HSBC CS CS BACR CS BACR CS LLOYDS	Ba2/BB+/BB- Ba3/BBB-/BBB+ A2/A/AA- A3/BBB+/A- Ba2/BBB+/A- Ba3/BBB/A- Ba3/BBB/A- Ba3/BBB/A- Ba3/BBB/A- Ba3/BBB/A- Ba3/BBB/A- Ba3/BBB/A- Ba3/BBB/A- Ba3/BBB/A- Ba3/BBB+/A- A3/BBB+/A- A3/BBB+/A+ A3/BABA+/A- A2/A/AA- A2/A/AA-	EUR USD USD USD USD USD USD USD AUD USD AUD USD EUR JPY JPY USD AUD USD AUD USD	500 1,250 750 1,000 500 3,000 750 1,250 225 750 200 175 1,250 500 131,900 31,300 5,800 1,750 150 250 2,000 2,000	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.859% 3.566% 4.327% 5.244% 4.207% 0.875% 0.650% 0.968% 1.182% 4.892% 4.750% 3.900% 3.326% 3.950%	date 03-Jul-25 25-Jun-24 27-Jun-23 21-Jun-29 12-Jun-24 15-Jun-23 12-Jun-24 15-Jun-23 12-Jun-24 15-Jun-23 16-Jun-23 30-May-25 30-May-25 23-May-26 23-Nov-23 18-May-24 18-May-24	date - 25-Jun-23 25-Jun-22 - 19-Jun-28 12-Jun-23 - 12-Jun-23 - 12-Jun-23 18-May-28 - 18-May-23 18-May-23 18-May-20	180 163 - 105 - 152 - 134 184 235 147 67 50 74 73 200 195 152 - 112	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66 4.36 4.92 - 3.40 4.02	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65 4.18 5.04 4.32 0.93 0.62 0.99 1.18 4.90 4.64 3.90 3.39 3.99	spread
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 06-Jun-18 07-Jun-18 07-Jun-18 20-Jun-18 24-May-18 24-May-18 15-May-18 16-May-18 10-May-18 10-May-18 10-May-18 09-May-18	AIB RBS RBS RBS HSBC LLOYDS HSBC CS CS BACR CS BACR CS LLOYDS LLO	Ba2/BB+/BBB- Baa3/BBB-/BBB+ A2/A/AA- A3/BBB+/A- Baa2/BBB+/A- Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- A3/BBB+/A+ A3/BABB+/A+ A3/BBB+/A+	EUR USD USD USD USD USD USD USD USD AUD USD AUD USD EUR JPY JPY USD AUD USD USD USD USD USD USD USD USD USD U	500 1,250 750 1,000 500 3,000 750 1,250 225 750 200 175 1,250 500 131,900 31,300 5,800 1,750 150 250 2,000 2,000 2,000 1,750 1,250	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.566% 4.327% 5.244% 4.207% 0.875% 0.650% 0.968% 1.182% 4.892% 4.750% 3.900% 3.326% 3.950% 2.926% 4.972% 4.338%	date 03-Jul-25 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-24 15-Jun-23 15-Jun-23 15-Jun-24 27-Jun-24 30-May-25 30-May-25 30-May-25 318-May-25 18-May-24 18-May-24 18-May-24 16-May-25 16-May-24	date - 25-Jun-23 25-Jun-23 27-Jun-28 12-Jun-23 12-Jun-23 - 12-Jun-23 - 12-Jun-23 - 12-Jun-23 - 18-May-28 - 18-May-28 18-May-23 18-May-20 16-May-28 16-May-23	180 163 - 105 - 152 - 134 184 235 147 67 50 74 73 200 195 152 - 112 -	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66 - 4.36 4.92 - 3.40 4.02 2.90 5.07 4.62	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65 4.18 5.04 4.32 0.93 0.62 0.99 1.18 4.90 4.64 3.90 3.39 3.99 2.91 5.05 4.56	spread
20-Jun-18 20-Jun-18 15-Jun-18 14-Jun-18 12-Jun-18 06-Jun-18 07-Jun-18 07-Jun-18 07-Jun-18 20-Jun-18 24-May-18 24-May-18 15-May-18 16-May-18 10-May-18 10-May-18 10-May-18 09-May-18	AIB RBS RBS RBS HSBC LLOYDS HSBC CS CS BACR CS BACR CS LLOYDS LLO	Ba2/BB+/BBB- Baa3/BBB+/BBB+ A2/A/AA- A3/BBB+/A- Baa2/BBB+/A- Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- Baa3/BBB/A Baa2/BBB+/A- A3/BBB+/A+ A3/BABA+/A+ A2/A/AA- A2/A/AA- Baa3/BBB/A	EUR USD USD USD USD USD USD USD AUD USD AUD USD EUR JPY JPY USD AUD USD USD USD USD USD USD USD	500 1,250 750 1,000 500 3,000 750 1,250 225 750 200 175 1,250 500 131,900 31,300 5,800 1,750 150 250 2,000 2,000 2,000 1,750	2.250% 4.519% 3.885% 2.175% 3.130% 4.583% 3.566% 4.207% 3.566% 4.327% 5.244% 4.207% 0.875% 0.650% 0.968% 1.182% 4.892% 4.750% 3.900% 3.326% 3.950% 2.926% 4.972%	date 03-Jul-25 25-Jun-24 27-Jun-23 21-Jun-21 19-Jun-24 15-Jun-23 12-Jun-24 15-Jun-23 30-May-23 30-May-25 30-May-25 23-Nov-23 18-May-24 18-May-24 18-May-24 18-May-25	date - 25-Jun-23 25-Jun-23 27-Jun-28 12-Jun-23 12-Jun-23 - 12-Jun-23 - 12-Jun-23 - 12-Jun-23 - 18-May-28 - 18-May-28 18-May-23 18-May-20 16-May-28 16-May-23	180 163 - 105 - 152 - 134 184 235 147 67 50 74 73 200 195 152 - 112 - 215	call - 4.52 3.89 2.30 - 4.43 3.76 4.23 - 3.66 4.36 4.92 - 3.40 4.02 2.90 5.07	maturity 2.34 4.50 3.89 2.03 3.10 4.44 3.73 4.21 4.13 3.65 4.18 5.04 4.32 0.93 0.62 0.99 1.18 4.90 4.64 3.90 3.39 3.99 2.91 5.05	spread - 155 - 94 - 154 - 124 124 175 175 175

Disclaimer

This material has been prepared by Crédit Agricole Corporate and Investment Bank or one of its affiliates (collectively "Crédit Agricole CIB"). It does not constitute "investment research" as defined by the Financial Conduct Authority and is provided for information purposes only. It is not to be construed as a solicitation or an offer to buy or sell any financial instruments and has no regard to the specific investment objectives, financial situation or particular needs of any recipient. Crédit Agricole CIB does not act as an advisor to any recipient of this material, nor owe any recipient any fiduciary duty and nothing in this material should be construed as financial, legal, tax, accounting or other advice. Recipients should make their own independent appraisal of this material and obtain independent professional advice from legal, tax, accounting or other appropriate professional advisers before embarking on any course of action. The information in this material is based on publicly available information and although it has been compiled or obtained from sources believed to be reliable, such information has not been independently verified and no guarantee, representation or warranty, express or implied, is made as to its accuracy, completeness or correctness. This material may contain information from third parties. Crédit Agricole CIB has not independently verified the accuracy of such third-party information and shall not be responsible or liable, directly or indirectly, for any damage or loss caused or alleged to be caused by or in connection with the use of or reliance on this information. Information in this material is subject to change without notice. Crédit Agricole CIB is under no obligation to update information previously provided to recipients. Crédit Agricole CIB is also under no obligation to continue to provide recipients with the information contained in this material and may at any time in its sole discretion stop providing such information. Investments in financial instruments carry significant risk, including the possible loss of the principal amount invested. This material may contain assumptions or include projections, forecasts, yields or returns, scenario analyses and proposed or expected portfolio compositions. Actual events or conditions may not be consistent with, and may differ materially from, those assumed. Past performance is not a guarantee or indication of future results. The price, value of or income from any of the financial products or services mentioned herein can fall as well as rise and investors may make losses. Any prices provided herein (other than those that are identified as being historical) are indicative only and do not represent firm quotes as to either price or size. Financial instruments denominated in a foreign currency are subject to exchange rate fluctuations, which may have an adverse effect on the price or value of an investment in such products. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party without the prior express written permission of Crédit Agricole CIB. No liability is accepted by Crédit Agricole CIB for any damages, losses or costs (whether direct, indirect or consequential) that may arise from any use of, or reliance upon, this material. This material is not directed at, or intended for distribution to or use by, any person or entity domiciled or resident in any jurisdiction where such distribution, publication, availability or use would be contrary to applicable laws or regulations of such jurisdictions. Recipients of this material should inform themselves about and observe any applicable legal or regulatory requirements in relation to the distribution or possession of this document to or in that jurisdiction. In this respect, Crédit Agricole CIB does not accept any liability to any person in relation to the distribution or possession of this document to or in any jurisdiction.

United States of America: The delivery of this material to any person in the United States shall not be deemed a recommendation to effect any transactions in any security mentioned herein or an endorsement of any opinion expressed herein. Recipients of this material in the United States wishing to effect a transaction in any security mentioned herein should do so by contacting Crédit Agricole Securities (USA), Inc. United Kingdom: Crédit Agricole Corporate and Investment Bank is authorised by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and supervised by the ACPR and the Autorité des Marchés Financiers (AMF) in France and subject to limited regulation by the Financial Conduct Authority and the Prudential Regulation Authority. Details about the extent of our regulation by the Financial Conduct Authority and the Prudential Regulation Authority are available from us on request. Crédit Agricole Corporate and Investment Bank is incorporated in France and registered in England & Wales. Registered number: FC008194. Registered office: Broadwalk House, 5 Appold Street, London, EC2A 2DA.

© 2018, CRÉDIT AGRICOLE CORPORATE AND INVESTMENT BANK. All rights reserved.



OUT V/OTO of solutions



2.000% Senior Non-Preferred Notes Due 2028

Joint Bookrunner





0.875% Green Senior Unsecured HoldCo Due 2023

Joint Structuring Advisor & Joint Bookrunner





1.75% Senior Non Preferred Notes Due 2023

Sole Bookrunner



1.375% Senior Non Preferred Due 2025

Sole Bookrunner



4.000% 15NC10 Tier 2 Due 2033

Sole Bookrunner



5.375% AT1 Perpetual NC7.5

Joint Bookrunner









Choose a bank which engages its expertise in hybrid capital for the sole benefit of serving its clients.

