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2019 European Banks Credit Outlook | Europe

A Port in a Storm

1H will be tricky – a potential deluge of senior supply, the first AT1 non-call, the conclusion of CRR2 and half a trillion of TLTRO casting its shadow over markets. Despite all this, we remain equal-weight overall, but move underweight seniors and, perhaps counterintuitively, overweight AT1s.

Our European credit strategists forecast another year of negative returns, with stress points coming from BBB corporates and leveraged loans. Their mantra is to focus on low beta, low duration and liquidity. In banks, we remain cautious but appreciate that valuations have cheapened up, away from certain geographic exposures the sector enjoys strong credit fundamentals, and due to CRR2, there are a number of positive technicals limiting the risk of non-calls and liquidity tends to be far better. Overall, though, banks look as unattractive as corporates and we thus stay equal-weight, within credit. But it's going to be tough.

Supply is likely to be a constant vulnerability this year, at least for 1Q, and we are moving underweight seniors because of it. While our economists believe there will be a fine-tuning operation to succeed the TLTRO (€489 billion matures in 2020), it's likely to be announced in response to growing funding strains, in our view, meaning spreads are going wider. UniCredit's recent $7.83% five-year non-preferred senior is a potential taste of things to come. We forecast 2019 gross issuance of €146 billion in that debt class, and €112 billion in preferred senior.

Tier 2 – unloved, forgotten, but good value and with decent technicals: Our view of any resolution requiring a buyer who would demand bail-in of every single bail-inable instrument possible means that non-preferreds should trade far closer to Tier 2. They don't, and haven't for some time now, but with a combination of English law making first calls in Tier 2s more certain, cheaper valuations and net negative issuance, we're equal-weight in the cleanest, most boring credits – with added English law upside.

Overweight 'no hope of a first call' AT1s, adding some liquidity and carry to our recommendations. In a market which may simply grind wider between bursts of volatility, we're happy taking carry on discount AT1s of again the most solid issuers. Add in regulatory par call fears linked to CRR2, and we have no AT1 buys above par, and plenty of sells above. In a potential world of a grind wider between volatile periods, we are happy taking the carry on such bonds.

We are not changing our Italian and UK bank recommendations, nor are we buying back into anything with material Italian or Turkish exposure. Having been underweight the largest bank credit sector (the UK) for nearly a year now, we still don't believe that it's time to add just yet. We sold out of anything remotely periphery-related in May but, with the observable de-linkage of quality second tier Spanish from Italian bank spread movements, we add their Tier 2s back now. Santander's 'non-call' 2019 € AT1 is also a new recommendation to buy.

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Recommendations

See Thematic recommendations for all recommendations across our Outlook.

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Overview: TLTRO to divide the year

Looking at the charts in 2018 performance, this year was clearly looking strong in its first few months and we were delighted with our opening very bullish call on European banks. Clearly, all that changed abruptly come May and the dawn of Italy's new government and – albeit not early enough – we took the decision to then reverse our overweight AT1s, sell anything connected to the periphery (including all Spanish banks) and almost anything that could remotely cause concern from a fundamental or geographic exposure perspective. We were already underweight the UK, which in May of course was simply moving along with the market, rather than underperforming. Clearly, the market as a whole, and AT1s in particular, have performed badly over the second half of the year, and UK names more recently. For us, **it's been a case of hiding in particular pockets of bank debt** – a skew to seniors, no periphery names, no UK banks, a couple of discos, discount AT1s, foreign-law callable bonds and some legacy Tier 1s.

2019's undoubtedly going to be tricky... As detailed below, we maintain our cautious stance in banks but shift around our debt-class allocations. We are expecting a year of two distinct halves – potentially a lot like 2018, but in reverse. We expect significant volatility to continue as we enter the year, linked to both macro-level and bank-specific influences. On the macro front, we face the **Brexit process, the Italian budget negotiations, potential continued newsflow regarding early Spanish elections, Turkey entering a recession (as our economist forecasts) and Mexico forging a new economic path**. Banking sector-specific volatility is likely to be caused by **a potential sizeable amount of senior debt issuance, the first AT1 non-call (Santander in March), the conclusion of CRR2 (with ramifications for non-EU law bonds) and further country-level decisions on AT1 tax deductibility.** In addition to all this, an era of unprecedented monetary stimulus is of course coming to an end globally and, according to our credit strategists, the cycle is turning, with corporate credit deterioration set to worsen. For banks, there appears no hope of any respite from the equity markets. Although the SX7P is down 23% year-to-date, with European banks having only traded cheaper to the wider European market at the lows of the Global Financial Crisis, the eurozone crisis and the immediate aftermath of the Brexit vote, our equity strategists remain 'In-line' on banks. An untested cycle for bank earnings and increased cost of funding leave our bank equity colleagues still circumspect, despite where banks are trading.

... but a new LTRO decision could prove the inflection point, in our view. While Italian developments proved a key pivot point this year for a reversal of the first few months' spread performance, the opposite could be true this year. As we approach the one-year mark to the TLTRO 2's first maturities in June 2020, if banks have not managed to prudently pre-finance at least part of this, we would expect the ECB to announce some fine-tuning operations to alleviate the stress, as per our European economists' views. Naturally, some stress is likely first needed to prompt a reaction from the ECB, and with the Italian banks having the largest TLTRO 2 drawings, it may well be once again an Italian-linked event that changes the course of next year, as it did this.

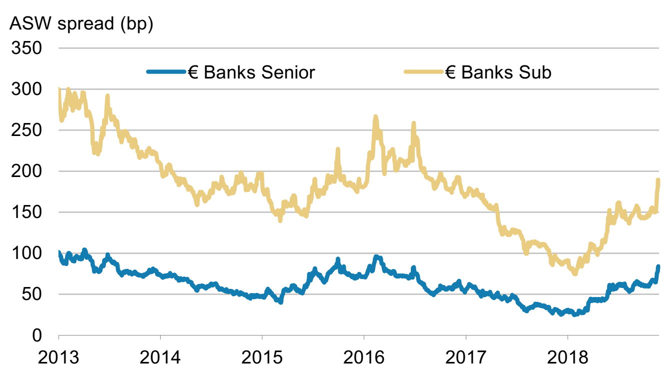
Staying neutral on banks

In their Outlook, Punishing the Weak Links, our strategists maintain their bearish stance on European credit and are underweight going into 2019, forecasting another year of negative returns: They have concerns over both technical and fundamental pressures building next year, with the end of ECB QE leading to higher volatility and gap risk and stress points in credit coming from BBB corporates and leveraged loans. Needless to say, our strategists are generically looking for low-beta and low-duration bonds.

Low beta and – for a sector with its fair share of perps – low duration is a tall order in banks. But we have some technicals working for us here in the guise of CRR2 and, considering the performance of the sector in the past half-year, we also have some interesting valuations now. **We are a very long way from feeling bullish** here, but saying that, unlike our strategists for corporates, we are certainly not concerned about deteriorating credit fundamentals (see NPLs are not the problem for a brief review of asset quality). However, we remain feeling somewhat cautious on banks on the whole, but this is driven more by political influences (UK, Italy, Turkey) causing volatility, rather than any reversal of the strong progress banks have made in asset quality, capitalisation, profitability and risk-management over the past ten years.

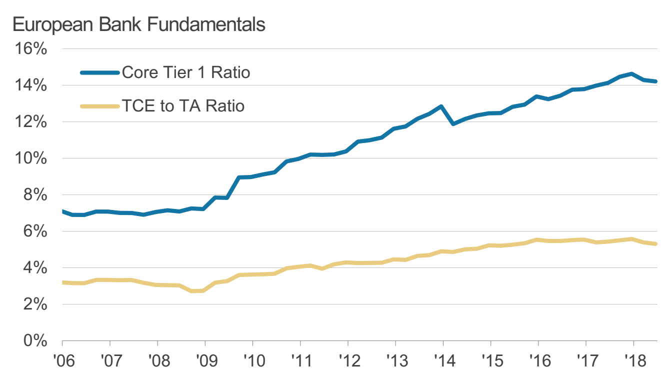
It may seem somewhat counterintuitive to keep a top-down recommendation of equal-weight in banks when we are bearish on broader credit. However, our strategists' conviction of significant stresses in weaker corporate balance sheets and tighter market liquidity leads us into the banking sector as a less-unattractive alternative. Clearly **valuations have improved (Exhibit 1) and credit fundamentals in the sector generally remain strong (Exhibit 2, and see NPLs are not the problem)**. Furthermore, we'd argue that **there is better liquidity in this sector than others, a number of regulation-linked positive technicals and, clearly, many AT1s now trading without hope of a first call.** These counteracting considerations support a top-down equal-weight recommendation in banks relative to non-financials.

Exhibit 1: European bank valuations are back at mid-to-late 2016 levels...



Source: Markit, Morgan Stanley Research

Exhibit 2: ...while capital ratios remain near post-crisis highs



Source: SNL Financial, Morgan Stanley Research

Better liquidity, fundamentals and some helpful technicals

Our current buys and sells are all in Thematic recommendations and are peppered around the individual sections. A number of bank-specific factors inform our general recommendations.

- First, for **supply** – or at least the fear of it – TLTRO redemptions starting 2020 and MREL pressures mean that issuance should start heavy in 2019, causing spreads on both preferred seniors and bail-inable seniors to widen. We are firm believers in a new LTRO, but *only if it is required*, and that would be proven by funding markets coming under severe pressure, we believe. Going into such a scenario, and considering that banks ought to approach the topic assuming TLTRO 2 was the last, we would rather be underweight seniors more broadly. In the full expectation of a new LTRO being announced when needed – and that, ultimately, banks will be given years to reach end-state MREL targets if they need years – we would look to change our recommendation at the time such funding pressures emerge.

- On the regulatory front, and our second thematic driver, we would hope that **CRR2 is finalised by the end of this year,** containing within it new rules for the underlying law of regulatory capital instruments. Where that law is non-EEA with no contractual recognition of European bail-in rules, we would expect such bonds to be called at the first call date, dousing non-call fears and boosting yields.

- Third, on the macro front, while initially Italian headlines in May caused an almost equal reaction in Spanish bank spreads compared to Italian spreads, this linkage has diminished over time, more so for Tier 2s than AT1s. Coupled with our Spanish economist's outlook, this would suggest that **domestic Spanish bank spreads should be more stable over 2019,** despite continued ructions in Italy.

- Finally, many AT1s of very strong and 'boring' issuers are trading without a first call priced in, with many offered in the 80s cash price area. We think that **perpetuity in AT1s is a myth;** as regulations change every 5-10 years, so outstanding bonds become non-compliant and are called. Yields to second or even third calls look attractive here.

Staying up in issuer quality but prefer low cash price sub debt:

- **Underweight seniors** (opco/preferred and bail-inable). Although we believe that the Single Resolution Board (SRB) does not want to exacerbate any funding pressures the banks might face, we still think that banks wish to get to end-state MREL targets sooner rather than later, and are being encouraged to do so. Separately, just under €500 billion of TLTRO matures in 2020; we assume that banks will want to pre-finance as early as possible and not simply rely on a TLTRO 3.

- **Equal-weight Tier 2s:** We could never argue that liquidity is good here, but at least we are expecting net negative supply in 2019 and there are a number of low-beta issuers to choose from. Our recommendations focus on those with good relative value versus bail-in debt and those callables and long-dated bullets written under English law, and trading close to, or below, par.

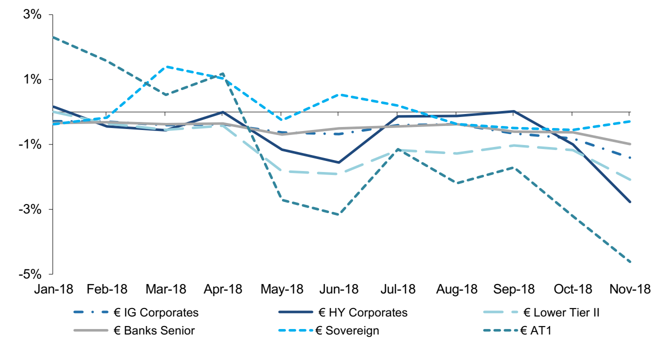
- **Domestic Spanish Tier 2s would be a place where we would add,** in terms of a shift out of seniors now and into Tier 2s. The link between Italian Tier 2 volatility and Spanish Tier 2 has diminished over the course of the year, and Spanish bank fundamentals remain strong and politics ought not to shock.

- **Low-cash, low back-end AT1s** are our preferred section of this most liquid bank debt class, with first call hopes already priced out. With low cash prices, further volatility ought to hit these less than above-par bonds and, needless to say, we focus only on the most stable names, excluding Italian, UK and even Spanish banks here (with the exception of Santander, as detailed in Looking for low-beta liquidity in AT1). We would again also own a number of close-to/sub-par English law AT1s due to the CRR2 dynamic. **We prefer € AT1s to $ AT1s** linked to cross-currency-adjusted valuations, plus the 'first line' status of $ AT1s for any further souring in the $ HY market, which typically swiftly impacts the AT1 sector as off-index positions are shed by US HY managers.

As an aside, we'd note that while the AT1 sector, at around €160 billion, is dwarfed by European high yield at ~€250 billion, the latter tends to have much smaller deal sizes and is far less liquid. AT1s certainly won't be immune from a risk-off move – and have borne the brunt of sovereign-related newsflow this year – but arguably there will be more bids in this sector than in HY. Our strategists also point out the very tight yield differential between AT1s and single B corporates (the latter only slightly higher-yielding). Away from on-the-run debt, we would also own a number of legacy Tier 1s – in particular **make-whole call bonds with New York law,** where we have strong conviction of a make-whole in early 2022. While again not immune to broader market moves, this tends to be the last bank debt class to succumb to any risk-off environment.

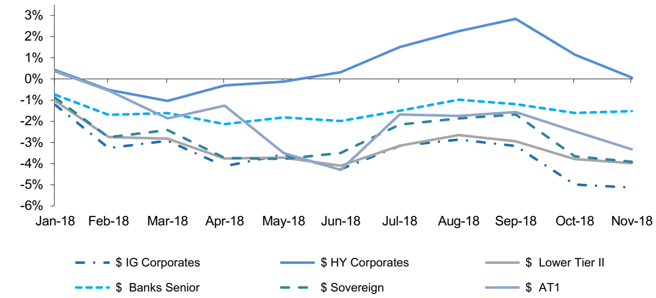
2018 performance

Exhibit 3: € iBoxx indices – 2018 YTD return: The AT1 index has been the worst performer with YTD total returns of -4.6%



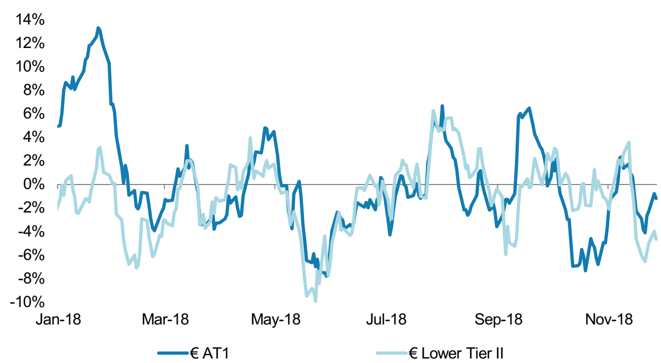
Source: Markit iBoxx, Morgan Stanley Research

Exhibit 4: $ iBoxx indices – 2018 YTD return: The Tier 2 index has been the worst performer with YTD total return of -4.0%



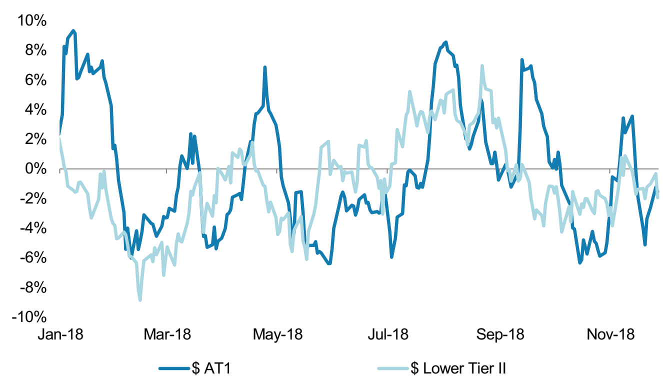
Source: Markit iBoxx, Morgan Stanley Research

Exhibit 5: € AT1 vs. € Tier 2 – risk-adjusted returns: The€ AT1 index currently returns -1.2% compared to -4.7% for the € Tier 2 index



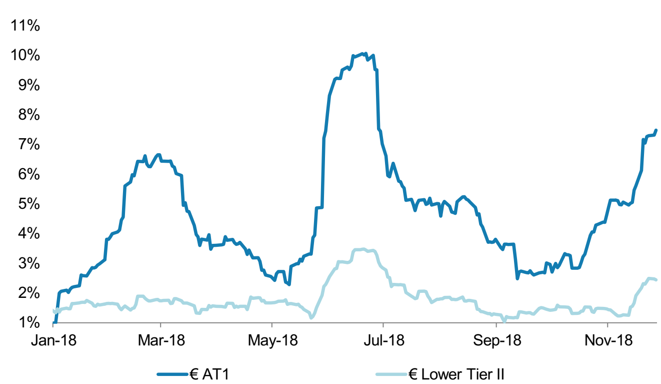
Source: Markit iBoxx, Morgan Stanley Research. Rolling monthly risk-adjusted returns.

Exhibit 6: $ AT1 vs. $ Tier 2 – risk-adjusted returns: The $ AT1 index currently returns -1.5% compared to -1.9% for the $ Tier 2 index



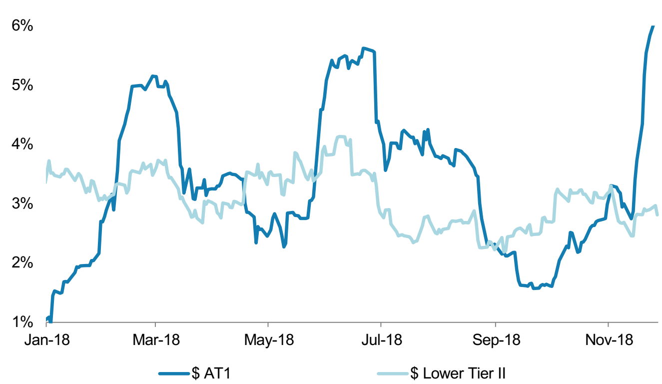
Source: Markit iBoxx, Morgan Stanley Research. Rolling monthly risk-adjusted returns.

Exhibit 7: € AT1 vs. € Tier 2 – volatility over 2018



Source: Markit iBoxx, Morgan Stanley Research. Average one month return divided by average one month volatility.

Exhibit 8: $ AT1 vs. $ Tier 2 – volatility over 2018

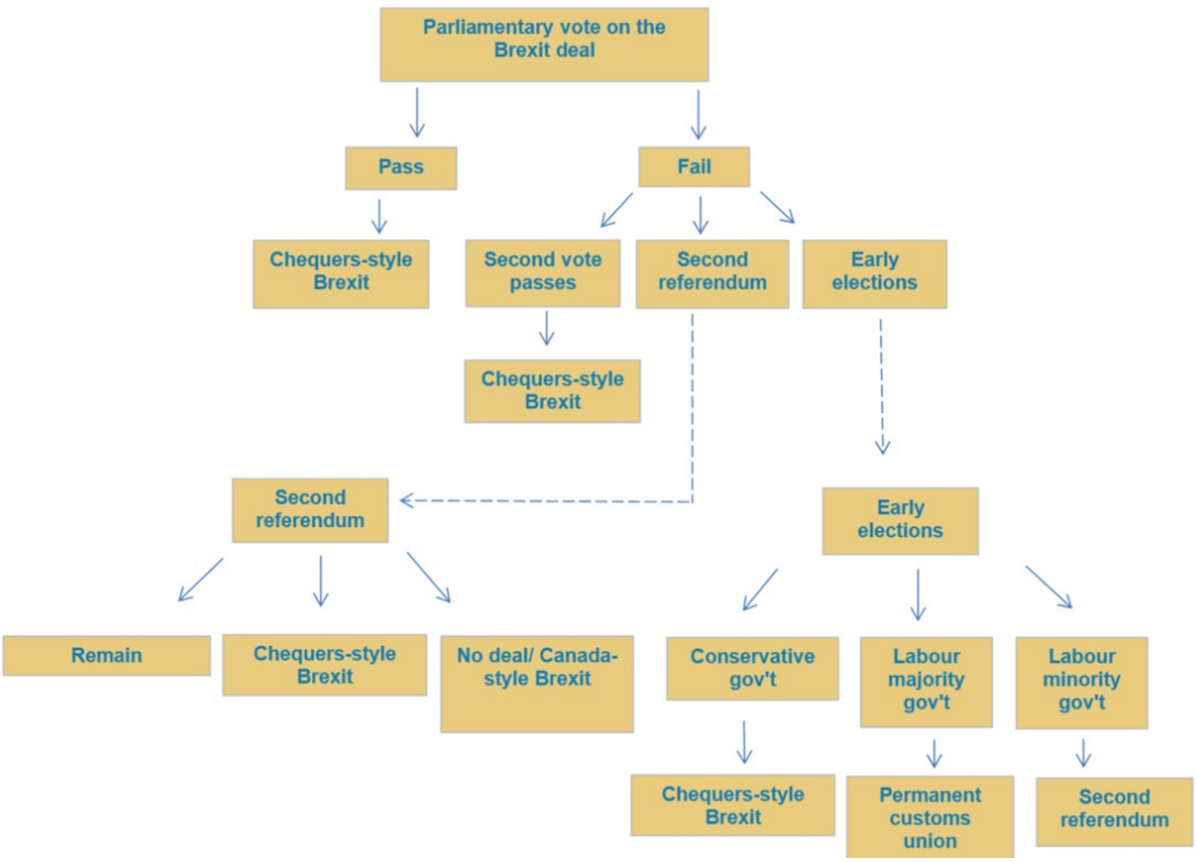


Source: Markit iBoxx, Morgan Stanley Research. Average one month return divided by average one month volatility.

Still sellers of UK banks

We began the year underweight UK banks on the expectation that 2018 would be challenging, given the uncertainty of the ultimate Brexit outcome and, at the time, a weakening economic outlook. UK bank € AT1 has widened by up to ~280bp, compared to the broader € AT1 market at ~230bp. While valuations have cheapened up, we find ourselves writing this less than two weeks before the parliamentary vote on the Brexit deal. As published by our UK economist in Focus on the Vote, November 14, 2018, the outcome of the parliamentary vote on the deal looks hard to call. If approved, the road to a soft Brexit is open, but if it fails, we see a protracted period of uncertainty, with a range of possible outcomes.

Exhibit 9: Some possible pathways from the parliamentary vote to the final Brexit outcome



Source: Morgan Stanley Research

For now, then, the high potential for further uncertainty-linked volatility remains an overhang for UK bank debt, and **we retain our recommendations to sell,** as detailed in Thematic recommendations. However, considering our view of the robustness of the banks' underlying fundamentals, we are waiting to reverse our underweight, and to buy the most beaten-up names within the large banks. At such a time, these are most likely to be the domestically focused banks. Any recommendation to buy will be based on an estimate of bonds being oversold on a risk event.

Exhibit 10: Comping UK bank AT1

Ticker	Ccy	Cpn (%)	Back-end	Next Call	Amt Os (m)	Ratings	Offer	YTC	YTM	ZtC
BACR	USD	6.625	MS+502.2	15-Sep-19	1,211	B+/ NR/ BB+	98.3	9.0	8.2	608
SOCGEN	USD	6	MS+406.7	27-Jan-20	1,500	NR/ Ba2/ BB+	95.8	10.0	7.4	706
HSBC	USD	6.875	MS+551.4	1-Jun-21	2,000	NR/ Baa3/ BBB	103.4	5.4	8.1	244
BNP	USD	7.625	MS+631.4	30-Mar-21	1,500	BBB-/ Ba1/ BBB-	103.1	6.2	8.8	319
HSBC	USD	5.625	MS+362.6	17-Jan-20	1,500	NR/ Baa3/ BBB	98.6	6.9	6.7	398
DNBNO	USD	5.75	MS+407.5	26-Mar-20	750	BBB/ NR/ NR	99.0	6.5	7.1	357
BACR	EUR	8	MS+675	15-Dec-20	1,000	B+/ NR/ BB+	107.5	4.1	7.6	428
SOCGEN	EUR	6.75	MS+553.8	7-Apr-21	1,000	NR/ Ba2/ BB+	103.9	5.0	6.7	508

Source: Bloomberg, Morgan Stanley Research. Prices updated at 16:30 UK time on November 29, 2018.

3Q exposure update

Over the course of 2018, European bank debt has been buffeted by macro events which have caused significant spread widening, despite credit fundamentals typically being solid. Clearly, future deterioration linked to exposures to countries with expected economic weakness should be reflected in spreads, but selling/marking wider has occurred when it's actually hard to envision how such deterioration could materially impact the bank. **Here we focus on geographies which have caused material European bank volatility over 2018.**

Over the course of this year, we have put recommendations to sell on nearly all the issuers noted here, due to the fear of volatility and spread impact linked to geographies with potentially challenging geopolitical newsflow, and/or deteriorating economies. We also separately discuss the UK in Still sellers of UK banks and Italy in NPLs are not the problem. **With a bearish view on credit right now, most of the issuers we mention here continue to be names we are avoiding** (see Thematic recommendations). An outlier is Santander, where we have a recommendation to buy on its short-call AT1s, as discussed in Looking for low-beta liquidity in AT1.

Turkey

As we wrote in Committed to Turkey, September 17, 2018, **the banks with the most significant Turkish exposures are UniCredit, BBVA, ING and BNP.** All have loan books in Turkey which include a substantial amount of FX lending, which – and quite apart from the deteriorating economic outlook – should drive weakening asset quality simply due to the lira's depreciation. Three out of these four banks have greater financial commitments to Turkey than book value of equity, due to intra-company funding. However, we have seen this reducing, particularly for ING, which reduced its funding to €3.4 billion at 3Q from €3.8 billion at 1H. The relative size of exposures in Turkey has also diminished for the banks, due mainly of course to TRY, which depreciated by 30% between 1H and 3Q against the euro, and now stands 8.5% down on 1H.

Our economist's base case is a **major economic slowdown** at year-end and a recession in 2019. There has been ongoing normalisation in geopolitical risks and a significant policy rate hike, but TRY lending rates for household and corporate loans are now up by 20pp and 14pp in the last 12 months to 36% and 29%, respectively. Our economist's growth forecast for 2019 is -0.7%Y. Our concerns for the banks are clearly on asset quality worsening, and also simple spread-widening pressure from the downside risk (as our economist notes) of idiosyncratic geopolitical risks.

BBVA's subsidiary Turkiye Garanti Bankasi is by far the largest relative contributor to the group, versus the other European banks with Turkish operations and hence is worth a specific comment. Garanti reported a 16% ratio of Stage 2 loans to gross loans at the end of September, down slightly on 2Q but naturally the TRY size of the loan book increased, considering FX loans. NPLs grew 74% over 3Q, with the NPL ratio rising from 3.1% to 3.9% (unconsolidated Garanti level), and BBVA taking an extra TRY 700 million (€100 million) provisions in 3Q. As an aside, this is an NPL ratio calculated domestically;

at the group level, BBVA has a different classification for some big tickets that in the group are considered Stage 3, while only Stage 2 at the local level. Hence, at the group level, Turkish NPLs are recorded at 5.2%. BBVA increased provision guidance at 3Q from 200bp to 230-240bp for FY18, and expects FY19 to remain elevated for Turkey. Our equity analysts are only expecting a small profit in FY19. BBVA notes that its capital-hedging policy protects its CET1, with a 10% move in TRL impacting ~2bp. **UniCredit** wrote down the goodwill in its Yapi stake at 3Q, taking an impairment of €850 million, but remaining committed to its investment. Due to a number of one-offs at group level including this impairment, Yapi's net profit as a percentage of group looks high at 18%; at 1H this was 6%.

ING actively reduced its funding of its Turkish subsidiary, down to €3.4 billion at 3Q, from €4.1 billion at 4Q17. The group notes that the Turkish subsidiary only extends FX lending to corporate customers with proven FX revenues, and that of total lending exposure of €13.3 billion, €1.8 billion is Export Credit Agency insured lending and around €1.0 billion of SME/mid-sized corporate lending benefits from KGF (Credit Guarantee Fund) cover. Stage 3 loans stood at 2.3% at 3Q, down from 2.7% at 4Q17, with a coverage of 67%. We'd note that due to the one-off settlement charge ING took in 3Q, Turkey net income shows as an inflated 7% of group; at 2Q this was 4%. As an aside, **HSBC** also has exposure to Turkey via its ownership of HSBC Bank AS. At 3Q it had US$3.9 billion of gross lending (<0.5% of group lending), although with another ~US$5 billion of exposure booked outside Turkey, mainly to large corporates and banks, which HSBC does not give details about. HSBC does not disclose inter-group funding, but the group policy is that each defined operating entity should be self-sufficient. Of the U$3.9 billion, 10% is Stage 3, with US$0.2 billion ECL (Expected Credit Losses) allowances. Of TRY 16.3 billion total loans at 1H, TRY 5.2 billion were non-lira, or 32.8% (€969 million FX loans at 1H, using 1H exchange rates). No FX loans were non-performing.

Exhibit 11: European bank operations in Turkey

	BBVA	Unicredit	BNP	ING
Turkish Bank	Garanti	Yapi	TEB	ING Bank AS
Ownership %	49.85%	40.4%	72%	100%
As % Group Net Income	7%	18%	2%	7%
As % Group RWAs	15%	13%	2%	3%
Intercompany Funding (€bn)	0.0	2.6	1.2	3.4
Turkish Book Value (€bn)	3.8	1.49	1.04	1.17
Turkish Bank 3Q18 Balance Sheets				
CET1	8.5	4.7	1.3	1.0
CET1 (%)	16.1%	9.8%	11.5%	11.6%
CET1 Requirement	*8.0%*	*7.5%*	*6.4%*	*6.4%*
Total Capital	18.6%	16.1%	16.4%	20.3%
Total Capital Requirement	*11.5%*	*11.0%*	*9.9%*	*9.9%*
Total Loans	37,093	35,401	9,837	7,488
NPLs	3.9%	3.7%	3.2%	2.3%
Restructured Loans	3.8%	2.3%	2.7%	1.1%
Closely Monitored Loans	12.8%	7.6%	15.2%	18.4%
Foreign Currency Loans	39%	49%	23%	39%
Foreign Currency Deposits	56%	60%	45%	48%

Source: Company data, Morgan Stanley Research; Intercompany funding figures for BNP at 1H18.

Italy

Agricole gave details of its Italian exposure in its banking book at 1H, with €8.4 billion in BTPs, with €5.1 billion held at amortised cost. For the insurance holdings, this was a further €6.5 billion. As reported at 3Q, the CET1 ratio was impacted by -2bp linked to movements in BTPs, and the bank estimates that a 100bp BTP widening translates to a ~3bp impact on CASA's CET1 ratio. The net loan book exposure at 1H stood at €102 billion, At 3Q, retail loans amounted to €42.1 billion, down from €42.9 billion at 1H, because of a disposal of doubtful loans (€700 million, which was 15% of the gross portfolio). The 3Q NPL ratio stood at 9.1%, from 10.3% at 1H, while coverage fell from 64.6% to 62.9%. Agricole notes that net income from retail banking in Italy amounts to around 4.3% of group income. Agricole does not disclose invested equity in its Italian operations (main shareholding is Cariparma, 86.5%). **BPCE** notes that at 3Q, Italian exposure in the banking book amounted to €12.9 billion, of which €5.7 billion was corporate, €4.6 billion sovereign, €1.3 billion public sector entities, €0.7 billion ABS and €0.2 billion financial institutions. Trading book exposure was negligible. **BNP** also has significant Italian exposure, owning Italy's sixth-largest banking group, BNL. Without a 3Q update, BNP's overall 1H on and off-balance sheet exposure to Italy was ~€140 billion, and on b/s ~€100 billion. At FY17, BNL's gross NPLs were 16.6% and CET1 11.2%. BTP exposure of the BNP group at FY17 was €9.8 billion, with over 80% held to maturity and a policy of limiting this to under ~€10-11 billion.

Commerzbank notes that 3Q Italian sovereign exposure stood at €8.5 billion, accounted for at amortised cost, hence no impact on P&L and capital. In the EBA transparency exercises these are in the 'longer than 15 years' bucket. In the same FY17 report, non-sovereign exposure stood at €2.894 billion with 1% NPLs. Again, **HSBC** has Italian exposure but it's immaterial to the group and little is therefore disclosed, with pre-tax profit for FY17 just US$40 million and making up 0.2% of IRB credit exposures for the group. **BBVA** has €7.6 billion of BTP exposure, of which €3.5 billion matures before year-end.

Exhibit 12 shows the holdings and sensitivity to BTPs for Italian banks, the latter estimated by Morgan Stanley Equity Research. As an example, for every 100bp widening in BTP spreads, Intesa's pre-tax profit is hit by €899 million (€629 million on a post-tax basis), impacting CET1 by 23bp. Taking the 5-year BTP spread at 3Q of ~233bp, at the time of writing this is now 264bp. For context, our rates strategists' forecast at 1H19 is 330bp.

Exhibit 12: Impact of BTPs spread moves on Italian bank CET1

Issuer	CET1 B3 % (3Q18)	Total Italian Sovereign bond	o/w Italian bonds FVTOCI	Avg. duration	Impact %	Impact, pre-tax	Tax rate %	Impact, post-tax	% RWAs
Intesa SPI	13.7%	28,132	18,719	4.8yrs	4.8%	899	30%	629	0.2%
UniCredit	12.1%	57,825	43,304	3.2yrs	3.2%	1,364	30%	955	0.3%
Mediobanca	13.0%	2,800	1,606	2.5yrs	2.5%	40	30%	28	0.1%
UBI Banca	11.4%	9,313	6,276	5.0yrs	5.0%	314	30%	220	0.4%
Banco BPM	11.2%	18,200	6,500	2.9yrs	2.9%	190	30%	133	0.2%
BMPS	10.3%	18,545	12,360	2.4yrs	2.4%	297	30%	208	0.3%

Source: Company data, Morgan Stanley Equity Research

Brazil

Our Brazil economists note that they expect a stable currency, low rates and large slack to allow the economy to recover, and without material inflationary pressures and with inflation at target, they do not believe that the central bank will be forced to hike rates any time soon. **Santander's** Brazil operations had total assets of €152 billion (11% of group) and a loan book of €65.0 billion (7.5%). NPLs were 5.26% with a coverage of 109.1%. Total equity of the business stood at €14.3 billion (22% of group CET1). Net attributable profit at nine months stood at €1.942 billion, which is 34% of the group. To note, **BBVA** has negligible exposure to Brazil, with just a representative office in Sao Paulo.

Mexico

Our economists believe that questions over policy continuity will likely dominate Mexico's outlook in 2019, with recent actions by the incoming administration hinting at a new course. Against this uncertain backdrop, they see growth at 1.7%Y in 2019, down from 2.2%Y this year, with activity struggling below trend over the forecast horizon. **BBVA's** book value in its Mexican franchise was €9.839 billion at 3Q, excluding goodwill of €536 million, and with no intercompany funding. Total assets are €96 billion (14% of group), loans €52 billion (14%) and 3Q net attributable profit €642 million (38.4%). NPLs stood at 2.0%, so asset quality is strong. The only detail that **Banco Sabadell** gives on its Mexican exposures is the loan book, which is €3 billion at 3Q, up 6.2%Q and 45%Y. Against this, customer funds more than doubled over the past year. While no net income details are given as the franchise is still in the ramp-up phase, considering the generally higher margins on Mexican lending, it could be safe to assume that the contribution to group net income is somewhat higher than the share of group loans of ~2%. **Santander** had €9 million net attributable profit in Mexico of €554 million (9.6% of group), a loan book of €31.4 billion (3.6%) and an NPL ratio of 2.41% with a 120.5% coverage ratio.

Russia

Our economist notes that tight fiscal policy and sanctions are likely to keep the economy stagnant in 2019-20, with GDP expected at 1.5%Y in 2019, down from 1.6%Y this year. In terms of sanctions, she notes that there are several Russian sanctions bills to go through the US Senate in the next few months, but assumes mild measures avoiding sanctions on new government debt, oil, or the banking sector.

At 3Q, **RBI's** credit exposure to Russia stood at €17.4 billion (€17.2 billion net of provisions). Funding to the Russian operations amounted to €470 million (€450 million subordinated, €12 million senior), and Russia accounted for ~24% of RBI's pre-tax profit. Customer loans totalled €8.587 billion, NPLs €359 million, the NPL ratio was 4.1% and coverage 69%. With regard to RBI’s strategy in Russia, it is looking to grow across all business segments while maintaining a prudent risk approach. In corporates, the focus is on multinationals and stronger mid-market players, and in retail, both secured and unsecured targeted lending. **SocGen** discloses that, in 3Q, Russian exposure at default (EAD) stood at €14.8 billion, with a loan book of €9.2 billion (~2.1% of group loans) and a contribution to group net income of €43 million (3.4% of total group net income). While not detailing the NPL ratio, SocGen notes that it is on a positive trend, and the cost of risk in 3Q, at €20 million, remains at a low level. The book value of the operations was €2.8 billion and funding provided by the SocGen group stood at €0.5 billion. **UniCredit** recorded a €42 million 3Q net profit in its Russia operations with an NPL ratio of 8.2% and a loan book of €9.5 billion (2.1% of group).

UK Commercial Real Estate

As we creep closer to Brexit it's worth taking a brief look at CRE exposure and considering newsflow, exposures to retailers. **HSBC** gave details at FY17 on CRE but gives no information on the retailer exposure. CRE lending stood at £14 billion (3.6% of total lending), with 51% in London and the South-East, and was 88% investment grade. **Barclays** last gave broad details on CRE exposures in its FY16 annual report, showing just £11.2 billion of exposure, which it notes is highly collateralised and the vast majority with an LTV>75%, and likely little changed today in terms of size. As at 1H16, when CRE became a more interesting topic post the EU referendum, Barclays also noted that exposure to commercial development was less than 2% of the CRE book, plus it noted that NPLs in CRE were £174 million at 1H, or 1.4% of the portfolio, with 50% provisions. In terms of exposure to retailers, at 1H18 Barclays noted £20 billion to wholesale and retail trade (on and off balance sheet), and has stated that it became more prudent on certain sectors, including this one, this year, while having been very cautious on CRE for many years already. **RBS** notes at 3Q that CRE was £20.7 billion (and it took an impairment charge of £12 million, or 0.23%), out of total Commercial Banking of £91.1 billion, and this includes both general CRE and Housing Associations. As a comparison, FY17 was £22.9 billion. At 1H, IFRS9 disclosures showed total CRE at Stage 3 was £1.3 billion, with a provision stock of £261 million, hence provisions coverage of 20.5%. The average LTV was 49%. RBS has no specific disclosures on UK retailer lending, aside from a comment that average LTV on the retail sub sector was 48% and that "Defaults were low and related to legacy assets, with a limited number of new defaults. The sub sector portfolio was monitored on a regular basis and credit quality was in line with the wider CRE portfolio." **Santander UK** had a CRE portfolio of £7.514 billion at 1H (~3.7% of total loans), with 17% relating to the retail sector. Within CRE, the NPL ratio was just 0.65%, or £49 million, with £32 million loss allowances. **Lloyds** had £18 billion CRE exposure at 1H18 (~4% of total loans), and retailer exposure was <1% of group loans and advances. **Standard Chartered** does not disclose specifically on UK CRE but the whole of Europe and the Americas had US$151 million of CRE exposure, which is just 1% of the group CRE loan book of US$15 billion.

On the smaller names, **Nationwide** notes that its CRE exposure continues to run off (having been closed to new business), with £1.574 billion reported against £1.81 billion at FY17. Of this, only £169 million is Stage 2 and £27 million Stage 3. 45% of the CRE relates to the residential sector. As an aside, with **TSB's** focus on retail mortgages, its (Sabadell's) exposure to UK CRE is described by the bank as negligible.

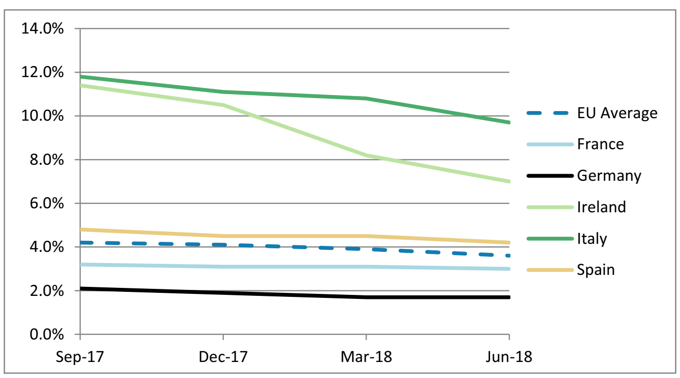
Russia is a country which is generally the subject of selective sanctions programs administered or enforced by the United States, the European Union and/or by other countries, which target among other things Russia's financial sector. Users of this report are solely responsible for ensuring that their investment activities are carried out in compliance with applicable sanctions.

NPLs are not the problem

The SSM's approach to NPLs has softened during 2018: The central bank originally envisaged more stringent requirements for NPLs, but industry pushback has tempered these somewhat. The supervisor raised the possibility of quantitative NPL targets with regulatory sanctions for non-compliance, but settled for bank-specific dialogue which resulted in banks setting their own NPL targets, although naturally there would have to be agreement with the supervisors. Similarly, the SSM's proposal for binding NPL coverage requirements of 100% for NPLs became non-binding guidance, but a similar proposal subsequently appeared in the Council's negotiating position for CRR2. The Council proposed a 'prudential backstop' of 100% coverage for future unsecured NPLs after 3 years and secured loans after 8-10 years (the ECB wanted 2 and 7 years). We expect this proposal to make it into the final text, although it will only impact future NPLs and not the existing stock.

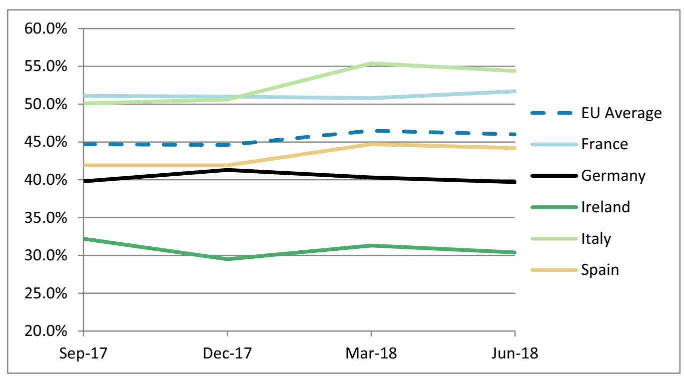
While supervisors and regulators have been busy coming up with rules on how to avoid another large build-up of unprovisioned NPLs, the current stock has continued to fall across the EU, with the average NPL ratio down 90bp to 3.5% in the year to June 30, 2018. Naturally, strong divergence between countries remains, with Italian banks still at double the EU average, while Spanish banks keep narrowing the gap to peers. Here's where we turn our attention.

Exhibit 13: Further NPL progression in the EU...



Source: EBA, Morgan Stanley Research

Exhibit 14: ...with coverage remaining healthy



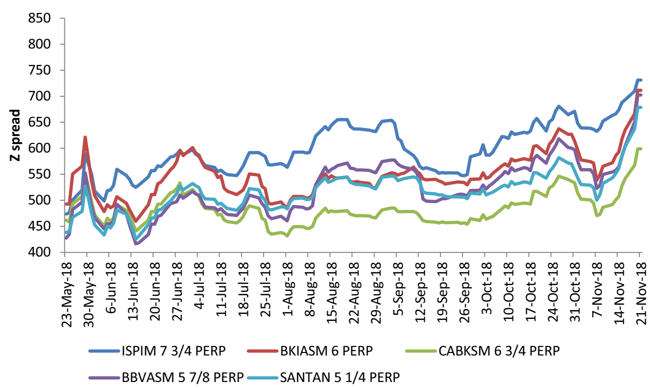
Source: EBA, Morgan Stanley Research

Adding Spanish banks on fundamentals and periphery de-linkage

NPLs were definitely not on our list of concerns when we sold Spanish banks in May. Instead, periphery spillover and domestic political uncertainty drove our decision. The May sell-off in Italian banks was triggered by political developments at a time when there was uncertainty in Spain too due to the change in Prime Minister, which, combined with the risk-off sentiment towards the periphery, caused Spanish debt to widen, albeit less severely than Italian debt.

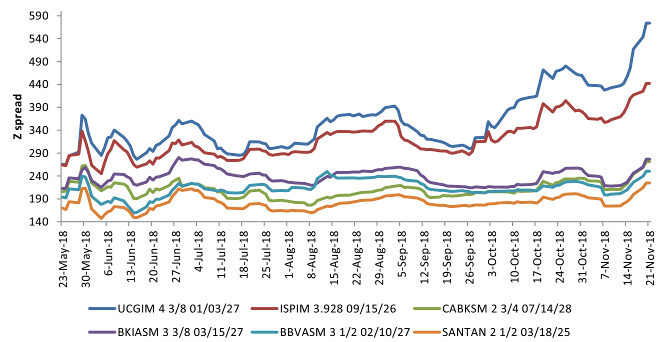
Spanish Tier 2 appears to have gradually de-linked from Italy, making us more comfortable to re-enter domestic bank Tier 2, where we like both the good fundamentals and current valuations. We would still be more cautious on Spanish bank AT1 which, while trading tighter, still moves broadly in tandem with the Italians (Exhibit 15). In Tier 2, Spain has been far less sensitive to moves in Italy, with the magnitude of moves much smaller (Exhibit 16).

Exhibit 15: Some periphery linkage in AT1



Source: Bloomberg, Morgan Stanley Research

Exhibit 16: Spanish Tier 2 more de-linked from Italy



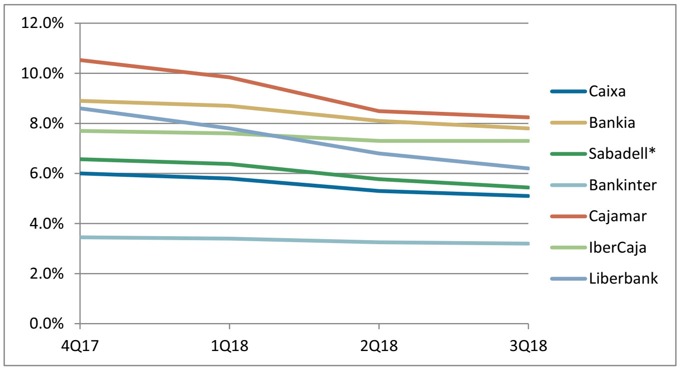
Source: Bloomberg, Morgan Stanley Research

We re-enter Spanish domestic bank Tier 2 on continued asset quality improvement, with NPLs down 120bp to 4.2% in the year to June 30, 2018, narrowing the gap to the eurozone average. The banks have also been reducing REO assets, with the domestic banks in Exhibit 18 reducing these by 9.5% in the nine months to September 30, 2018. Our economists believe that Spain's economic growth will slow next year, but remain robust, with a 2019 GDP forecast on 2.2%Y – still above the eurozone average of 1.6%Y. There are political risks, but our economists believe that while market volatility could increase if there was an early election, the vote remains pro-European and in support of the mainstream parties.

English law adds a positive nuance to our Tier 2 recommendations to buy

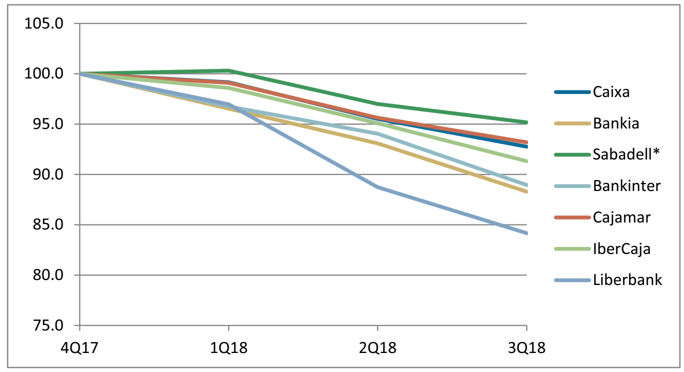
Caixa €3.5% 27-22 and **€2.75% 28-23** are our highest-conviction recommendations to buy, as these bonds are English law so we fully expect these to be called at the first call date, as discussed in CRR2 – changing capital characteristics. We also buy **Bankia €3.375% 27-22** and **Bankinter €2.5% 27-22** on outright valuations as these add a pick-up to our lower-beta Tier 2 holdings. The **Caixa €2.25% 30-25** carries extension risk, so we are cautious here despite this being largely priced in. Sabadell carries its own idiosyncratic risks from reputational and regulatory concerns over its UK subsidiary TSB, which in any case is UK risk, plus exposure to Mexico (see 3Q exposure update). We remain cautious on Santander and BBVA as we think that their exposures to emerging markets create an increased risk of spread volatility (again, see 3Q exposure update).

Exhibit 17: NPLs have been falling in Spain...



Source: Company data, Morgan Stanley Research; *Sabadell figures exclude TSB.

Exhibit 18: ...as have REO exposures



Source: Company data, Morgan Stanley Research; *Sabadell figures exclude TSB.

Still cautious on Italy, despite fundamentals

We are still cautious on Italian banks, having sold our Italian holdings in May due to political developments. Our economists believe that political uncertainty in Italy may well rise, with a fiscal compromise likely to come only after extra pressure is applied by the EU. This creates the potential for further volatility in Italian banks, which would be compounded by our economists' expectation of stagnating growth, which is forecast at 0.5%Y in 2019, much lower than the eurozone average forecast of 1.6%Y. Italy will not be a core holding for us in 2019 because of the potential for political headlines to cause volatility, but **we will look to opportunistically go into and out of Italian bank debt** when valuations gap wider, as we expect they will.

The political developments in Italy overshadowed the fundamental improvements in balance sheets: Italian NPLs have fallen 670bp in the year to June 30, 2018, with most banks making significant progress towards their NPL targets. This was supported by the introduction of IFRS 9, which enabled them to take large, one-off provisions in January 2018 which could be phased into regulatory CET1. The NPL targets to be achieved by ~2020 were set by banks following the SSM switching its NPL focus to bank-by-bank dialogue, so we assume that regulators are comfortable with them. We re-run our scenario analysis whereby we make assumptions on current bid levels for NPLs and work out what immediate sales of NPLs, in order to attain those NPL targets now, would do to CET1 (Exhibit 19).

UniCredit and Intesa are the best placed for further deleveraging, UBI and CreVal would remain above requirements and BPM and BPER fall below their 2019 SREP, based on our assumptions. Clearly, there is no very near-term pressure to move to these targets and hence our scenario analysis merely indicates who's at the better starting point.

Our in-and-out strategy towards Italian banks would focus on bonds with good technicals: We mentioned a number of New York and English law Italian bank bonds we're keeping our eye on in CRR2 – changing capital characteristics. Due to their non-EEA law status and with no contractual recognition of bail-in rules, we have high call certainty and are less concerned with whether the issuer call options are in the money. In AT1, Intesa $7.7% is New York law, and so is a resolution disruptor and will become ineligible as capital and EL post-CRR2. UniCredit $8% and €6.75% and Intesa €7%, €7.75% and €6.25% are all English law, which again will become ineligible post-CRR2 and the Brexit transition period, in our view, so will be callable at the first call date. Should CRR2 happen at its earliest date (January 1, 2020) and there is a hard Brexit, there is greater early regulatory par call upside with all these bonds. In Tier 2, we would expect the English law UBI €4.45 27-22 and €4.25% 26-21 and UniCredit €5.75% 25-20 and €4.375% 27-22 to be called at the first call date, while the bullet Intesa €2.855% looks good considering early RPC potential.

Exhibit 19: Scenario analysis – NPL disposals to target ratios

	Unicredit	Intesa	UBI Banca	Banco BPM	BPER Banca	Credito Valtellinese
4Q17 Balance Sheet						
FL CET1 Ratio	13.6%	14.0%	11.4%	11.9%	13.7%	15.8%
NPL Ratio	10.2%	11.9%	13.0%	21.1%	19.8%	21.7%
NPL Coverage Ratio	56.2%	51.1%	35.5%	48.8%	48.7%	45.3%
3Q18 Balance Sheet						
FL CET1 Ratio	12.1%	12.4%	11.4%	11.2%	12.0%	12.1%
NPL Ratio	8.3%	9.2%	11.1%	15.9%	20.8%	11.3%
NPL Coverage Ratio	60.9%	53.5%	39.3%	50.7%	47.7%	50.4%
3Q18 NPLs by class (€bn)						
Bad loans	23.1	22.2	5.8	10.1	7.1	0.8
Unlikely to pay	16.7	15.6	4.6	8.3	3.6	1.1
Past due	1.0	0.6	0.1	0.1	0.2	0.1
3Q18 Coverage by class (€bn)						
Bad loans	73%	67%	51%	65%	59%	71%
Unlikely to pay	46%	36%	25%	34%	27%	39%
Past due	31%	24%	12%	18%	11%	11%
NPL Targets						
NPL Target	6.0%	6.0%	10.0%	11.5%	13.5%	9.6%
Disposals for NPL Target (€bn)	11.4	13.3	1.1	5.1	3.8	0.3
NPL Coverage Target	54.0%	52.0%	47.0%	59.0%	55.0%	59.0%
Increased Coverage Cost (€bn)	0.0	1.8	1.1	2.1	1.4	0.2
Estimated CET1 Post-Provisioning	12.2%	11.9%	9.7%	8.2%	7.8%	10.2%
Delta to 3Q18 CET1 (bps)	11	-48	-172	-305	-421	-189
2019 CET1 Requirement	10.0%	9.3%	9.3%	9.8%	8.8%	8.3%

Source: Company data, Morgan Stanley Research; We assume a transfer price of 30% for bad loan disposals based on recent transaction data. As an example, we estimate that Intesa would need to increase coverage to €1.8 billion to: 1) Sell bad loans until the total NPL ratio hit the target; 2) Increase coverage of those bad loans to be disposed up to 70% (currently 67%); and 3) Increase the residual total NPL coverage ratio to the target.

CRR2 – changing capital characteristics

Regulatory change always brings opportunity and, over the past few years, we have spent a lot of time on those bonds which are not compliant with the new 'crisis-reaction' rules on bank capital contained in the Capital Requirements Regulation (CRR) of June 2013. Grandfathering of such bonds was also detailed in the CRR, and we discuss this group later in The fate of legacy bonds. In this chapter, we focus on post-CRR issued bonds, which now face yet another regulatory upheaval, in the form of CRR2. We detail all these in Appendix 1: CRR2-affected bonds.

Capital, leverage and MREL all changed under CRR2

Changes to the CRR are currently being negotiated between the European Commission, the Council and the Parliament (EP). The final text of what will be CRR2 is hoped for by the end of the year, although the ultimate conclusion must be in time for the final EP votes to take place (at the very latest the week of April 15), ahead of new EP elections on May 23-26. If all goes to plan for year-end though, this would mean publication in the Official Journal/entry into force at the earliest next March. Implementation is two years thereafter (the EP and Council texts agree on this timeframe) and, as a regulation, CRR2 cannot be front-run; hence all EU members will implement CRR2 at the same time. Using the original Commission-proposed CRR2 amendments from November 2016 unless otherwise stated, key areas of potential change for credit investors are the following:

- **Instruments can only be written under EU law, or have legally enforceable contractual provisions** (Para 23(d), p51, CRR Amendments) which recognise EU bail-in powers.

- **Instruments cannot be subject to any set-off arrangements or netting rights:** Both the Council and EP agree on these requirements above.

- Regulatory capital must be directly issued (so **no SPV issuance**). Article 83 (page 68 of the document for Tier 2) is amended to state that **SPV issues can qualify only until December 31, 2021** – for both AT1 and Tier 2 purposes. Again, both the Council and the EP agree on this, and also the timing.

- **Changes to the ADI calculation** (EP text) would change the current AT1 coupon restriction text of "(coupons) are paid out of distributable items" to "paid out of distributable items or reserves built under national law", a significant boost to German and Austrian banks, who are bound by domestic GAAP accounts. We expect this to be in the final CRR2.

- **Speeding up the leverage requirement,** with the EP text accelerating the timescale to meet the minimum of 3% plus half the G-SIFI buffer, to January 1, 2020, from the Council's proposal of the implementation date, around 2Q21. Here, it's unclear which side will prevail.

We focus on the first two requirements above, and mention SPVs only in The fate of legacy bonds.

The problem with non-EEA law bonds

The CRR2 draft includes the following requirement for a bond to have regulatory value. **Instruments can only be written under EU law, or under the laws of a non-EU country where EU bail-in power (Article 59 of the BRRD (2014/59) is effective and enforceable based on statutory provisions or legally enforceable contractual provisions** (Para 23(d), p51, CRR Amendments). It could be debated as to whether this remains in the final text, but we strongly expect that it will. First, this is simply introducing the same standards to capital instruments as the BRRD already introduced for Eligible Liabilities (bail-in debt, to be used to meet MREL), which are not regulatory capital. Second, having a capital instrument written under a law (e.g., New York) which does not allow the relevant European resolution authority to write it down in resolution creates multiple problems. These problems include not only the simple fact that it cannot be written down (or the resolution authority simply does write it down, but then faces clear litigation issues), but that it will be pari passu with a number of other capital instruments under EU law which otherwise would be simply written down without any concerns. **This makes the non-EU law bond a resolution disruptor.** The pari passu nature of other erstwhile compliant instruments to the New York bonds could create further litigation headaches – such as where the holder of an EU law bond would see a pari passu, but New York law, bond not being written down, while their bond is. At least, there would very likely be litigation by the New York law bondholders against the write-down – clearly sparking at the very least vested interest by the 'compliant' pari passu bondholders which have been written down. As a final point, of course, those New York law subordinated bonds will in fact be subordinated to any senior, non-preferred debt, which may also suffer in a resolution, creating further legal headaches.

New York law bonds will fall foul of CRR2 but Brexit is also a problem, as the majority of financial bonds are written under English law. Post March 29, 2019 England is not in the EU – albeit our economists expect a transition period. We have already seen in the past year banks keeping prospectus language as English law but adding a contractual clause that recognises EU bail-in power – even though English law is of course EU law right now. **Clearly this is a recognition that English law will become third-country law in the near future,** and that the CRR2 requires such contractual recognition of bail-in for bonds to count as regulatory capital. We also have a number of examples of AT1s of the same issuer, both with English law, but only one (the more recent vintage) containing the contractual recognition of bail-in. Nordea even put into its consent solicitation – primarily linked to moving to Finland – a contractual recognition of EU bail-in rules in some of its English law bonds (all its AT1s).

Set-off is also an issue

Similar problems arise from bonds that can be set off against other claims, so that the full value of the capital instrument cannot be written down or converted into equity. However, while it's pretty easy to work out which bonds will lose regulatory value due to non-EU law/no contractual recognition of EU bail-in, it's more complicated for the set-off rule. In the Council's CRR2 proposals (recital 21 (d)), they clearly state that this requirement is not intended as contractual. Hence, the relevance of having waiver of set-off rights in a capital instrument will depend on the applicable insolvency law of that country. In some instances, set-off may actually not be operable, which makes the presence of a clause redundant in any case. This means that even if an AT1 or Tier 2 has no contractual waiver of set-off rights, the national insolvency law may mean that there are no set-off rights to begin with – hence the AT1 is still compliant with CRR2. We can reduce the list of 'set-off' bonds worthy of checking though by ignoring those that have both no waiver of set-off rights and a law problem. The nine AT1s that remain – no waiver of set-off, but written under EU law – are all short-dated, with only DB €6%, SANTAN €6.75% and BNP €6.125% having call dates longer than 2021 (all 2022).

Timing and grandfathering

While the EP and Council agree on the structural requirements of capital instruments, they disagree on when these apply. Article 494b in the Council's text relates to the grandfathering of own funds and EL instruments. AT1s issued prior to entry into force of CRR2 may qualify as AT1 until six years later, where they meet all conditions except for the EU law/contractual recognition of EU bail-in law, and no set-off rights (the same applies for Tier 2s). Entry into force would be around 2Q19, we believe, putting the **Council's proposed grandfathering to around 2Q25.** Parliament does not even mention grandfathering of AT1s and Tier 2s, and simply sets dates for when certain requirements will be implemented – with its proposed date **January 1, 2020.**

Our base case is end-2022: While we believe that an 'earlier of the call date or ~2Q25' would make far more sense, we imagine that the two parties will meet somewhere in the middle of the two dates they've put forward. It also gives us rolling grandfathering dates – CRR at end-2021, CRR2 at end-2022 – which, far from being a compelling argument, does get us around the problem of what to do with a bond that doesn't meet CRR2 requirements if they are implemented before end-2021, yet is still grandfathered under CRR.

As an aside, for Eligible Liabilities (not regulatory capital), the SRB posted on its website a paper on expectations to ensure resolvability of banks in the context of Brexit. It clearly upholds the requirement for new issuances of EL to be written under EU law or to have contractual recognition of EU bail-in powers, if written under English law. However, for outstanding EL, the SRB will consider each situation on a case-by-case basis if excluding English law bonds creates an MREL shortfall for a bank, although "ensuring consistency across all banks under its remit". Considering that the SRB is still taking a relatively unobtrusive, softly-softly approach to MREL, in our view (see Supply tailwinds: TLTRO and MREL), we would not expect this to ultimately cause any bank to be 'no matter the price' forced issuers. Furthermore, our economists think that a transition period may well be extended beyond January 2021, so it could be many years yet before the UK leaves the EU.

Implications for AT1s and Tier 2s

Non-EU law AT1s and Tier 2s without contractual recognition of EU bail-in powers or with set-off rights will become ineligible once these provisions of the CRR2 are implemented. This is all complicated by Brexit – English law will not be EU law once the UK has left the EU. There appear to be myriad possibilities as to when that might happen, but our UK economists base case is a soft Brexit, with a transition period. Barnier's latest comments were that a transition period **to end-2022** is possible. This would dovetail with our base case for CRR2's likely implementation for the capital instrument-related provisions, also at end-2022. Generally, for bonds with set-off rights and bonds written under non-EU law, with no recognition of EU bail-in rules:

- They will lose regulatory value (AT1 and Tier 2) when the CRR2 clauses are implemented.
- These bonds either have regulatory par calls, giving the issuer the option to call when regulatory value is lost, or no language at all. For the latter, there is no possibility to call, but they can try to LME the bonds.
- Bonds trading below par with regulatory call language have clear upside – these should be called at the earlier of the first call date or the implementation/grandfathering date, we believe. Hence, we expect extension risk to be limited for bonds with call dates before the implementation date, with the pending loss in capital value incentivising issuer calls, possibly coupled with soft pressure from the regulator. Supervisors should want these taken out as soon as possible, as they are non-compliant.
- For above-par bonds, there's clear downside, where the implementation date is ahead of the official call date, as again we would expect a regulatory par call and refinancing with compliant bonds.

Complications come in the form of not only when the clauses are implemented, but also, for English law bonds, when England is considered a non-EU country: For UK bank bonds, naturally we would only care about New York law bonds, as presumably English law ought to work for them.

In Thematic recommendations, we show recommendations on AT1s, Tier 2s and one senior holdco bond, linked to our scenario analysis. We look at January 1, 2020 RPCs, should the EP 'no grandfathering' view prevail, which is not our base case, but is possible. We run both New York and English law bonds to this date; the latter simply hypothetically, as per Barnier's suggestion of a transitional period for the UK post March 29, 2019 Brexit out to December 31, 2022. This scenario would suggest RPC risks only then, at December 31, 2022, rather than January 1, 2020. We also run RPCs to 2Q25, should the Council's grandfathering proposals prevail in the final CRR2. Our recommendations naturally take into account other factors too.

We list all non-CRR2 compliant bonds in Appendix 1: CRR2-affected bonds, in various guises, and run them to the scenarios above.

Non-CRR2 compliant bonds with no early call language

We recommend selling bonds which are compliant with CRR2 and thus have little LME potential, into often cheaper, non-CRR2 compliant bonds, with clear LME potential. We recommend **buying HSBC's Tier 2 $36s, 37s and 38s** yielding 5.4%, which are under New York law and thus are resolution disruptors, facing pressure from the Bank of England to be LMEd by 2022. Against these buys, we would **switch out of the somewhat richer, and CRR2-compliant HSBC's $26s and 44s**, which are yielding 5.0% and 5.5%, respectively. Similarly, we would **buy HSBC's senior holdco $6.1% 42s** with a 5.0% yield, under New York law and with LME upside, against **selling HSBC's compliant (recognising EU bail-in powers) 4.583% 29nc28** senior holdcos yielding 4.9%.

Non-CRR2 compliant bonds with regulatory par call language

For New York law AT1s and Tier 2s with no recognition of EU bail in powers but with regulatory calls, naturally we look at the scenarios for that regulatory par call (RPC) option. For Tier 2s, one bond that does look very interesting is DB $4.296% 28nc23s, with a YtRPC of up to 18.1%, should Parliament get its way on implementation. In any case, we would fully expect this bond to be called at the first call date, considering its underlying law and thus status as a resolution disruptor. However, **with a bearish view on credit markets more broadly, and DB not one of our favoured credits, this is a bond we'll watch, rather than adding now.** The other bond of the four NY law Tier 2s here to have a call or maturity before end-2022 is BNP's $4.25% 24s, but with an unexciting YtRPC in our base case of CRR2 at end-2022 of 4.8%, and with its Italian exposure, this is not a bond we would be adding right now, either.

A clear upside from non-EU law bonds (not just NY, but also English) here is **certainty of call date,** should the bonds have not been RPCed before that time. With the CRR2 clearly on its way, we would expect banks to take this into account for their first call decision and simply refinance these soon-to-be non-compliant bonds. Certainly, as a potential resolution disruptor, the resolution authority would be keen to see these gone or, at least, not count them in a bank's EL (as clearly indicated in the SRB's recent paper). Again, this highlights **a number of potential interesting bonds which we're not quite ready to recommend buying,** but are on our radar – English law Tier 2s from UBI callable in 21 and 22, similarly UCGIM 20s and 22s; also bullet bonds such as ISPIM 25s look good considering potential early RPCs.

We do have a number of recommendations to buy in better-quality/non-Italian Tier 2s due to certainty of calls and possibility of early RPC ahead of bullet maturities, such as **Caixa 22s and 23s.** In stronger credits, we also like **KBC 24s, SEB 23s, Swedbank 22s** and bullet **BFCM 26s,** all of which should be more stable in any choppy markets. On the recommendation to sell side, and in line with the view of disliking high cash price bonds – and particularly these with RPC potential to boot – **we have Tier 2s such as BKIR's 10% 22s linked to limited upside and a -14% yield if indeed Parliament gets its way** on timing. We also **sell high-ish-cash BNP bullet Tier 2s, BFCM 24s and 25s, Erste 22s, SocGen 23s and Nordea 21s** – maturing before our base-case CRR2 implementation but still carrying a risk on Parliament's timetable – at least in terms of market reaction (we would not expect Nordea to use the early call). It's a similar story in AT1s; **selling high cash price, possible RPC bonds such as BNP 22s** (with this call date, we're more swayed by the high cash price rather than the early call risk) and **Agricole's New York law (i.e., resolution-disrupting) £26s and $24s.** On the buy side in AT1s, we doubt we'll get rich but we might sleep easier – **SEB and Swedbank 22s** should have certainty of call due to English law, and although unlikely, should Parliament again bring in the CRR2 early and we have a hard Brexit, RPC upside is significant. As an aside. we would question the legality of any RPC linked to CRR2 changes for bonds issued post-November 2016, when the first draft CRR2 was published – we've noted such bonds in Appendix 1: CRR2-affected bonds. However, we would expect investors to only have a problem with such an RPC if it meant a loss/diminished yield for them, and again here, we focus on sub-par bonds.

The mechanics of consent solicitation

Should we get to a point where a bank can reg par call a bond due to the UK exiting the EU and the bond loses regulatory capital value, an alternative is to change the documentation so capital value is retained. We understand that many believe that this would be the more likely way forward for issuers, who would not want to call a very high-cash-price bond at par, and upset investors. We actually think that any news that a bank had such an option would cause a reaction in the price very quickly. What might have previously been a high-cash price bond would quickly trade close to par, thus incentivising the issuer to use the par call as the bond is already there, or at least to do an LME marginally above par, ahead of a par call.

However, should an issuer choose to go down the route of a consent solicitation, it's worth knowing some background here. Generally, for English law bonds, a two-thirds quorum is required and, of that, there is a 75% threshold to reach agreement. Importantly, certain countries have local civic codes which can have more stringent processes. For example, in France and Italy, an issuer would have to pay all bondholders a consent fee, even to those who did not consent – clearly adding to the cost of such an exercise. In terms of what the consent could be for, an issuer could request to change English law to EEA law, and it's likely that the trustee could say that this was not materially detrimental to bondholders, allowing a consent solicitation which could be approved by 75% of the two-thirds quorum described above (any change determined to be materially detrimental would require 100% approval). Contractual recognition of EU bail-in powers could be added, as Nordea did in 2017, and also a waiver of set-off rights (although, as noted above, few bonds have this problem).

The fate of legacy bonds

As opposed to the currently compliant AT1s and Tier 2s we mulled over in CRR2 – changing capital characteristics, here we come back once again to legacy Tier 1s and Tier 2s. These were issued before the original Capital Requirements Regulation (CRR) of June 2013 and are generally grandfathered out to end-2021. While any legacy Tier 1s will definitely lose any AT1 value when grandfathering ends, some could still have Tier 2 or Eligible Liability value (useful to meet TLAC or MREL), with the same also true for legacy Tier 2 instruments. The fate of any legacy bond will be intrinsically tied to their post-2021 regulatory value (Tier 2, EL or simply funding), the cost of keeping them outstanding versus refinancing with new bonds with the same regulatory value, any supervisory pressure to get rid of them, and any profit motive around LME, including avoiding a potentially more expensive call in the future. We give details of all legacy bonds in Appendix 2: Legacy bonds.

Status of legacy instruments, end-2021 – Tier 2/EL value?

The following characteristics are the most likely to mean **loss of regulatory capital status** at end-2021, once CRR-linked grandfathering ends. Again, considering that no legacy bonds have the triggers needed for AT1s, we believe that none could possibly qualify as AT1 post-2021. The question therefore is if any legacy subordinated debt will qualify as compliant Tier 2. Features that would rule this out, in our view, are as follows:

- **Ability to be repurchased within five years of issuance:** We believe that banks have to read the CRR rules quite literally – and even if a particular legacy bond was issued in the 1980s and could be bought back within its first five years, it could not count as Tier 2.

- **Any (historical or future) incentive to redeem:** Any bond with some form of step-up in the past or future, including a floor that could have kicked in years ago (as per CMS bonds), will not count as Tier 2, we believe.

- **No requirement for regulatory permission to be redeemed/repurchased/called:** This is often a problem for very old legacy bonds.

- **SPV-issued:** This is a CRR2 proposal, but it looks like it will go through, with the clear statement that all regulatory value will be lost at December 31, 2021 – so the same timescale as CRR grandfathering. This clearly has implications for issuance of Tier 2s from Spanish banks in particular, but we note Santander UK's 2016 transition of bonds from its SPV, ANTS, to its opco, Santander UK plc. We imagine similar may be possible for other banks too. A ban on SPVs will also cause problems for German bank silent participations, we believe.

- **Written under non-EU law, without contractual recognition of EU bail-in powers:** This would immediately affect New York law bonds and also post-Brexit English law bonds, as discussed in The problem with non-EEA law bonds.

- **Subject to set-off rights:** Again, as discussed in that same section.

As discussed in our Foundation note, 2022 - Capital and EL Redefined, April 26, 2018, we believe that **the only requirements that should be needed to count as an Eligible Liability** would be:

- **Remaining maturity of one year.**
- **Contractual recognition of bail-in** for non-EU law bonds issued after January 1, 2015.
- **For the UK, EL will only be counted if issued from the top holdco,** from 2022.
- **Directly issued** (no SPVs).

The first three requirements stem from the original BRRD, the last from the proposed CRR2. We expect that all other CRR2-proposed EL requirements relating to no set-off rights, no acceleration rights, regulatory approval needed to call or reduce and no incentive to be called/redeemed will be grandfathered for outstanding bonds – for EL purposes.

Regulatory calls versus no language

The regulatory value of any legacy instrument after 2021 should inform a call or an LME decision – and **most legacy bonds have the ability to call on the loss of Tier 1 or Tier 2 capital value,** even when their official call or maturity date is way beyond end-2021. This would be a call at par, or for some – and much better for the investor – a call at a make-whole amount. The third category is no early call language at all, so that, should an issuer wish to get rid of the bonds, they would have to do an LME or a consent solicitation, the latter of which we looked at in The mechanics of consent solicitation .

It's important to note that while the CRR2 will be key to thinking about what regulatory value legacy bonds have post-2021, it should not have any bearing on the grandfathering period before then. Under Article 484 of the original CRR, legacy capital instruments are grandfathered out to end-2021, and the Council and European Parliament (EP) did not alter this Article in their drafts for CRR2 – hence we assume no change to the grandfathering of those legacy instruments, even if the EP's January 1, 2020 CRR2 timetable were to be agreed.

In Rounding Up the Regulatory Calls, September 7, 2018, we ran through all bonds with regulatory call language. Below, we run through our top picks in legacy with such call language, plus recap those with no such language, which could be prone to LME, or consent solicitation, depending on the economics.

Regulatory make-whole calls – our top picks in legacy

At the end of the grandfathering period, these bonds lose Tier 1 value and can be called, but at a make-whole price which is well over par. As discussed in Revisiting Make-Whole Calls, November 23, 2018, Santander UK has already used such a call and, while we don't expect any other such calls before 2022, we would expect nearly all issuers with such instruments outstanding to follow suit. Looking at the Exhibit 34 in Thematic recommendations, of all legacy Tier 1s with make-wholes, most are not even EL-eligible as they are from SPVs, or UK opcos. The only two which should have some Tier 2 value – and so the economics of leaving them outstanding, rather than using the call option, are more questionable – are the Barclays $6.96% (although it won't have EL value, as it's an opco) and Rabo's £6.91%.

We fully expect banks to use their make-whole calls for the bonds which lose capital and EL value: The SANUK make-whole shows that issuers are willing to use these options when they become available. The yield-to-make-whole call is up to 230bp higher on the bonds we like compared to the equivalent yield-to-call on ~22 call AT1. We expect make-whole prices to be largely offset by swap gains on these bonds, as detailed in Exhibit 40. **Our highest conviction on make-whole calls are non-EEA law legacy Tier 1** which will lose all capital value post-CRR2, and for UK banks the BoE views these as impediments to resolution, in our view – hence there will be supervisory pressure to use the make-whole call, as well as the economics making sense too. Overall, we see the best pick-up over AT1 in the Lloyds £7.881%, HSBC £5.844% and Commerz $8.151%. Of the interesting-looking returns on some of the make-whole call bonds, we do not buy the Lloyds £7.281% due to ambiguous and certainly hard-to-follow language linked to the call, nor the RBS $7.648% and $6.425%. The potential yields on the RBS bonds are around the same as for HSBC, and we prefer the latter, considering the potential outcomes of the Brexit process over the coming weeks.

Regulatory par call legacy bonds – a mixed bag

Again, whether issuers use regulatory par calls on their grandfathered bonds from 2022 will depend on the underlying economics and also supervisory pressure. As mentioned above for make-wholes, for those legacy bonds which are non-EU law and have no contractual recognition of bail-in, the supervisor will view these as impediments to resolution (the BoE in particular), and will require them to be called as soon as possible – right after grandfathering ends. In the legacy world which is generally populated by old Tier 1 structures, we would also include the Barclays $7.625% 22 CoCo, which has a reg par call. As an aside, this bond can be par called when the CRR2 provisions are implemented (as it is under New York law) and has a maturity in November 2022. Although it yields just 1% to the earliest possible CRR2 date of January 1, 2020, we believe that the far more likely date for a call option to kick in (implementation or grandfathering date) will be very close to the actual maturity, and yield to maturity is 6.1%. Hence we are not inclined to assign a recommendation to sell to the bonds.

Instead, **we sell Lloyds $12% and SANUK £7.037%,** with just 5.5% and 0.8% YtRPC in 2022, which are also both opco bonds hence could face BoE encouragement to also call then, aside from the simple loss of regulatory capital value. **We would also sell BNP's $7.195%,** yielding just 5.9% to a reg par call in early 2022 (and likely facing encouragement to do so, as it's under New York law). Considering that BNP's $6.75% March 22s are yielding 6.9%,there's arguably little value in the $7.195% and it's an issuer we are avoiding due to exposures to Italy, as discussed in 3Q exposure update. The old RBS $7.64% is now floating and has a next official call in 2027. RBS doesn't view these bonds as eligible as capital in its Pillar 3 report – we're less sure and would expect Tier 2 value, as although it has no waiver of set-off rights, as a preference share, it does not have set-off rights to start with. The bonds also ought to work as EL, in our view. For these reasons and the Brexit-related thoughts noted above, again we would simply avoid it.

Legacy bonds with no early call language

For those bonds without any regulatory call language, and as discussed in The Only Way Is LME, November 6, 2018, issuers who wish to rid themselves of such bonds due to loss of regulatory value are most likely forced down the path of LME or, possibly, consent solicitation. As discussed in that note, our favoured legacy bonds here are naturally those with non-EU law as, again, the supervisors (and particularly in the UK) will be strongly encouraging the banks to diminish the size of these issues as much as possible. While it would not remove a resolution disruptor completely, at least arguably the possible size of litigation problems reduces (monetary amount) as the size of the problematic bonds reduce. In fact, all Tier 1 legacy bonds with this problem either have make-whole calls or reg par calls. There are also no interesting legacy bonds to discuss, in terms of non-UK issuers with English law legacy bonds.

Not suffering from an underlying law problem, most of the legacy Tier 1s without early call language are preference shares. As we discussed in The Only Way Is LME, **we have our reservations about these bonds linked to newsflow on preference shares** earlier in 2018, when Aviva stated that it had the ability to cancel preference shares at par. While the subsequent events might suggest that there is little appetite now for banks to do this (and Aviva ultimately did not do it), considering partly the FCA's reaction, it still makes us wary of holding such bonds, at least those trading above par. Barclays' €4.75% is also a preference share which is callable in 2020, unlike the other, long-call preference shares. As we noted in Bank Capital & The End of Libor, November 5, 2018, we lack conviction that this actually gets called at the call date, due to its status as cheap grandfathered Tier 1 until end-2021, diminishing its yield to expected call date (for us, not before 2022). We therefore have a recommendation to **sell Barclays' €4.75%** given that the yield to a December 2021 call (considering the euribor+71bp back-end) is just 5.1%.

Also arguably falling into the realm of legacy bonds without early call language would be a number of UK bank opco subordinated bonds. As discussed in BoE's MREL Part 2 - The Fate of Opco Sub Debt, September 13, 2018, we have little conviction that the banks will be pressured by the BoE to get rid of such debt (which won't count as MREL/TLAC under BoE rules, but is able to count as capital under EU rules). We believe that non-top holdco UK bank sub debt (a mouthful, but we capture the intermediate holdcos in this definition) – as long as they are written under English law – adds some complication to a resolution, but they are not impediments. Away from the make-whole bonds in this category – which we believe will be make-whole called, as we argued above – you either have to generally love these no-language bonds in terms of what they yield right now, or have strong conviction that any LME will be above where you currently own the bonds. As noted above, we have no conviction on the latter. Of the list of bonds, **HBOS Plc $6% and Santander UK Plc $7.95% are interesting, as here there will certainly be pressure to get rid of them due to them being impediments to resolution;** all the rest are under English law. We would certainly expect those with calls to get called at the first call date, at least, except in cases where the economics of leaving opco sub debt outstanding are very favourable. There is nothing else interesting away from these two NY law bonds (and in fact, those are illiquid and so a recommendation to buy is not appropriate in any case), due to our lack of excitement regarding LME here, and standing ahead of Brexit. We discuss HSBC opco Tier 2 more in CRR2 – changing capital characteristics, but for the HSBC bonds here (see Appendix 2: Legacy bonds), they already appear to trade somewhat better than holdco Tier 2s and, arguably, being Tier 2 at the non-ring-fenced banks, they would theoretically go first in a resolution. For example, HSBC Holdings £7% 38s are yielding 4.5%; HSBC Bank's £6.25% 41s are 4.2%.

As an aside, discos also fit the bill of being issued from UK opcos. However, as first discussed in Discounting Discos, May 23, 2018, discos simply offer cheap funding for banks – whether they are counted as Tier 2 (and in our view, only BNP's discos will have that value, post-2021), EL (only DNB (pre-Brexit, as they are English law), BNP, one RBS, SocGen and Stan Chart) or simply funding. Hence we don't expect any more quarterly calls to be exercised any time soon, and LME only at far lower cash prices, linked to profit (the last one was Barclays, at 70). **Our only recommendation to buy in discos remains with DNB,** after Nordea got called, as expected, due to its English law problem. In Not So Constant-Maturity Swaps, May 25, 2018, all CMS these would lose capital value in 2022, in our view, but more than half should retain EL value. Unlike discos, though, these types of bonds are certainly not cheap funding, as they typically pay a margin over long-end rates, although this sector suffers from a lack of liquidity.

Looking for low-beta liquidity in AT1

AT1 is our preferred section of the bank capital market... With a clear eye on our credit strategists' preference for liquid bonds going into 2019, we'd argue that AT1 is the most liquid class in the bank debt stack and is also supported by supply technicals. We expect some net issuance going forward, but with most banks having filled their AT1 buckets we are not concerned about oversupply. The returns are significantly higher than elsewhere in the debt stack, and **we think that coupon clipping here provides protection from a grind wider in credit.**

…but not just any AT1s. We like low-cash-price, low-reset AT1s in higher-quality names: First call hopes are already priced out, but valuing non-called AT1 to perpetuity seems overdone, so we look at valuations to a second call date five years after the first. Given that the bonds are trading at low cash prices, we think that further volatility ought to hit these bonds less than above-par bonds, particularly for the lower-beta, higher-quality issuers. We do not expect them to be immune from weakness, but with the starting cash prices, no 'repricing to non-call' needed, and decent yields to second and third calls, we'd expect weaknesses to be less here than elsewhere.

We are also buyers of English law AT1s which we believe will be called at the first call date: Our recommendations here are for those bonds close to or below par issued by higher-quality banks. Non-EEA law bonds will be ineligible after CRR2 implementation, which means that issuers will be incentivised to call at the first call date. This does create reg par call risk (see CRR2 – changing capital characteristics), but this can be navigated by targeting close to or below-par bonds.

Extension – the first non-called AT1 coming up

Extension remains the key risk for AT1, in our view (aside from volatility), and we expect this to get more focus given the increase in AT1 first call dates in 2019. The CRR is explicit that issuers must make economic decisions to call regulatory capital instruments, which could mean issuers not calling if the coupon reset spread is greater than the spread of a newly issued AT1, although in practice we expect that some issuers would look to be bondholder-friendly and exercise an out-of-the-money call option provided the premium was not material.

We expect to see the first non-call of AT1 in 1Q19: The Santander €6.25% March 2019 and $6.375% May 2019 calls look out-of-the-money after the recent sell-off. We expect issuers to make economic decisions to call – and particularly this issuer, who has not got any history of being overly bondholder-friendly, in our view – and based on current AT1 spreads we would not expect these bonds to be called. However, this appears to be largely priced in. **The decision not to call would be primarily Santander's,** in our view, although it would be in line with CRR requirements on economic calls. Santander could have chosen to pay a premium on newly issued AT1 and pre-financed the call ahead of seeking regulatory approval. The supervisor (or indeed, its shareholders if they cottoned on to it) could have questioned the size of such a premium, but if the refinancing has already taken place it is difficult to see supervisor preventing a call, in our view, although it could lead to greater supervisory scrutiny of future capital issuance and redemptions.

We have recommendations to sell on Santander's AT1s, from when we sold a number of periphery-linked issuers in May. However, **we would buy Santander €6.25% as the price action has been overdone,** in our view. While we do not expect a call in March, it will become callable quarterly, meaning that any rally in spreads could lead to a refinancing. Even if it was left outstanding until 2024 (five years after the first call) it would yield 6.8%, ~90bp above the Caixa €6.75% 2024 call. We are less positive on the Santander $6.375% because we prefer € AT1 on a cross-currency-adjusted basis, and we expect € AT1 to be relatively more protected from negative movements in HY $ credit where our strategists are bearish.

Under normal circumstances, we expect banks to pre-finance AT1 calls 3-6 months ahead, in line with behaviour we have seen so far. BBVA, Barclays and SocGen all issued new AT1 in this window (or longer, at seven months for SocGen) before calling, which we think is due to the approval process. Banks are required to replace called or matured regulatory capital (unless they have an excess) so we expect them to issue ahead of seeking regulatory approval to call, which takes ~3 months. Bondholders can be notified once approval is granted with a typical notice period of 30-60 days, so banks issuing 3-6 months ahead of call dates should give investors comfort on calls.

Extension risk greatest in 2017 and early 2018 vintage AT1s

2017/early 2018 saw AT1s issued at the tightest levels and hence they carry the lowest reset rates. Spread movements in the second half of 2018 have moved these call options out of the money, with $ AT1 spreads widening by 239bp since UBS issued its $5% (lowest reset $ AT1) and € AT1 spreads widening by 377bp since Belfius issued its €3.625%. These bonds have call dates in 2022 and beyond so clearly there are no imminent non-calls here, but some of these bonds like UBS and Belfius are already pricing to perpetuity. We'd note that there is also idiosyncratic extension risk for banks (rather than broader market widening-related) such as for DB and Danske, considering where their AT1s now trade. We are tempted into neither – with an overall bearish view on credit, our mantra is to stick with the best-quality, well-priced issuers, particularly in AT1. Our equity research colleagues expect that the Danske money laundering case will take a long time to resolve, so we expect this to overshadow spread performance for some time.

We continue to see value in low-cash-price, low-reset AT1 because these bonds should not price to perpetuity. As discussed in detail in Perpetuity Is Not Forever, September 10, 2018, we do not think that perpetuity exists for AT1 since capital regulations generally alter every 5-10 years and we already doubt the usefulness of AT1 as going concern capital (as does the SSM, we believe). We expect the point of non-viability to be reached ahead of triggers being hit, particularly for low-trigger AT1, so we expect that in the next decade much outstanding AT1 could well become obsolete and therefore callable (all have regulatory par calls). While low reset AT1 may well not be called at the first call date, we prefer valuing bonds to the second or even third call dates rather than perpetuity.

Our top picks in low-reset AT1 are UBS $5%, Belfius €3.625%, KBC €4.25% and ABN €4.75%: We think that these bonds have been oversold, with the market pricing these to perpetuity. Given that we do not think perpetuity is a risk for AT1, we prefer looking at the yield to a second call date five years after the first (using this also as a rule of thumb for more frequently callable bonds), and like valuations on this basis. We also like Nordea €3.5%, $5.25% and $6.125%, and expect that the two $ AT1s will be called at the first call date since the structure – converting to mandatory coupons if capital value is lost – has been disallowed by the EBA.

Exhibit 20: Alternative AT1 valuations

ISIN	Ticker	Coupon	First Call	Call Frequency	Amt O/S (m)	Reset	CET1 Trigger	Offer	YT1C	YT2C	YT3C	YTP
USD												
XS1202090947	NDASS	5.25	13/09/2021	Annually	550	MS+342.4	8.000%	96.1	6.7	6.4	6.4	6.3
US65557DAL55	NDASS	6.125	23/09/2024	Semi-Annually	500	MS+352.9	8.000%	95.8	7.0	6.9	6.8	6.7
XS1584880352	SEB	5.625	13/05/2022	Anytime	600	MS+349.3	8.000%	96.6	6.7	6.6	6.7	6.6
XS1535953134	SWEDA	6	17/03/2022	5 Years	500	MS+410.6	8.000%	97.3	6.9	7.1	7.2	7.2
CH0400441280	UBS	5	31/01/2023	Annually	2,000	MS+250.7	7.000%	83.8	9.7	7.6	7.1	6.4
EUR												
XS1693822634	ABNANV	4.75	22/09/2027	Semi-Annually	1,000	MS+389.8	5.125%	92.0	6.0	6.0	6.0	5.7
BE0002582600	CCBGBB	3.625	16/04/2025	5 Years	500	MS+293.8	5.125%	79.1	8.0	6.7	6.4	5.5
BE0002592708	KBCBB	4.25	24/10/2025	Annually	1,000	MS+359.4	5.125%	89.0	6.3	6.0	6.0	5.6
XS1725580465	NDASS	3.5	12/03/2025	Semi-Annually	750	MS+300.3	8.000%	90.6	5.3	5.1	5.1	4.7
XS1043535092	SANTAN	6.25	12/03/2019	Quarterly	1,500	MS+541	5.125%	96.3	22.3	6.8	7.0	7.0

Source: Bloomberg, Morgan Stanley Research; YT1C = yield to first call, YT2C = yield to second call, five years after the first possible call date, YT3C = yield to third call five years after the second possible call date. Prices updated around 16:30 UK time on November 29, 2018. We do not think extension risk exists for Nordea $ 5.25% and $ 6% (structure disallowed by the EBA), or Swedbank $ 6% and SEB $ 5.625% (English law).

Knee-jerk reactions on non-calls more likely in $

We do not expect large selling of non-called AT1 because most of the investor base can hold truly perpetual bonds, reducing the risk of forced selling, and investors already factor extension into their investment decisions, based on data from our AT1 survey. Our survey data show that 88% of the AT1 market is held by preferred funds or asset managers, which can typically hold true perps, while 78% of respondents also value AT1 to maturity (or call and maturity) when buying. However, it's clear that in the past (Standard Chartered's $6.409s, which dropped more than 5 points on a non-call, spring to mind), **Asian investors in particular have reacted badly to non-calls** and, while that reaction may lessen in the future, we would not expect it to disappear entirely from the $ AT1 market.

We balance duration on low-reset bonds with non-EEA law bonds: These are bonds which we expect to be called at the first call date, as they will become ineligible once CRR2 is fully implemented, which we expect to be end-2022 for non-EEA law bonds once we factor in grandfathering. There is reg par call risk for non-EEA law AT1 with first call dates after this date, so we are cautious on high cash price bonds that fall into this category. Our top picks are SEB $ 5.625% and Swedbank $ 6%.

AT1 relative value

Preference for € over $

€ AT1 looks more attractive than $ AT1 on a cross-currency-adjusted basis. Exhibit 21 shows pairs of € and $ AT1 with similar call dates, showing a significant spread pick-up for € AT1. There is up to ~50-140bp of upside when comparing € AT1 swapped into $ compared to simply buying the equivalent bank in $ AT1. HSBC is clearly anomalous here, although we note that the €6% has a much higher reset than the $6.25%, at €MS+5.338% compared to $MS+3.453%. The difference between € and $ has grown since we wrote about it in our 2018 outlook, which is largely a function of the relative performance of the two credit markets over the course of the last year, so we maintain our preference for € AT1. This preference is also supported by our US credit strategists' outlook for 2019, as discussed in Overview: TLTRO to divide the year.

Exhibit 21: EUR bonds swapped to USD can generate a pick-up ex HSBC

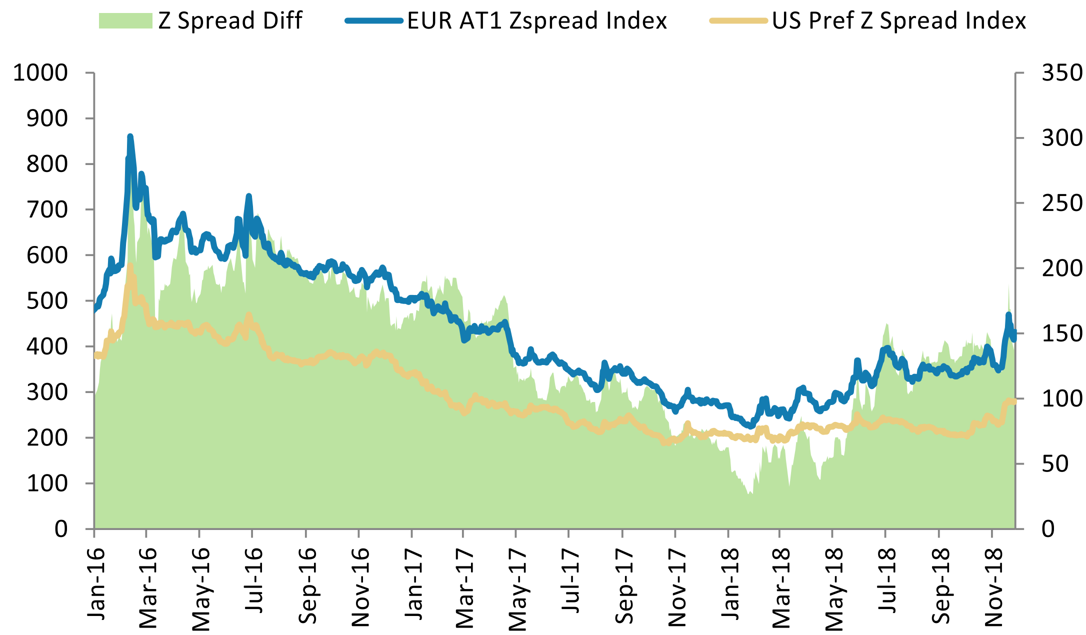
ISIN	Ticker	Currency	Coupon	Call	ZTC	Offer	Year Frac	FX Basis	3m6m basis	ZTC USD
US06738EAB11	BACR	USD	6.625	15/09/2019	596	98.3				
XS1068574828	BACR	EUR	6.5	15/09/2019	736	99.5	1	9.625	5.8	740
USF43628C734	SOCGEN	USD	7.375	13/09/2021	461	99.5				
XS0867620725	SOCGEN	EUR	6.75	07/04/2021	513	103.8	2	11.5	5.75	518
USF1R15XK698	BNP	USD	6.75	14/03/2022	368	100.3				
XS1247508903	BNP	EUR	6.125	17/06/2022	409	106.5	4	12.625	6.1	415
US404280BN80	HSBC	USD	6.25	23/03/2023	452	95.5				
XS1298431104	HSBC	EUR	6	29/09/2023	398	107.7	5	13.25	6.1	405
US65557DAL55	NDASS	USD	6.125	23/09/2024	408	95.5				
XS1725580465	NDASS	EUR	3.5	12/03/2025	491	90.4	6	13.5	6.15	498

Source: Bloomberg, Morgan Stanley Research. Prices updated around 16:30 UK time on November 29, 2018.

Cheapening up against US prefs

While we don't cover US banks, their preference shares are interesting to compare to $ AT1 as both are Tier 1 bank capital and are bought by a similar investor base. AT1s were at their tightest level to US bank prefs early this year with a spread differential of just 27bp. Since then, they have widened out to 152bp, which may once again make these attractive for portfolio diversification for US preferred funds. However, considering that AT1s are not part of any preferred or HY index, **we would not expect an increase in demand here,** particularly set against an expected difficult year for US HY, which could result in fund outflows. **The higher AT1 spread compared to US bank prefs is partly due to the less bondholder-friendly structure,** before you factor in credit considerations between European and US banks. Prefs do not have contractual triggers which would write-down or convert bonds to equity while the bank is a going concern, so could only absorb losses in a resolution or insolvency (although this is academic since we think that AT1 triggers will only be hit in resolution). Coupon risk is lower for US bank prefs as there are no MDA-linked coupon restrictions, and dividend stopper language adds incentives to pay discretionary Tier 1 coupons that European bank AT1 (ex. UBS/CS) does not have.

Exhibit 22: AT1 versus US bank prefs (spread)

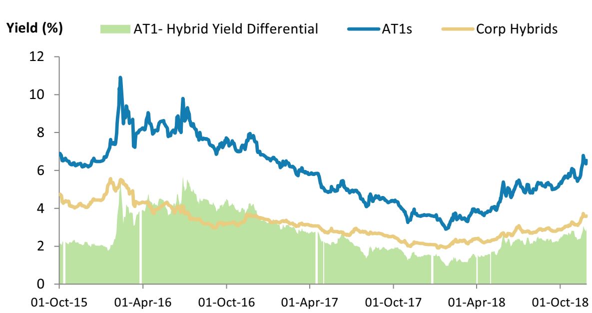


Source: Bloomberg, Morgan Stanley Research

Pick-up over corporate hybrids increasing

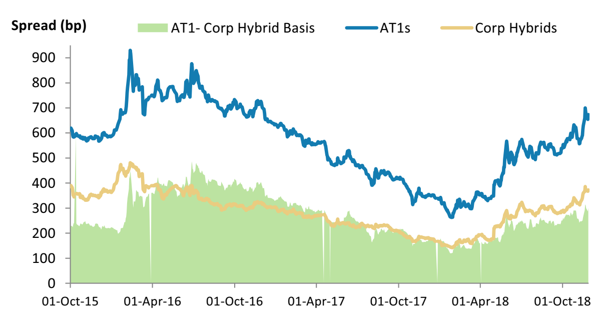
€ AT1 has cheapened up against corporate hybrids: We monitor the corporate hybrid market in the same way we keep an eye on US bank prefs, to understand how returns compare to AT1s for investors in higher-spread, higher-beta instruments. The basis between AT1 and corporate hybrids has widened 122bp since the beginning of 2018, with contingent convertible bank debt spread now 301bp higher, making AT1s more attractive than they were this time last year on a relative basis. However, **corporate hybrids carry lower extension risk than AT1** since most become senior funding instruments if not called, although extension risk is higher for bonds not rated by S&P. AT1s retain full capital treatment if not called, reducing call incentives versus corporate hybrids. Hybrids also do not carry MDA-linked coupon risk, so are structurally more bondholder-friendly than AT1. However, given that our credit strategists are defensive within corporate hybrids and only maintain exposure to short-call IG-rated paper, we think that AT1 looks attractive on a relative value basis.

Exhibit 23: AT1 versus corporate hybrids (yield)



Source: Markit iBoxx, Morgan Stanley Research

Exhibit 24: AT1 versus corporate hybrids (spread)



Source: Markit iBoxx, Morgan Stanley Research

Selective in Tier 2

We are equal-weight Tier 2 as we see value in low-beta issuers: Tier 2 is a contracting market, with negative net supply in 2018, which is a trend we expect to continue into 2019 (see Supply tailwinds: TLTRO and MREL). Liquidity can be challenging in Tier 2, but the supply technical should protect spread performance. We have a preference for low-beta issuers, some of whom are not AT1 issuers (i.e., BPCE) so Tier 2 offers the highest-yielding investment opportunity for the names.

Extension risk for callable Tier 2 is underestimated, in our view, with some callable Tier 2 reset spreads already tighter than spreads on bail-in senior. The market is not pricing extension risk in callable Tier 2 in the same way it has done in the AT1 market, so we think that repricing is a risk for low-reset Tier 2 should this change, and thus we prefer increasing call certainty through non-EEA law bonds and high-reset Tier 2. In bullet Tier 2, we recommend switching into low-beta issuers.

Extension – it's not just AT1

Extension risk exists for callable Tier 2 as it does for AT1, and we think that spread movements in 2018 have increased the risk of extension in some 2017-18 vintage bonds that have low resets. As we discussed in Looking for low-beta liquidity in AT1, issuers are required to make economic decisions at the call date under CRR. We are cautious on low-reset Tier 2 bonds where we think that spreads indicate non-call potential. **The economic decision for Tier 2 is complicated by regulatory amortisation.** In a purely economic decision, an issuer should compare the reset spread against the spread of issuing a replacement instrument, which is far more straightforward for AT1, which retains full capital value if not called. Tier 2 loses regulatory capital value on a straight line basis in the final five years to maturity, becoming less valuable to the issuer, so it does not make sense to compare the reset spread to a replacement Tier 2.

Issuers should compare the reset spread to the weighted average spread of a newly issued Tier 2 and NPS, in our view. The introduction of bail-in regimes such as TLAC and MREL has increased the regulatory value of non-called Tier 2. The amortised portion of Tier 2 will still count as loss-absorbing debt until the final year before maturity, so while a non-called bond provides decreasing Tier 2 value, the remainder of the nominal offers the equivalent of NPS. We think that the appropriate comparison for refinancing is the weighted average of these two spreads.

Banks have already not called

Banks have not called Tier 2 in the past so issuers are less likely to be put off by the stigma of being the first to miss a call. Since the shock non-call of the DB €3.375% 14-09 in late 2008, we have seen at least 14 European banks not exercise first call options on dated, callable Tier 2, rising to over 20 banks across Tier 1 and Tier 2. We believe that this lowers the bar for out-of-the-money call options to not be exercised, which, combined with the explicit CRR requirement for regulatory capital calls to be economic, makes us cautious on low-reset Tier 2. **Extension risk is highest where reset spreads are**

close to current NPS spreads. While we view the weighted average Tier 2 and NPS spread as the appropriate refinance cost, a more straightforward approach to assess extension risk is to compare the reset spread to the current spread on bail-in senior with ~5 years to maturity. Exhibit 25 shows those bonds that would reset at a spread close to or below current NPS levels if not called, so we think that they carry higher extension risk that in some cases is not being priced in.

We recommend selling SocGen €1.375%, Belfius €1.625% and ING €2% and €1.625% callable Tier 2 as extension risk is not priced in. The valuation of non-called Tier 2 is simpler than for AT1, as yield to maturity offers an alternative valuation for dated Tier 2, particularly for those with one-time calls. Cash prices could fall by more than 2pt for the SocGen and Belfius bonds, and over 1pt for the ING bonds, if they priced to maturity. All the bonds in Exhibit 25 are one-time calls, except for the Belfius €1.625% which has an annual call, giving the issuer greater optionality. We think that Caixa €2.25% and Lloyds €1.75% also carry high extension risk, but that current valuations reflect this.

Exhibit 25: Tier 2 resets versus NPS spreads

ISIN	Structure	Ticker	Coupon	Call Date	Maturity	Reset	Z Spread	T2 Reset - NPS Spread
FR0013320033	Tier 2	SOCGEN	1.375	23/02/2023	23/02/2028	MS+90	211	
XS1718306050	BIS	SOCGEN	0.5	-	13/01/2023	-	96	-6
XS1808351214	Tier 2	CABKSM	2.25	17/04/2025	17/04/2030	MS+168	333	
XS1897489578	BIS	CABKSM	1.75	-	24/10/2023	-	170	-2
XS1788982996	Tier 2	LLOYDS	1.75	07/09/2023	07/09/2028	MS+130	325	
XS1517174626	BIS	LLOYDS	1	-	09/11/2023	-	157	-27
BE6303010472	Tier 2	CCBGBB	1.625	15/03/2023	15/03/2028	MS+123	255	
BE6299156735	BIS	CCBGBB	1	-	26/10/2024	-	97	26
XS1689540935	Tier 2	INTNED	1.625	26/09/2024	26/09/2029	MS+125	207	
XS1882544627	BIS	INTNED	1	-	20/09/2023	-	91	34
XS1796079488	Tier 2	INTNED	2	22/03/2025	22/03/2030	MS+135	212	
XS1882544627	BIS	INTNED	1	-	20/09/2023	-	91	34

Source: Bloomberg, Morgan Stanley Research. Prices updated around 16:30 UK time on November 29, 2018.

Increasing call probability

Non-EEA law callable Tier 2 will be called at the first call date, in our view. As discussed in CRR2 – changing capital characteristics, non-EEA law bonds without contractual recognition of bail-in powers will be made ineligible by CRR2, impacting bonds written under New York, and post-Brexit, English law. A grandfathering period is our base case, and we expect all callable regulatory capital that would become ineligible to be called at the first call date if this were the case.

We prefer switching into higher-quality Tier 2 with higher call certainty: We **recommend buying BPCE €2.875% 27-22 and ABN €2.875% 28-23** as these have resets at around ~MS+240bp, which we view as high for higher-quality core domestic eurozone issuers, giving us greater confidence on the calls. We also **buy English law bonds trading below par** which we expect will be called at the first call date, which carry possible upside potential from reg par calls post-CRR2 should the grandfathering period end before the call date. We like Caixa €3.5% 27-22 and €2.75% 28-23, KBC €1.625% 29-24, SEB €1.375% 28-23 and Swedbank €1% 27-22. Finally, we **reiterate recommendations to**

buy on Swiss Tier 2 CoCos, as, although they provide '3 for 2' TLAC value post-2019, we expect them to continue to be called – the CS €5.75% 25-20 and UBS €4.75% 26-21 trade cheap to peers, although we acknowledge that this could be in part because some Tier 2 investors cannot buy CoCos.

Switching into lower-beta bullets

We are equal-weight in Tier 2 and prefer higher-quality, low-beta names: In bullet Tier 2, we look to switch into banks which are lower beta, in our view:

- **Sell BNP $4.25% 24 and $4.375% 25s and buy BPCE $5.15% 24 and $4.5% 25:** BNP has significant Italian exposure, and while we don't worry that this will have a serious impact on credit fundamentals, we remain concerned that Italian volatility could weigh on spreads. BNP had total credit exposures of €153 billion at June 30, 2018, 9.8% of its total exposures, and Italy accounted for 44% of stage 3 loans at the same date. We think that $ technicals such as index inclusion mean that BPCE trades cheap, so we like the ~20-30bp upside for switching into domestically focused BPCE.

- **Sell HSBC $4.25% 25 and buy Rabo $4.375% 25:** We give up ~5bp of spread for this switch, but HSBC will likely face volatility going into the Brexit endgame, albeit less than domestic UK banks, so we prefer Rabo here.

- **Sell Credit Ag €2.8% 25 and buy Belfius €3.125% 26:** We are cautious on Credit Ag's sizeable Italian exposure for the same reasons as BNP. Agricole had €107 billion of total exposure to Italy at June 30, 2018, 13% of its total. Italy accounted for 38% of defaulted exposures at the interim results too. Switching into Belfius offers ~30bp upside for moving into a high-quality, domestically focused Belgian bank.

- **Sell BNP €2.75% 26 and buy BPCE €2.875% 26:** As discussed above, we are concerned about the spread impact that Italian volatility could have on BNP. We prefer switching into domestically focused BPCE for the same spread.

- **Sell Santander €3.25% 26 and buy Commerz €4% 26:** This switch offers ~50bp of upside for switching out of Santander, with UK and some possibly volatile EM risk, into Commerz. Commerzbank has cleaned up its balance sheet, with CET1 now up at 13.2%, NPLs below 1% and its ship finance portfolio shrinking by 76% to €1.1 billion in the year to September 30, 2018.

Bail-in seniors – trading better than they should

The bail-inable senior (BIS) market is arguably still in its infancy but, as discussed in Supply tailwinds: TLTRO and MREL, there's a lot more to come, in both the non-preferred senior and holdco senior formats. Regular readers will know that we maintain clusters of bonds from specific issuers, trying to marry up ideally maturities rather than call dates (although we do use callables, when they are in the money), for preferred senior, bail-inable senior and Tier 2. We update these clusters as new bonds are issued and the universe gets larger. We've included a few representative clusters in Exhibit 26. Generically, **€ BIS (where we have more comparable data) tends to trade halfway between preferred senior and Tier 2** for many issuers, but there are notable outliers. For longer-dated (2025+) maturities, we get a generic pref senior to Tier 2 differential of 100-140bp, and a pref senior to BIS of 50-60bp. What's interesting – and somewhat disappointing – is that this is almost exactly double the February relationship, when the bank debt market was close to its tights of the year. **This suggests some stability in the 'halfway house' BIS valuation.** As an aside, in $, where we lack many meaningful clusters, the spread between BIS and Tier 2 is much closer than preferred to BIS, potentially reflecting the lack of 'only senior' restricted US-based buyers, or longer experience with bail-in.

It's disappointing as, in our view, we had been expecting BIS to be trading closer to Tier 2s, on the basis of if a bank went into resolution, generally we would expect BIS to get bailed-in/converted pretty much to the same extent (i.e., close to 100%) as Tier 2s. The resolution authority wishes to create an extremely strongly capitalised bank on the Monday after the resolution and, right now, we would expect that market participants would need to see a tremendous level of CET1 to continue trading. Furthermore – and putting this theoretical weekend resolution aside for now – due to the multitude of problems of putting a bank into resolution on Friday night and relaunching it on Monday morning, **our expectation is that a buyer would always need to be found.** This adds further complexity to any thoughts on Loss Given Resolution. **Any buyer willing to absorb a failing/failed bank with extraordinarily limited notice would surely require all bail-inable instruments to be bailed-in,** boosting the failed bank's capital to the highest possible level, before agreeing to buy (we assume the equity, for €1, as per Santander's purchase of Popular). Thus, our working assumption is that all bail-inable debt is zeroed.

Senior supply should dominate 1Q19

It could be due to ratings versus Tier 2, it could be due to certain large insurance companies only being able to buy 'senior' debt – **but BIS keeps trading better than we think it should, from a risk perspective.** And that relationship with Tier 2 and preferred senior has remained – despite a lack of Tier 2 issuance and plenty of BIS issuance over this year. Where does this leave us? **Fearing a great deal of senior supply in 2019, we start the year underweight,** but if the preferred-BIS-Tier 2 generic relationship persists, Tier 2 should also widen on senior issuance. However, clearly Tier 2 spreads have widened a lot already and, at some point, there will be a limit to where these move to, on the basis of senior issuance – it's not like Tier 2 and BIS trade closely together and thus the former should be highly sensitive to the issuance of the latter. Hence, with our clear view in seniors and Tier 2 being that supply is the problem, not fundamentals, we're happy with being equal-weight Tier 2 and underweight seniors. Getting a decent yield (in a low-yield environment) on Tier 2s for what we see as currently the same risk as BIS is fine with us.

As noted above, the preferred-BIS-Tier 2 relationship is far from homogeneous and a number of recommendations emerge from our broader cluster analysis.

- We recommend **selling BPCE's €2.125% March 21 pref seniors** bid at 31bp (Danske's, albeit with its problems, are at z+55bp). Likewise, we **sell SocGen's €0.125% Oct 21s at z+28bp and €0.75% May 23s at z+39bp.**

- With a view that the relationship is simply wrong (and BIS should be closer to Tier 2s), we **sell Agricole's €1.875% 26s.** We also **sell BNP's $3.8% Jan 24s** BIS considering the differential between that and BNP's $3.25% March 23 pref seniors is the same as the differential between BPCE's 28 pref and BIS bonds (in Exhibit 26).

- We **sell Agricole's €2.625% 27s T2s and buy BFCM's €2.625% 27 T2s,** preferring the latter as a credit (smaller exposure to Italy), the cheaper valuation and 132bp differential with its preferred senior, versus Agricole's 96bp.

- We **buy Caixa's €2.75% 28nc23 T2s** as it's English law so gives a good certainty of call, and is trading over 100bp behind its BIS, which in turn is just over 50bp behind preferred senior.

Morgan Stanley & Co. International plc ("Morgan Stanley") is acting as financial advisor to CaixaBank in relation to the proposed sale of 80% of its real estate business to Lone Star Fund X and Lone Star Real Estate Fund V as announced on 28 June 2018.CaixaBank has agreed to pay fees to Morgan Stanley for its financial services. Please refer to the notes at the end of the report.

Exhibit 26: € and $ preferred senior-BIS-Tier 2 clusters

B/S	ISIN	Structure	Ticker	Cpn	Maturity	Amt os (m)	Rating	Offer	YTM	Zspd	BIS-Snr	T2-BIS	T2-Snr
EUR Clusters													
Sell	**XS1204154410**	**LT2**	**ACAFP**	**2.625**	**17-Mar-27**	**2,000**	**BBB+/Baa2/A**	**102.2**	**2.3**	**165**			**96**
Sell	XS1538284230	BIS	ACAFP	1.875	20-Dec-26	1,500	A-/Baa2/A+	100.7	1.8	112		52	
	XS1605365193	Pref Snr	ACAFP	1.375	3-May-27	1,500	A+/A1/A+	99.8	1.4	68	44		
Buy	XS1587911451	LT2	BFCM	2.625	31-Mar-27	500	BBB/Baa1/A	100.8	2.5	183			132
	XS1717355561	LT2	BFCM	1.625	15-Nov-27	500	BBB/Baa1/A	92.1	2.6	186			134
	XS1617831026	Pref Snr	BFCM	1.25	26-May-27	1,300	A/Aa3/A+	100.1	1.2	51			
	XS1325645825	**LT2**	**BNP**	**2.75**	**27-Jan-26**	**750**	**BBB+/Baa2/A**	**103.0**	**2.3**	**175**			**137**
	XS1748456974	BIS	BNP	1.125	11-Jun-26	1,250	A-/Baa1/A+	95.1	1.8	122		53	
	XS1369250755	Pref Snr	BNP	1.625	23-Feb-26	1,000	A/Aa3/A+	104.7	1.0	38	83		
	FR0011538222	LT2	BPCEGP	4.625	18-Jul-23	1,000	BBB+/NR/A-	114.2	1.4	122			91
	FR0013231743	BIS	BPCEGP	1.125	18-Jan-23	1,000	A-/Baa2/A	100.5	1.0	84		38	
	FR0011280056	Pref Snr	BPCEGP	4.25	6-Feb-23	600	A+/A1/A	115.7	0.5	31	54		
Buy	**XS1645495349**	**LT2**	**CABKSM**	**2.75**	***14-Jul-23***	**1,000**	**BBB-/Ba1/BBB**	**98.9**	**3.4**	**278**			**168**
	XS1679158094	BIS	CABKSM	1.125	12-Jan-23	1,250	BBB/Ba1/BBB+	97.5	1.7	161		117	
	XS1752476538	Pref Snr	CABKSM	0.75	18-Apr-23	1,000	BBB+/Baa1/BBB+	97.7	1.3	111	50		
	DE000CZ40LW5	LT2	CMZB	4	30-Mar-27	649	BBB-/Baa3/BBB	103.4	3.5	284			201
	DE000CZ40MM4	BIS	CMZB	1.875	28-Feb-28	500	BBB/Baa1/BBB+	95.6	2.4	157		127	
	DE000CZ40M39	Pref Snr	CMZB	1.5	28-Aug-28	500	A-/A1/A-	98.1	1.7	83	74		
	XS0849517650	**LT2**	**UCGIM**	**6.95**	**31-Oct-22**	**1,500**	**BB+/Ba1/BBB-**	**109.7**	**4.2**	**409**			**202**
	XS1754213947	BIS	UCGIM	1	18-Jan-23	1,500	BBB-/Baa3/BBB	91.2	3.3	318		92	
	XS1374865555	Pref Snr	UCGIM	2	4-Mar-23	1,100	BBB/Baa1/BBB	99.0	2.2	208	110		
USD Clusters													
	US05579T5G71	LT2	BNP	4.25	15-Oct-24	1,000	BBB+/Baa2/A	98.0	4.6	167			90
Sell	US05581LAB53	BIS	BNP	3.8	10-Jan-24	1750	A-/Baa1/A+	97.3	4.4	143		23	
	US05574LFY92	Pref snr	BNP	3.25	3-Mar-23	1,000	A/Aa3/A+	98.1	3.7	77	66		
	US05584KAC27	BIS	BPCEGP	3.5	23-Oct-27	1250	A-/Baa2/A	90.2	4.9	183	66		
	US05584KAE82	BIS	BPCEGP	4.625	12-Sep-28	850	A-/Baa2/A	98.0	4.9	184	66		
	US05578BAJ52	Pref snr	BPCEGP	3.25	11-Jan-28	850	A+/A1/A	92.8	4.2	118			

Source: Bloomberg, Morgan Stanley Research; Prices updated around 4PM UK time on November 29, 2018. Bolded LT2s are under English law. Note: CABKSM 2.75% has a maturity on July 14, 2028, call date is noted in the Exhibit due to our view of English law giving certainty of call.

Supply tailwinds: TLTRO and MREL

2018 supply has been above expectations, with €259 billion issued across the capital stack against our expectation of €250 billion (with one month left in the year). Gross issuance was up year on year, with reductions in Tier 2 (-€12.0 billion and AT1 (-€0.1 billion) more than offset by a large increase in bail-in senior issuance (+€23.7 billion) and a smaller increase in preferred senior (+4.5 billion)

EU banks are sat on €1 trillion of ECB liquidity across TLTRO and CPBB3, and we expect them to begin refinancing at least the first of the ~€720 billion of TLTRO drawings in 2019. As such, **we are expecting a significant increase in gross issuance in 2019**, estimating gross supply of €301 billion across AT1, Tier 2, bail-in senior and preferred senior. TLTRO refinancing will be evenly split between unsecured and secured markets, in our view, as banks have been far more active issuers of senior and we do not think the secured market can absorb a larger increase in a year in which the ECB stops net purchases of covered bonds and ABS. We also expect banks to continue to build out their MREL stacks through bail-in senior issuance despite the lack of transparency on MREL requirements, while AT1 and Tier 2 issuance are not expected to increase.

We are bearish on bail-in senior and preferred senior on supply expectations as a large volume of new issues – or simply the fear of it – should push secondaries wider. The introduction of a 'fine-tuning operation' to help banks refinance TLTRO would reduce issuance expectations, but as we would not expect any potential announcement until the middle of 2019 – and with the ECB's hand most likely needing to be forced by a building crisis in periphery bank funding – we believe that the path of least resistance for spreads is wider. Either banks pre-finance TLTRO and there's a deluge of supply, or they don't, and we approach the one year to maturity date with rising concern about how banks navigate TLTRO's end. In both cases, there would be spread widening – clearly the latter more severe, but shorter-lived, than the former. Bank-specific MREL requirements will also contribute to net bail-in senior supply, and we **recommend selling bail-in senior for banks we expect to be the greatest issuers.**

Exhibit 27: Our issuance expectations for 2019

	AT1	Tier 2	Bail-in Senior	Senior Preferred
2018 Outturn	26.1	16.9	121.8	93.8
2019 MS Forecast Gross	23.0	20.0	146.0	112.0
2019 Maturities	14.7	22.6	10.6	87.2
2019 MS Forecast Net	8.3	-2.6	135.4	24.8
Memo: 2018 Maturities	4.0	29.9	8.5	68.8
Memo: 2018 Net	22.1	-13.0	113.3	25.0

Source: BondRadar, Morgan Stanley Research forecasts

TLTRO to increase 2019 senior supply

EU banks are facing €720 billion of TLTRO maturities between June 2020 and March 2021, of which €489 billion matures in 2020. **We do not expect a similar TLTRO to be introduced,** certainly not one offering four-year funding at -40bp. The monetary policy justification for TLTRO I and II no longer exists – we are not facing a contagious sovereign debt crisis or a deflationary environment, and the provision of extra liquidity would be at odds with the ECB path of policy normalisation. A 'fine-tuning operation' could be introduced if there is a crisis in the bank debt market due to fears that banks could not refinance, but this would likely have a one- or two-year maturity at a less favourable funding cost, we believe. This could perhaps come in May or June next year due to market concerns that banks will breach their net stable funding requirements otherwise. TLTRO funding will lose 50% of its NSFR benefit when there is less than one year to the contractual maturity. The EBA is already monitoring this metric even though it is not binding until two years after the entry into force of CRR2 (expected mid-2019), so there may be regulatory pressure to maintain a ratio >100% even if banks in breach will not face regulatory sanctions.

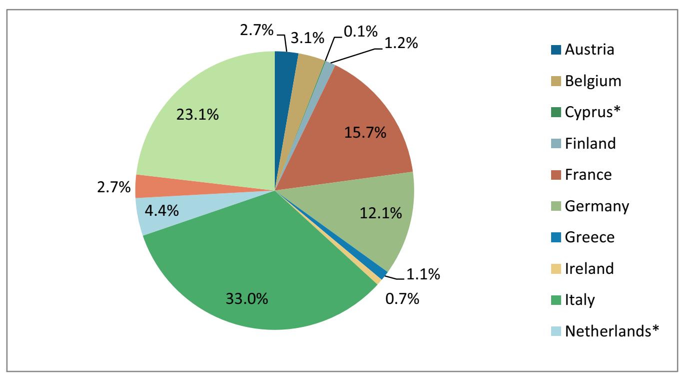
Considering the lack of clarity on a new LTRO announcement, the likelihood that it will not be as generous if it is renewed, the problematic NSFR angle and the sheer size of the €489 billion maturing in 2020, banks will pre-finance what they can in 2019, in our view. Again, the terms of any fine-tuning are likely to be less favourable – a one- or two-year programme is less valuable from a NSFR perspective, while a less generous funding cost reduces the NIM benefit of ECB funding compared to market funding. This is particularly the case in the core – so we expect non-periphery banks to begin re-financing away from ECB funding regardless. **NSFR will also increase the incentive to issue in the first half of the year, in our view.**

Exhibit 28: TLTRO maturities

Operation	Maturity	Amount (€bn)
TLTRO II.I	24/06/2020	382.3
TLTRO II.II	30/09/2020	44.3
TLTRO II.III	16/12/2020	62.2
TLTRO II.IV	24/03/2021	233.2
Total		722.0

Source: ECB, Morgan Stanley Research

Exhibit 29: ECB borrowing by member state



Source: Eurozone national central banks, Morgan Stanley Research. *MSe

Banks will refinance ~€80 billion of TLTRO in the senior market in 2019, in our view. We have assumed roughly one-third of the €489 billion TLTRO maturities in 2020 are refinanced next year, which we expect banks will refinance evenly between senior and secured markets. Senior issuance has grown far more than secured in 2018, with year-to-date issuance up 15% compared to flat for covered bonds. **We expect large net senior supply to continue in 2019,** in part because banks have been willing to pay up to access the senior market in recent weeks, with late November being particularly active despite the higher funding costs, including UniCredit's 5-year NPS private placement pricing with a coupon of $7.83%. We do not follow the covered bond market, but we think that any expectation for this market to absorb more than half of our estimated TLTRO pre-financing amount in 2019, a year in which net purchases of covered bonds by the ECB ends, is ambitious, to say the least. Issuers will look to use this market given the lower funding cost, explaining our 50% assumption, but the scale of use will be limited by depth of the market and the availability of collateral, much of which will still be posted at the ECB for TLTRO.

We expect the senior issuance to be split between bail-in and preferred senior since banks will need to be net issuers of bail-in debt for MREL. Preferred senior makes far more sense from a cost perspective, but since we expect a continued build-up of bail-in senior as banks progress towards MREL targets, then some of this net bail-in issuance will naturally refinance TLTRO drawings.

MREL issuance to continue; details remain murky

Bail-in senior issuance will remain the largest single source of issuance in 2019, repeating the trends seen in 2017 and 2018, in our view. We expect banks to continue to build out their bail-in resources because end-point MREL will need to be met with subordinated liabilities, in our view, particularly after the introduction of CRR2. Issuance of bail-in debt will also be higher than in 2018, we think, based on an increasing number of issuers being able to access the market.

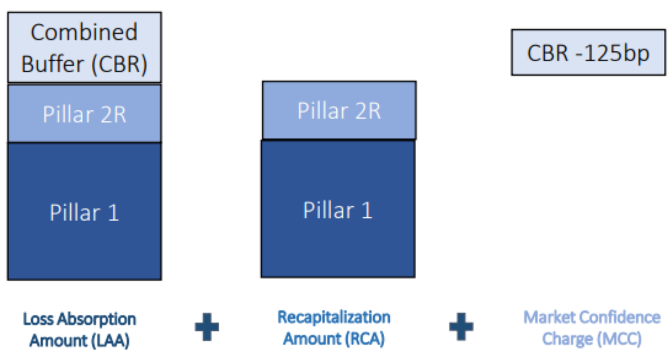
New NPS issuers will augment the established issuers' funding programmes to drive the increase in gross bail-in debt supply. Six jurisdictions had their inaugural NPS issuances in 2018, with Italy (UniCredit), the UK (Nationwide), Denmark (Danske), the Netherlands (Rabo), Sweden (Nordea) and Luxembourg (BIL). The NPS law was passed in Denmark, Austria and the Netherlands in 2018, and is due to be passed in the UK, Sweden and Finland before the end of the year (existing Nordea and Nationwide issuances are contractual and 'flip' once the law passes).

There remains a disappointing lack of transparency on eurozone MREL requirements, with the SRB setting both quantum and deadline on a bank-by-bank basis and not disclosing these publicly. Average end-state MREL requirements are ~26% of RWAs, as calculated in Exhibit 30. However, the SRB only requires 12% of RWAs plus buffers to be subordinated for O-SIIs, or 13.5% plus buffers for G-SIIs – for now (Exhibit 31). This undermines the drive for banks to have large buffers of loss-absorbing debt, in our view, and could create significant issues with the principle of No Creditor Worse Off (NCWO) in resolution as preferred senior ranks pari passu to excluded liabilities in most eurozone countries.

Ultimately, we expect that most MREL will have to be subordinated: At present, preferred senior is eligible as MREL, with the BRRD only requiring MREL to have a remaining maturity of at least one year (and contractually recognise bail-in powers if non-EEA law, if issued after 2014). The CRR2 introduces additional requirements including subordination to liabilities excluded from bail-in and containing no waiver of set-off, which will make all existing preferred senior ineligible, we believe. Grandfathering will allow preferred seniors issued before the entry into force of CRR2 (likely mid-2019) to potentially count as MREL until maturity (provided they are not SPV-issued), in our view, but all preferred issued after this date will only count if these other requirements are met.

The SRB has committed in its 2018 policy document to review the subordination policy in setting the next wave of resolution plans. Requiring a greater level of subordination will be a positive, in our view, not least as this helps to avoid NCWO issues of trying to bail-in preferred senior debt which ranks pari passu with excluded liabilities. Further upward pressure on bail-in issuance could come from the potential for CRR2 to include a requirement for 8% of Total Liabilities and Own Funds (TLOF) to be subordinated for MREL (although we note that the Parliament proposed 6.75%, in line with TLAC rules).

Exhibit 30: The SRB's MREL calculation...



Source: EBA, Morgan Stanley Research

Exhibit 31: ...and the subordination requirements

Subordination (*)	
G - SIIs	13.5% RWAs + Buffers
O - SIIs	12% RWAs + Buffers
Other	Case by case

(*) Not applicable where the resolution strategy envisages structural subordination

Source: EBA, Morgan Stanley Research

MREL disclosures are evolving, but currently are inconsistent across banks: Numerators are more consistent as these almost universally include regulatory capital, bail-in and preferred senior, but with banks that state they comply with MREL generally including preferred senior. The denominator can be expressed on either a TLOF or RWA basis, or sometimes both – since TLOF is not always disclosed, and since it differs from both total assets and the leverage exposure, this can make comparability challenging. We appreciate that only 35 banks had been given their MREL requirements at the time of the SRB conference on October 15 so it may take time for a standard to form, but inconsistent disclosure compounds the lack of transparency investors have on MREL.

Outside the eurozone

There is greater clarity on UK and Scandinavian MREL requirements where requirements have been publicly communicated and must be met with regulatory capital or bail-in senior (non-preferred senior or holdco senior). **UK banks** have had their MREL requirements for some time and we expect the regular bail-in senior issuance to continue at a steady pace as they meet their 2020 and 2022 requirements, although 2018 pre-funding may reduce 2019 issuance needs. **Danish** and **Swedish banks** must meet MREL requirements in a subordinated format by January 2022, and many issuers have communicated a recycling strategy of refinancing maturing preferred senior into NPS.

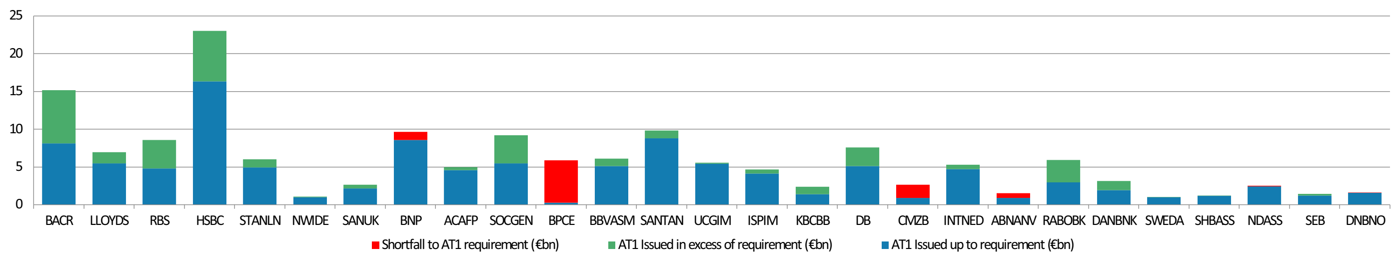
Selling bail-in senior on issuance expectations

We recommend selling bail-in senior debt of issuers we expect to be particularly active in 2019 based on the impact that this issuance could have on secondaries. We expect the largest issuers next year to be the those banks with large balance sheets and a need for continued net issuance in the bail-in markets, with **HSBC, Barclays, BNP, SocGen** and **ING** standing out in this category. We are particularly cautious on bail-in senior secondaries with maturities in or around 2024, 2026 and 2029 (or call date for UK issuers), given the preferred issuance tenors. In 2018, 58% of bail-in senior supply had a 5-year maturity (or first call), with 10-year (21%) and 7-year (17%) the next most popular. We note that a cautious market may lead banks to issue even more in the shorter-dated 5-year bucket.

Net regulatory capital issuance to end; focus on refinance

Banks have largely filled their AT1 and Tier 2 buckets so we do not expect significant net issuance of regulatory capital in the future. Net issuance of AT1 has begun to reduce as banks reach 1.5% of RWAs and outstanding AT1s come up to their first call dates, with €22.1 billion of net supply in 2018 compared to €26.2 billion in 2017. Net issuance will continue in 2019, in our view, but will be more moderate, with most issuance expected to be refinancing. Of the larger European banks, Commerzbank stands out as not having accessed the CRR-compliant AT1 market (BPCE/BFCM can raise equity more cheaply than AT1), although we note that Commerz had a low FY17 ADI figure (€0.65 billion) which may put off issuance until clarity on the ADI changes in CRR2.

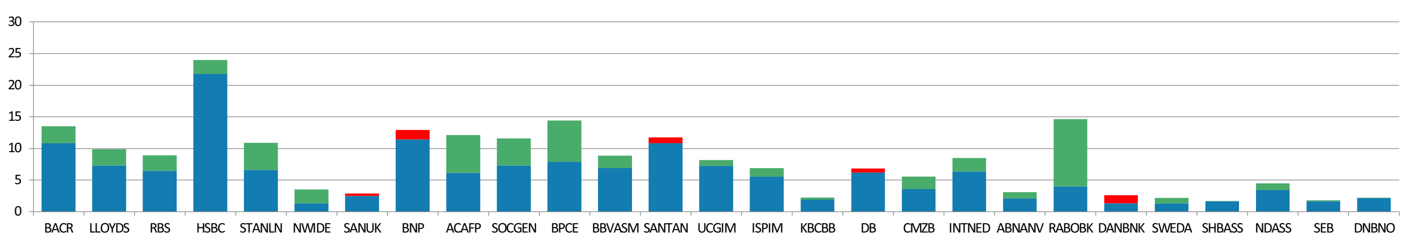
Exhibit 32: Most banks have filled AT1 minimum requirements



Source: Company data, Morgan Stanley Research; Data as at September 30, 2018 except for Rabo at June 30, 2018.

We expect negative net Tier 2 issuance in 2019, given that many banks have a significant excess, a trend which was visible in 2018 with the Tier 2 market contracting by €13.0 billion. Since the introduction of bail-in rules, regulators have increasingly focused on either just CET1, or on total loss-absorbing requirements, so there is no regulatory benefit for issuers in having excess AT1 or Tier 2 above minimum requirements, in our view. We expect banks with significant excess Tier 2 to refinance the surplus with bail-in debt.

Exhibit 33: Tier 2 surplus at European banks



Source: Company data, Morgan Stanley Research; Data as at September 30, 2018 except for Rabo at June 30, 2018.

Thematic recommendations

Exhibit 34: Thematic recommendations

B/S	Structure	Ccy	Ticker	Cpn	Next Call	Maturity	Amt os mn	Back-end	Price	YTC (%)	YTP/M (%)	ZtC/ M	MW Price on 01-01-2022	YtMWC on 01-01-2022	YtRPC 01-01-2022
Make-whole regulatory call bonds															
B	Legacy Tier 1	USD	CMZB	8.151	30-Jun-29	30-Jun-31	1,000	MW+125	123.5	5.2	5.5	216	130.2	8.2	
B	Legacy Tier 1	GBP	HSBC	5.844	05-Nov-31	Perp	700	L+176	120.1	3.8	3.6	222	135.8	8.5	
B	Legacy Tier 1	GBP	LLOYDS	7.881	09-Dec-31	Perp	245	G+440	139.0	3.9	5.0	238	155.0	8.9	
Non-/EU law bonds with Regulatory Par Calls															
S	Legacy Tier 1	USD	BNP	7.195	25-Jun-37	Perp	1,100	L+129	102.4	7.0	6.1	382			6.3
S	Legacy Tier 1	GBP	SANUK	7.037	14-Feb-26	Perp	238	G+375	117.5	4.1	5.1	273			1.2
S	Legacy Tier 1	USD	LLOYDS	12	16-Dec-24	Perp	2,000	L+1175.6	117.3	8.3	11.6	531			5.8
No early call language															
S	Legacy Tier 1	EUR	BACR	4.75	15-Mar-20	Perp	319	L+71	91.8	12.0	2.4	1223			
Discos															
B	Discos	USD	DNBNO	2.6875	28-Feb-19	Perp	200		69.7						
B	Discos	USD	DNBNO	2.7125	28-Feb-19	Perp	200		69.5						
B	Discos	USD	DNBNO	2.95663	23-Feb-19	Perp	150		69.6						
New York law Tier 2s and senior hold co, with no recognition of bail in, and no early call language															
B	Tier 2	USD	HSBC	6.5		2-May-36	2,000		112.3	5.4	5.4	225			
B	Tier 2	USD	HSBC	6.5		15-Sep-37	2,500		112.9	5.4	5.4	225			
B	Tier 2	USD	HSBC	6.8		1-Jun-38	1,500		116.7	5.4	5.4	225			
B	Holdco Snr	USD	HSBC	6.1		14-Jan-42	750		115.0	5.0	5.0	184			
Switch out of the following CRR 2 compliant bonds, into the above LME-prone bonds															
S	Tier 2	USD	HSBC	4.375		23-Nov-26	1,500		95.6	5.1	5.1	202			
S	Tier 2	USD	HSBC	5.25		14-Mar-44	1,500		96.6	5.5	5.5	234			
S	Holdco Snr	USD	HSBC	4.583	19-Jun-28	19-Jun-29	3,000		97.4	4.9	4.9	187			

Source: Bloomberg, Morgan Stanley Research; Prices updated at 4PM UK time on November 29, 2018. We use bid levels for recommendations to sell and offer levels for recommendations to buy.

Exhibit 35: Thematic recommendations (continued)

Scenario													EP: NY Law & Hard Brexit	Brexit, CRR2 base case Transition	EC: 6yr Grandfathering
B/S	**Structure**	**Ccy**	**Ticker**	**Cpn**	**Next Call**	**Maturity**	**Amt os mn**	**Back-end**	**Price**	**YTC (%)**	**YTP/M (%)**	**ZtC/ M**	**YtRPC 01-01-2020**	**YtRPC 01-01-2023**	**YtRPC 30-06-2025**
English and New York Law Tier 2s with no recognition of bail-in, and with reg par calls															
B	Tier 2	EUR	CABKSM	3.5	15-Feb-22	15-Feb-27	1,000	MS+335	103.4	2.4	3.6	238	0.4	N/A	N/A
B	Tier 2	EUR	CABKSM	2.75	14-Jul-23	14-Jul-28	1,000	MS+235	98.9	3.0	3.4	279	3.8	3.0	N/A
B	Tier 2	EUR	KBCBB	1.625	18-Sep-24	18-Sep-29	500	MS+125	97.1	2.2	2.5	178	4.4	2.4	N/A
B	Tier 2	EUR	SEB	1.375	31-Oct-23	31-Oct-28	850	MS+135	98.0	1.8	2.3	154	3.3	1.9	N/A
B	Tier 2	EUR	SWEDA	1	22-Nov-22	22-Nov-27	650	MS+82	97.8	1.6	1.9	144	3.1	N/A	N/A
B	Tier 2	EUR	BFCM	1.875		4-Nov-26	700		96.1	2.4	2.4	177	5.7	2.9	2.5
S	Tier 2	EUR	BFCM	3		21-May-24	1,000		105.4	1.9	1.9	162	-1.9	1.6	N/A
S	Tier 2	EUR	BFCM	3		11-Sep-25	1,000		105.2	2.2	2.2	167	-1.7	1.7	2.1
S	Tier 2	EUR	BKIR	10		19-Dec-22	250		129.1	2.4	2.4	226	-13.2	N/A	N/A
S	Tier 2	EUR	BNP	2.75		27-Jan-26	750		102.3	2.4	2.4	185	0.6	2.2	2.4
S	Tier 2	EUR	BNP	2.375		17-Feb-25	1,500		100.9	2.2	2.2	179	1.6	2.2	N/A
S	Tier 2	EUR	BNP	2.875		1-Oct-26	750		102.7	2.5	2.5	187	0.4	2.2	2.4
S	Tier 2	EUR	ERSTBK	7.125		10-Oct-22	500		121.8	1.3	1.3	119	-10.8	N/A	N/A
S	Tier 2	EUR	NDASS	4		29-Mar-21	750		107.8	0.6	0.6	72	-3.0	N/A	N/A
S	Tier 2	EUR	SOCGEN	4		7-Jun-23	1,000		109.9	1.7	1.7	152	-4.7	1.5	N/A
English and New York Law AT1s with no recognition of bail-in, and with reg par calls															
B	AT1	USD	SEB	5.625	13-May-22	Perp	600	MS+349.3	96.5	6.8	6.7	379	9.1	N/A	N/A
B	AT1	USD	SWEDA	6	17-Mar-22	Perp	500	MS+410.6	97.1	7.0	7.2	400	8.9	N/A	N/A
S	AT1	EUR	BNP	6.125	17-Jun-22	Perp	750	MS+523	105.4	4.5	6.4	441	1.1	N/A	N/A
S	AT1	GBP	ACAFP	7.5	23-Jun-26	Perp	500	UKT+453.5	104.9	6.7	6.6	523	2.9	6.2	6.6
S	AT1	USD	ACAFP	7.875	23-Jan-24	Perp	1,750	MS+489.8	100.6	7.8	6.1	496	7.3	7.8	N/A

Source: Bloomberg, Morgan Stanley Research; Prices updated at 4PM UK time on November 29, 2018. We use bid levels for recommendations to sell and offer levels for recommendations to buy.

Exhibit 36: Thematic recommendations (continued)

B/S	Structure	Ccy	Ticker	Cpn	Next Call	Maturity	Amt os mn	Back-end	Price	YTC (%)	YTP/M (%)	ZtC/ M
Still Selling UK banks												
S	AT1	USD	BACR	6.625	15-Sep-19	Perp	1,211	MS+502.2	97.4	10.3	8.3	727
S	AT1	USD	HSBC	6.875	1-Jun-21	Perp	2,000	MS+551.4	102.5	5.8	8.1	282
S	AT1	USD	HSBC	5.625	17-Jan-20	Perp	1,500	MS+362.6	97.8	7.7	6.8	482
S	AT1	EUR	BACR	8	15-Dec-20	Perp	1,000	MS+675	106.5	4.7	7.8	478
Spanish Domestic Tier 2												
B	Tier 2	EUR	CABKSM	3.5	15-Feb-22	15-Feb-27	1,000	MS+335	103.4	2.4	3.6	237
B	Tier 2	EUR	CABKSM	2.75	14-Jul-23	14-Jul-28	1,000	MS+235	99.0	3.0	3.4	278
B	Tier 2	EUR	BKIASM	3.375	15-Mar-22	15-Mar-27	500	MS+335	101.4	2.9	3.8	291
B	Tier 2	EUR	BKTSM	2.5	6-Apr-22	6-Apr-27	500	MS+240	99.4	2.7	3.2	266
Buy Low Reset AT1												
B	AT1	USD	NDASS	5.25	13-Sep-21	Perp	550	MS+243.2	96.0	6.8	6.3	387
B	AT1	USD	NDASS	6.125	23-Sep-24	Perp	500	MS+243.2	95.6	7.1	6.7	407
B	AT1	USD	UBS	5	31-Jan-23	Perp	2,000	MS+243.2	83.8	9.7	6.4	695
B	AT1	EUR	ABNANV	4.75	22-Sep-27	Perp	1,000	MS+389.8	91.4	6.1	5.8	533
B	AT1	EUR	CCBGBB	3.625	16-Apr-25	Perp	500	MS+293.8	78.8	8.1	5.5	751
B	AT1	EUR	KBCBB	4.25	24-Oct-25	Perp	1,000	MS+359.4	88.9	6.4	5.6	577
B	AT1	EUR	NDASS	3.5	12-Mar-25	Perp	750	MS+349.3	90.4	5.3	4.8	491
B	AT1	USD	SEB	5.625	13-May-22	Perp	600	MS+410.6	96.6	6.7	6.6	377
B	AT1	USD	SWEDA	6	17-Mar-22	Perp	500	MS+410.6	97.3	6.9	7.2	398
B	AT1	EUR	SANTAN	6.25	12-Mar-19	Perp	1,500	MS+541	96.3	22.3	7.0	2089
Sell Low Reset Tier 2												
B	Tier 2	EUR	ABNANV	2.875	18-Jan-23	18-Jan-28	1,000	MS+245	104.9	1.6	2.7	150
B	Tier 2	EUR	BPCEGP	2.75	30-Nov-22	30-Nov-27	750	MS+237	104.4	1.6	2.7	149
B	Tier 2	EUR	KBCBB	1.625	18-Sep-24	18-Sep-29	500	MS+125	97.2	2.2	2.5	177
B	Tier 2	EUR	SEB	1.375	31-Oct-23	31-Oct-28	850	MS+135	98.0	1.8	2.3	153
B	Tier 2	EUR	SWEDA	1	22-Nov-22	22-Nov-27	650	MS+82	97.8	1.6	1.9	143
B	Tier 2	EUR	CS	5.75	18-Sep-20	18-Sep-25	1,250	MS+400	107.3	1.6	3.8	178
B	Tier 2	EUR	UBS	4.75	12-Feb-21	12-Feb-26	2,000	MS+340	106.3	1.8	3.4	194
S	Tier 2	EUR	SOCGEN	1.375	23-Feb-23	23-Feb-28	1,000	MS+90	96.2	2.3	2.3	216
S	Tier 2	EUR	CCBGBB	1.625	15-Mar-23	15-Mar-28	200	MS+123	95.2	2.8	2.7	265
S	Tier 2	EUR	INTNED	1.625	26-Sep-24	26-Sep-29	1,000	MS+125	95.2	2.5	2.7	213
S	Tier 2	EUR	INTNED	2	22-Mar-25	22-Mar-30	750	MS+135	96.5	2.6	2.8	217
Tier 2 Switches to Reduce Volatility												
B	Tier 2	USD	BPCEGP	5.15		21-Jul-24	1,500		101.0	4.9	4.9	195
S	Tier 2	USD	BNP	4.25		15-Oct-24	1,000		97.2	4.8	4.8	181
B	Tier 2	USD	BPCEGP	4.5		15-Mar-25	1,250		96.6	5.1	5.1	216
S	Tier 2	USD	BNP	4.375		28-Sep-25	1,000		96.1	5.1	5.1	206
B	Tier 2	USD	RABOBK	4.375		4-Aug-25	1,500		98.0	4.7	4.7	173
S	Tier 2	USD	HSBC	4.25		18-Aug-25	1,500		95.8	5.0	5.0	200
B	Tier 2	EUR	CCBGBB	3.125		11-May-26	550		102.6	2.7	2.7	216
S	Tier 2	EUR	ACAFP	2.8		16-Oct-25	609		100.7	2.7	2.7	217
B	Tier 2	EUR	BPCEGP	2.875		22-Apr-26	750		103.7	2.3	2.3	176
S	Tier 2	EUR	BNP	2.75		27-Jan-26	750		102.3	2.4	2.4	185
B	Tier 2	EUR	CMZB	4		23-Mar-26	1,000		104.1	3.4	3.3	281
S	Tier 2	EUR	SANTAN	3.25		4-Apr-26	1,500		101.8	3.0	3.0	242
Bail-inable Seniors - Trading Better than they Should												
S	Tier 2	EUR	ACAFP	2.625		17-Mar-27	2,000		101.8	2.4	2.4	171
B	Tier 2	EUR	BFCM	2.625		31-Mar-27	500		100.9	2.5	2.5	183
B	Tier 2	EUR	CABKSM	2.75	14-Jul-23	14-Jul-28	1,000	MS+235	99.0	3.0	3.4	278
S	BIS	EUR	ACAFP	1.875		20-Dec-26	1,500		100.3	1.8	1.8	117
S	BIS	USD	BNP	3.8		10-Jan-24	1,750		96.4	4.6	4.6	163
S	Pref Snr	EUR	BPCEGP	2.125		17-Mar-21	743		104.7	0.1	0.1	20
S	Pref Snr	EUR	SOCGEN	0.125		5-Oct-21	500		99.6	0.2	0.2	28
S	Pref Snr	EUR	SOCGEN	0.75		26-May-23	1,000		100.7	0.6	0.6	39

Source: Bloomberg, Morgan Stanley Research; Prices updated at 4PM UK time on November 29, 2018. We use bid levels for recommendations to sell and offer levels for recommendations to buy.

Exhibit 37: Thematic recommendations (continued)

B/S	Structure	Ccy	Ticker	Cpn	Next Call	Maturity	Amt os mn	Back-end	Bid	Ask	Price	YTC (%)	YTP/M (%)	ZtC/ M
Selling Bail-in Seniors on Expected Supply														
S	BIS	USD	BACR	4.337	10-Jan-27	10-Jan-28	1,250		90.6	92.3	90.6	5.8	5.7	263
S	BIS	USD	BACR	4.375		12-Jan-26	2,500		94.2	95.6	94.2	5.4	5.4	237
S	BIS	USD	BACR	3.65		16-Mar-25	2,000		91.4	92.7	91.4	5.3	5.3	228
S	BIS	USD	BNP	3.375		9-Jan-25	2,000		93.0	94.1	93.0	4.7	4.7	170
S	BIS	USD	BNP	3.8		10-Jan-24	1,750		96.3	97.2	96.3	4.6	4.6	163
S	BIS	USD	HSBC	4.3		8-Mar-26	3,000		97.2	98.4	97.2	4.8	4.8	174
S	BIS	USD	HSBC	3.9		25-May-26	2,500		94.7	95.9	94.7	4.8	4.8	174
S	BIS	USD	INTNED	4.55		2-Oct-28	1,250		97.5	99.0	97.5	4.9	4.9	181
S	BIS	USD	INTNED	4.1		2-Oct-23	1,500		99.0	99.7	99.0	4.3	4.3	135
S	BIS	USD	SOCGEN	4.75		14-Sep-28	750		97.6	98.7	97.6	5.1	5.1	201
S	BIS	USD	SOCGEN	4.25		14-Sep-23	1,000		98.4	99.3	98.4	4.6	4.6	164
S	BIS	GBP	BACR	3.125		17-Jan-24	1,200		98.1	98.6	98.1	3.5	3.5	217
S	BIS	GBP	HSBC	2.256	13-Nov-25	13-Nov-26	1,000	MS+104	94.5	95.1	94.5	3.1	3.1	171
S	BIS	GBP	HSBC	6.5		20-May-24	650		118.9	119.5	118.9	2.7	2.7	135
S	BIS	EUR	BACR	1.375	24-Jan-25	24-Jan-26	1,000	MS+78	92.1	92.7	92.1	2.8	2.7	236
S	BIS	EUR	BACR	1.875		8-Dec-23	1,000		98.5	98.7	98.5	2.2	2.2	192
S	BIS	EUR	BNP	1.125		11-Jun-26	1,250		94.8	95.1	94.8	1.9	1.9	126
S	BIS	EUR	BNP	1.5		17-Nov-25	1,250		98.6	98.8	98.6	1.7	1.7	119
S	BIS	EUR	BNP	1		17-Apr-24	500		97.8	98.1	97.8	1.4	1.4	110
S	BIS	EUR	HSBC	0.875		6-Sep-24	2,000		96.0	96.3	96.0	1.6	1.6	122
S	BIS	EUR	INTNED	2		20-Sep-28	1,500		98.7	99.1	98.7	2.1	2.1	131
S	BIS	EUR	INTNED	1		20-Sep-23	1,000		99.1	99.3	99.1	1.2	1.2	96
S	BIS	EUR	SOCGEN	2.125		27-Sep-28	1,250		98.9	99.4	98.9	2.2	2.2	141
S	BIS	EUR	SOCGEN	1.125		23-Jan-25	1,250		97.1	97.3	97.1	1.6	1.6	119
Selling Volatility-Causing Exposures														
S	AT1	EUR	UCGIM	9.25	3-Jun-22	Perp	500	MS+930	105.1	105.6	105.1	7.7	9.9	752
S	AT1	EUR	UCGIM	5.375	3-Jun-25	Perp	1,000	MS+492.5	80.6	81.4	80.6	9.7	7.7	900
S	AT1	EUR	UCGIM	6.625	3-Jun-23	Perp	1,250	MS+638.7	89.4	89.9	89.4	9.8	8.5	941
S	AT1	USD	BBVASM	6.125	16-Nov-27	Perp	1,000	MS+387	83.5	84.5	83.5	8.9	8.0	579
S	AT1	EUR	BBVASM	8.875	14-Apr-21	Perp	1,000	MS+917.7	109.3	109.8	109.3	4.8	9.5	483
S	AT1	EUR	BBVASM	6.75	18-Feb-20	Perp	1,500	MS+660.4	100.6	101.1	100.6	6.4	7.9	642
S	AT1	EUR	BBVASM	5.875	24-Sep-23	Perp	1,000	MS+566	92.0	92.5	92.0	8.1	7.6	767
S	AT1	EUR	BBVASM	5.875	24-May-22	Perp	500	MS+577.9	96.4	96.9	96.4	7.2	7.4	703
S	AT1	USD	ACAFP	8.125	23-Dec-25	Perp	1,250	MS+618.5	103.9	104.6	103.9	7.5	8.6	443
S	AT1	GBP	ACAFP	7.5	23-Jun-26	Perp	500	G+453.5	105.0	105.5	105.0	6.7	6.5	523
S	AT1	EUR	ACAFP	6.5	23-Jun-21	Perp	1,000	MS+512	104.4	105.1	104.4	4.8	6.4	476
S	AT1	USD	BNP	7.375	19-Aug-25	Perp	1,500	MS+515	101.0	102.0	101.0	7.2	7.7	419
S	AT1	USD	BNP	6.75	14-Mar-22	Perp	750	MS+491.6	99.5	100.5	99.5	6.9	7.8	395
S	AT1	EUR	BNP	6.125	17-Jun-22	Perp	750	MS+523	105.5	106.4	105.5	4.5	6.3	438
S	AT1	USD	INTNED	6.875	16-Apr-22	Perp	1,000	MS+512.4	100.0	100.8	100.0	6.9	7.9	390
S	AT1	USD	INTNED	6.5	16-Apr-25	Perp	1,250	MS+444.6	94.3	95.3	94.3	7.7	7.6	467
S	AT1	USD	INTNED	6	16-Apr-20	Perp	1,000	MS+444.5	98.3	99.3	98.3	7.4	7.5	441
S	Tier 2	EUR	BAMIIM	6		5-Nov-20	710		102.0	104.0	102.0	4.9	4.8	504
S	Tier 2	EUR	BAMIIM	6.375		31-May-21	318		102.5	104.0	102.5	5.3	5.2	535
S	Tier 2	EUR	BAMIIM	7.125		1-Mar-21	475		105.0	106.5	105.0	4.7	4.7	483
S	Tier 2	EUR	ISPIM	5		23-Sep-19	1,051		102.3	103.6	102.3	2.0	2.0	227
S	Tier 2	EUR	ISPIM	5.15		16-Jul-20	922		105.1	105.7	105.1	1.9	1.9	212
S	Tier 2	EUR	UCGIM	6.95		31-Oct-22	1,500		109.0	109.7	109.0	4.4	4.3	428
Buy Swiss Low-Trigger AT1														
B	AT1	USD	CS	7.5	11-Dec-23	Perp	2,250	MS+459.8	101.8	102.9	102.9	6.8	7.5	384
B	AT1	USD	CS	6.25	18-Dec-24	Perp	2,500	MS+345.5	95.0	95.9	95.9	7.1	6.8	412
B	AT1	USD	UBS	7	19-Feb-25	Perp	1,250	MS+486.6	102.5	103.3	103.3	6.2	7.3	333
B	AT1	EUR	UBS	5.75	19-Feb-22	Perp	1,000	MS+528.7	106.9	108.0	108.0	3.1	6.1	308

Source: Bloomberg, Morgan Stanley Research; Prices updated at 4PM UK time on November 29, 2018. We use bid levels for recommendations to sell and offer levels for recommendations to buy.

Appendix 1: CRR2-affected bonds

Exhibit 38: CRR2-affected bonds

Scenario														EP: NY Law & Hard Brexit	Brexit, CRR2 base case Transition	EC: 6yr Grandfathering
Structure	**ISIN**	**Ccy**	**Law**	**Ticker**	**Cpn (%)**	**Call Date**	**Back-end**	**Maturity**	**Amt O/S**	**Offer**	**YtC/YtM**	**ZtC/ZtM**	**Swap Gains**	**YtRPC 01-01-2020**	**YtRPC 01-01-2023**	**YtRPC 30-06-2025**
New York law Tier 2s and senior hold co, with no recognition of bail in, and no early call language																
Tier 2	US404280AG49	USD	New York	HSBC	6.5			2-May-36	2000	112.7	5.4	224	39.9			
Tier 2	US404280AH22	USD	New York	HSBC	6.5			15-Sep-37	2500	113.3	5.4	223	35.1			
Tier 2	US404280AJ87	USD	New York	HSBC	6.8			1-Jun-38	1500	117.2	5.4	223	31.8			
Tier 2	US404280AE90	USD	New York	HSBC	7.35			27-Nov-32	222	122.0	5.1	202	21.3			
Tier 2	US597433AC57	USD	New York	HSBC	7.65			1-May-25	300	115.9	4.7	176	27.5			
Tier 2	US4041A3AG79	USD	New York	LLOYDS	6			1-Nov-33	466	101.9	5.8	269	31.4			
Tier 2	US002920AC09	USD	New York	SANUK	7.95			26-Oct-29	261	114.0	6.2	310	41.3			
Holdco Snr	US404280AM17	USD	New York	HSBC	6.1			14-Jan-42	750	115.5	5.0	182	-8.0			
English and New York Law Tier 2s with no recognition of bail-in, and with reg par calls																
Tier 2	XS1325125158	EUR	English	AIB	4.125	26-Nov-20	MS+395	26-Nov-25	750	102.7	2.7	286	0.6	1.6	N/A	N/A
Tier 2	XS1686880599	EUR	English	BAMIIM	4.375	21-Sep-22	MS+417.9	21-Sep-27	500	88.5	8.0	790	0.5	16.9	N/A	N/A
Tier 2	XS1055241373	EUR	English	BBVASM	3.5	11-Apr-19	MS+255	11-Apr-24	1500	101.1	0.5	80	0.7	N/A	N/A	N/A
Tier 2	ES0213307004	EUR	English	BKIASM	4	22-May-19	MS+316.6	22-May-24	1000	101.0	1.8	207	0.5	N/A	N/A	N/A
Tier 2	XS1075963485	EUR	English	BKIR	4.25	11-Jun-19	MS+355	11-Jun-24	750	101.3	1.8	203	0.5	N/A	N/A	N/A
Tier 2	XS1046827405	EUR	English	BNP	2.875	20-Mar-21	MS+165	20-Mar-26	1500	103.6	1.3	138	4.9	-0.5	N/A	N/A
Tier 2	XS1120649584	EUR	English	BNP	2.625	14-Oct-22	MS+183	14-Oct-27	750	103.7	1.6	151	2.4	-0.8	N/A	N/A
Tier 2	XS1565131213	EUR	English	CABKSM	3.5	15-Feb-22	MS+335	15-Feb-27	1000	103.4	2.4	238	0.4	0.4	N/A	N/A
Tier 2	XS1645495349	EUR	English	CABKSM	2.75	14-Jul-23	MS+235	14-Jul-28	1000	99.0	3.0	276	1.0	3.7	3.0	N/A
Tier 2	ES0244251007	EUR	English	CAZAR	5	28-Jul-20	MS+455.1	28-Jul-25	500	101.5	4.0	421	1.0	3.6	N/A	N/A
Tier 2	XS1068866950	EUR	English	DANBNK	2.75	19-May-21	MS+152	19-May-26	500	102.9	1.6	165	3.0	0.1	N/A	N/A
Tier 2	XS1571331955	EUR	English	DNBNO	1.25	1-Mar-22	MS+115	1-Mar-27	650	100.0	1.3	124	0.3	1.3	N/A	N/A
Tier 2	BE0002479542	EUR	English	KBCBB	2.375	25-Nov-19	MS+198	25-Nov-24	750	101.9	0.4	69	0.6	N/A	N/A	N/A
Tier 2	BE0002290592	EUR	English	KBCBB	1.625	18-Sep-24	MS+125	18-Sep-29	500	97.1	2.2	178	0.6	4.4	2.4	N/A
Tier 2	BE0002485606	EUR	English	KBCBB	1.875	11-Mar-22	MS+150	11-Mar-27	750	101.4	1.4	141	1.3	0.6	N/A	N/A
Tier 2	XS1321920735	EUR	English	NYKRE	2.75	17-Nov-22	MS+220	17-Nov-27	800	104.1	1.7	155	1.4	-1.0	N/A	N/A
Tier 2	XS1072796870	EUR	English	SEB	2.5	28-May-21	MS+145	28-May-26	1000	103.7	1.0	107	2.9	-0.9	N/A	N/A
Tier 2	XS1511589605	EUR	English	SEB	1.375	31-Oct-23	MS+135	31-Oct-28	850	98.0	1.8	154	-0.3	3.3	1.9	N/A
Tier 2	XS1014674227	EUR	English	SHBASS	2.656	15-Jan-19	MS+143	15-Jan-24	1500	100.3	0.0	37	0.3	N/A	N/A	N/A
Tier 2	XS1782803503	EUR	English	SHBASS	1.25	2-Mar-23	MS+80	2-Mar-28	750	99.0	1.5	132	11.2	2.2	1.5	N/A
Tier 2	XS1110558407	EUR	English	SOCGEN	2.5	16-Sep-21	MS+183	16-Sep-26	1000	102.7	1.5	154	2.3	0.0	N/A	N/A
Tier 2	XS1617859464	EUR	English	SWEDA	1	22-Nov-22	MS+82	22-Nov-27	650	97.8	1.6	145	0.8	3.1	N/A	N/A
Tier 2	XS1036494638	EUR	English	SWEDA	2.375	26-Feb-19	MS+140	26-Feb-24	750	100.5	0.2	49	0.5	N/A	N/A	N/A
Tier 2	XS1404902535	EUR	English	UBIIM	4.25	5-May-21	MS+418.2	5-May-26	750	95.0	6.5	663	0.3	9.3	N/A	N/A
Tier 2	XS1580469895	EUR	English	UBIIM	4.45	15-Sep-22	MS+424	15-Sep-27	500	94.0	6.3	618	1.2	10.6	N/A	N/A
Tier 2	XS0986063864	EUR	English	UCGIM	5.75	28-Oct-20	MS+410	28-Oct-25	1000	102.1	4.6	474	4.5	3.8	N/A	N/A
Tier 2	XS1426039696	EUR	English	UCGIM	4.375	3-Jan-22	MS+431.6	3-Jan-27	750	97.5	5.3	526	0.2	6.8	N/A	N/A
Tier 2	XS1204154410	EUR	English	ACAFP	2.625			17-Mar-27	2000	102.3	2.3	165	-0.8	0.5	2.0	2.3
Tier 2	XS1069549761	EUR	English	BFCM	3			21-May-24	1000	106.0	1.8	151	6.6	-2.4	1.5	N/A
Tier 2	XS1288858548	EUR	English	BFCM	3			11-Sep-25	1000	105.8	2.1	158	3.0	-2.2	1.5	2.0
Tier 2	XS1385945131	EUR	English	BFCM	2.375			24-Mar-26	1000	100.7	2.3	170	-0.2	1.7	2.2	2.3
Tier 2	XS1512677003	EUR	English	BFCM	1.875			4-Nov-26	700	96.2	2.4	177	-1.0	5.6	2.9	2.5
Tier 2	XS0867469305	EUR	English	BKIR	10			19-Dec-22	250	130.8	2.0	188	5.9	-14.3	N/A	N/A
Tier 2	XS1325645825	EUR	English	BNP	2.75			27-Jan-26	750	103.0	2.3	175	1.8	0.0	2.0	2.3
Tier 2	XS1190632999	EUR	English	BNP	2.375			17-Feb-25	1500	101.3	2.2	172	1.7	1.2	2.0	N/A
Tier 2	XS1378880253	EUR	English	BNP	2.875			1-Oct-26	750	103.4	2.4	177	0.7	-0.3	2.0	2.3
Tier 2	XS1470601656	EUR	English	BNP	2.25			11-Jan-27	900	98.3	2.5	182	-3.1	3.9	2.7	2.5
Tier 2	BE0002251206	EUR	English	CCBGBB	3.125			11-May-26	550	102.5	2.7	217	-0.4	0.7	2.5	2.7
Tier 2	XS0840062979	EUR	English	ERSTBK	7.125			10-Oct-22	500	122.4	1.1	106	6.1	-11.2	N/A	N/A
Tier 2	XS1109765005	EUR	English	ISPIM	3.928			15-Sep-26	1000	97.2	4.4	377	5.9	6.8	4.7	4.4
Tier 2	XS1222597905	EUR	English	ISPIM	2.855			23-Apr-25	500	92.9	4.1	370	0.1	10.1	4.8	N/A
Tier 2	XS0971213201	EUR	English	ISPIM	6.625			13-Sep-23	1446	110.9	4.1	384	9.2	-3.2	3.7	N/A
Tier 2	XS0544654162	EUR	English	NDASS	4			29-Mar-21	750	108.0	0.5	62	6.3	-3.2	N/A	N/A
Tier 2	XS0497179035	EUR	English	NDASS	4.5			26-Mar-20	1000	105.6	0.2	44	4.6	-0.6	N/A	N/A
Tier 2	XS1548444816	EUR	English	SANTAN	3.125			19-Jan-27	1000	100.6	3.0	239	0.6	2.6	3.0	3.0
Tier 2	XS1384064587	EUR	English	SANTAN	3.25			4-Apr-26	1500	102.4	2.9	232	-0.7	1.0	2.6	2.8
Tier 2	XS1201001572	EUR	English	SANTAN	2.5			18-Mar-25	1500	99.6	2.6	213	0.4	2.9	2.6	N/A
Tier 2	XS1195574881	EUR	English	SOCGEN	2.625			27-Feb-25	1250	102.1	2.3	183	1.4	0.7	2.1	N/A
Tier 2	XS0867612466	EUR	English	SOCGEN	4			7-Jun-23	1000	110.3	1.6	141	7.3	-5.1	1.4	N/A
Tier 2	XS0618847775	EUR	English	UCGIM	6.125			19-Apr-21	579	105.7	3.6	367	8.7	0.8	N/A	N/A
Tier 2	XS0849517650	EUR	English	UCGIM	6.95			31-Oct-22	1500	109.7	4.2	410	6.3	-1.9	N/A	N/A
Tier 2	**US251525AM33**	**USD**	**New York**	**DB**	**4.296**	**24-May-23**	**MS+224.8**	**24-May-28**	**1500**	**87.0**	**7.8**	**482**	**-3.5**	**18.1**	**8.1**	**N/A**
Tier 2	**US06739GBP37**	**USD**	**New York**	**BACR**	**5.14**			**14-Oct-20**	**1094**	**101.8**	**4.1**	**114**	**-0.6**	**4.3**	**N/A**	**N/A**
Tier 2	**US05579T5G71**	**USD**	**New York**	**BNP**	**4.25**			**15-Oct-24**	**1000**	**98.0**	**4.6**	**167**	**-3.8**	**6.2**	**4.8**	**N/A**
Tier 2	**US780099CE50**	**USD**	**New York**	**RBS**	**6.125**			**15-Dec-22**	**2250**	**102.3**	**5.5**	**252**	**-5.2**	**3.9**	**N/A**	**N/A**
Tier 2	US05971KAA79	USD	English	SANTAN	5.179			19-Nov-25	1500	99.2	5.3	232	-6.0	6.0	5.4	5.3
Tier 2	USF8586CBS01	USD	English	SOCGEN	4.75			24-Nov-25	1000	97.7	5.1	215	-6.0	7.0	5.4	5.2
Tier 2	USF8586CBU56	USD	English	SOCGEN	5.625			24-Nov-45	500	98.1	5.8	262	-11.4	7.5	6.2	6.0
Tier 2	US83367TBJ79	USD	English	SOCGEN	4.25			14-Apr-25	1500	95.5	5.1	211	-6.2	8.8	5.5	N/A
Tier 2	US83367TBG31	USD	English	SOCGEN	5			17-Jan-24	1000	100.7	4.8	186	-0.1	4.3	4.8	N/A
Tier 2	US83368JKF65	USD	English	SOCGEN	4.25			19-Aug-26	1000	94.2	5.2	216	-11.7	10.0	5.9	5.3

Source: Bloomberg,Morgan Stanley Research; Prices updated around 4 PM UK time on November 29. 2018. Bolded bonds are under New York Law. 5.14% BARC has reg call at 101.

Exhibit 39: CRR2-affected bonds (continued)

Scenario														EP: NY Law & Hard Brexit	Brexit, CRR2 base case Transition	EC: 6yr Grandfathering
Structure	**ISIN**	**Ccy**	**Law**	**Ticker**	**Cpn (%)**	**Call Date**	**Back-end**	**Maturity**	**Amt O/S**	**Offer**	**YtC/YtM**	**ZtC/ZtM**	**Swap Gains**	**YtRPC 01-01-2020**	**YtRPC 01-01-2023**	**YtRPC 30-06-2025**
English and New York Law AT1s with no recognition of bail-in, and with reg par calls																
AT1	XS1055037177	EUR	English	ACAFP	6.5	23-Jun-21	MS+512	Perpetual	1000	105.0	4.5	450	3.5	1.8	N/A	N/A
AT1	XS1328798779	EUR	English	AIB	7.375	3-Dec-20	MS+733.9	Perpetual	500	105.8	4.4	450	0.9	2.0	N/A	N/A
AT1	XS1248345461	EUR	English	BKIR	7.375	18-Jun-20	MS+695.6	Perpetual	750	105.3	3.9	403	1.1	2.4	N/A	N/A
AT1	XS1247508903	EUR	English	BNP	6.125	17-Jun-22	MS+523	Perpetual	750	106.3	4.2	415	2.6	0.3	N/A	N/A
AT1	XS1044578273	EUR	English	DANBNK	5.75	6-Apr-20	MS+464	Perpetual	750	98.0	7.5	754	1.8	7.9	N/A	N/A
AT1	XS1190987427	EUR	English	DANBNK	5.875	6-Apr-22	MS+547	Perpetual	750	100.9	5.7	556	1.4	5.1	N/A	N/A
AT1	XS1227057814	EUR	English	IPMID	8.625	1-Apr-21	MS + 835.6	Perpetual	125	103.0	7.1	726	1.4	5.7	N/A	N/A
AT1	XS1346815787	EUR	English	ISPIM	7	19-Jan-21	MS+ 688.4	Perpetual	1250	99.6	7.3	732	0.7	7.5	N/A	N/A
AT1	XS1548475968	EUR	English	ISPIM	7.75	11-Jan-27	MS+ 719.2	Perpetual	1250	100.3	7.9	713	-0.2	7.6	7.8	7.8
AT1	XS1614415542	EUR	English	ISPIM	6.25	16-May-24	MS + 585.6	Perpetual	750	92.0	8.3	780	0.3	15.1	8.8	N/A
AT1	XS1577953331	EUR	English	JYBC	4.75	21-Sep-27	MS+ 396.2	Perpetual	150	93.1	5.8	507	0.9	12.1	6.8	6.1
AT1	BE0002463389	EUR	English	KBCBB	5.625	19-Mar-19	MS+475.9	Perpetual	1400	100.4	4.4	464	0.4	N/A	N/A	N/A
AT1	XS1195632911	EUR	English	NYKRE	6.25	26-Oct-20	MS + 598.9	Perpetual	500	105.3	3.4	353	0.9	1.3	N/A	N/A
AT1	XS0867620725	EUR	English	SOCGEN	6.75	7-Apr-21	MS+553.8	Perpetual	1000	103.8	5.1	514	3.3	3.2	N/A	N/A
AT1	XS1107890847	EUR	English	UCGIM	6.75	10-Sep-21	MS+610	Perpetual	1000	91.4	10.7	1045	2.2	16.4	N/A	N/A
AT1	**XS1055037920**	**GBP**	**New York**	**ACAFP**	**7.5**	**23-Jun-26**	**UKT+453.5**	**Perpetual**	**500**	**105.4**	**6.6**	**517**	**10.7**	**2.4**	**6.0**	**6.5**
AT1	**USF22797RT78**	**USD**	**New York**	**ACAFP**	**7.875**	**23-Jan-24**	**MS+489.8**	**Perpetual**	**1750**	**101.8**	**7.5**	**471**	**-0.6**	**6.2**	**7.4**	**N/A**
AT1	**USF22797YK86**	**USD**	**New York**	**ACAFP**	**6.625**	**23-Sep-19**	**MS+469.7**	**Perpetual**	**1250**	**99.4**	**7.5**	**454**	**-0.7**	**N/A**	**N/A**	**N/A**
AT1	USF2R125CD54	USD	English	ACAFP	8.125	23-Dec-25	MS+618.5	Perpetual	1250	104.5	7.4	432	-7.6	3.9	6.9	7.3
AT1	XS1207306652	USD	English	DNBNO	5.75	26-Mar-20	MS+407.5	Perpetual	750	99.0	6.4	357	-1.7	6.6	N/A	N/A
AT1	XS1506066676	USD	English	DNBNO	6.5	26-Mar-22	MS+508	Perpetual	750	99.6	6.5	363	-5.6	6.7	N/A	N/A
AT1	**US46115HAU14**	**USD**	**New York**	**ISPIM**	**7.7**	**17-Sep-25**	**MS + 546.15**	**Perpetual**	**1000**	**87.6**	**10.3**	**728**	**-5.4**	**21.1**	**11.6**	**10.3**
AT1	XS1136391643	USD	English	SEB	5.75	13-May-20	MS+385	Perpetual	1100	99.4	6.2	325	-1.4	6.4	N/A	N/A
AT1	XS1584880352	USD	English	SEB	5.625	13-May-22	MS+349.3	Perpetual	600	96.6	6.7	377	-3.0	9.0	N/A	N/A
AT1	USF8586CRW49	USD	English	SOCGEN	7.875	18-Dec-23	MS+497.9	Perpetual	1750	100.0	7.9	490	0.2	7.9	7.9	N/A
AT1	USF8586CXG25	USD	English	SOCGEN	6	27-Jan-20	MS+406.7	Perpetual	1500	96.0	9.7	681	-1.0	10.0	N/A	N/A
AT1	USF43628B413	USD	English	SOCGEN	8	29-Sep-25	MS+587.3	Perpetual	1250	101.1	7.8	479	-6.5	6.9	7.7	7.8
AT1	USF43628C734	USD	English	SOCGEN	7.375	13-Sep-21	MS+623.8	Perpetual	1500	99.8	7.5	450	-4.8	7.6	N/A	N/A
AT1	XS1190655776	USD	English	SWEDA	5.5	17-Mar-20	MS+376.7	Perpetual	750	99.1	6.2	326	-1.5	6.4	N/A	N/A
AT1	XS1535953134	USD	English	SWEDA	6	17-Mar-22	MS+410.6	Perpetual	500	97.3	6.9	398	-2.9	8.7	N/A	N/A
AT1	XS1046224884	USD	English	UCGIM	8	3-Jun-24	MS+ 518	Perpetual	1250	86.8	11.3	832	-0.7	22.5	12.2	N/A
AT1s and Tier2s with No Waiver of Set-Off Rights, but are CRR2 Compliant Otherwise																
AT1	XS1033661866	EUR	Spanish	BBVASM	7	19-Feb-19	MS+615.5	Perpetual	1500	100.0	7.0	720	0.3			
AT1	XS1190663952	EUR	Spanish	BBVASM	6.75	18-Feb-20	MS+660.4	Perpetual	1500	100.9	6.1	621	0.6			
AT1	XS1394911496	EUR	Spanish	BBVASM	8.875	14-Apr-21	MS+917.7	Perpetual	1000	109.5	4.7	472	0.2			
AT1	XS1404935204	EUR	Spanish	BKTSM	8.625	10-May-21	MS+886.7	Perpetual	200	110.5	4.1	418	0.2			
AT1	DE000DB7XHP3	EUR	German	DB	6	30-Apr-22	MS+469.8	Perpetual	1750	86.8	10.8	1080	4.0			
AT1	XS1602466424	EUR	Spanish	SANTAN	6.75	25-Apr-22	MS+680.3	Perpetual	750	104.0	5.6	542	0.5			
AT1	XS1043535092	EUR	Spanish	SANTAN	6.25	12-Mar-19	MS+541	Perpetual	1500	96.3	22.3	2088	0.3			
AT1	XS1107291541	EUR	Spanish	SANTAN	6.25	11-Sep-21	MS+564	Perpetual	1500	100.9	6.0	596	2.4			
AT1	XS1066553329	USD	Spanish	SANTAN	6.375	19-May-19	Ms+478.8	Perpetual	1500	97.0	13.4	1036	-0.6			
AT1	USF1R15XK367	USD	New York	BNP	7.375	19-Aug-25	MS+515	Perpetual	1500	101.9	7.0	403	-5.4			
AT1	USF1R15XK441	USD	New York	BNP	7.625	30-Mar-21	MS+631.4	Perpetual	1500	103.1	6.2	319	-4.1			
AT1	XS1194054166	USD	English	SHBASS	5.25	1-Mar-21	MS+333.5	Perpetual	1200	98.3	6.0	311	-2.5			
Tier 2	FR0013063385	EUR	French	BPCEGP	2.75	30-Nov-22	MS+237	Perpetual	750	104.3	1.6	149	1.1			
Tier 2	FR0012018851	EUR	French	BPCEGP	2.75	8-Jul-21	MS+183	Perpetual	1000	103.6	1.3	140	2.7			

Source: Bloomberg,Morgan Stanley Research; Prices updated around 4PM UK time on November 29. 2018. Bolded bonds are under New York Law. 5.14% BARC has reg call at 101.

Appendix 2: Legacy bonds

Exhibit 40: The fate of legacy bonds

Structure	ISIN	Ticker	Currency	Coupon	Next Call	Maturity	Entity	Step/Non Step	Back-End	Amt Os mn	Law	Offer	YtC	ZtC/ZtM	MW Price on 01-01-2022	YtMWC on 01-01-2022	YtRPC on 01-01-2022	Swap Gains
Make-Whole Regulatory Call Bonds																		
Tier 1	US06738CAG42	BACR	USD	6.86	15-Jun-32	Perpetual	Opco	Non-step	L+173	179	English	106.0	5.5	310	118.9	10.0		25.0
Tier 1	US26156FAA12	CMZB	USD	8.151	30-Jun-29	30-Jun-31	SPV	Non-step	MW+125	1000	New York	123.5	5.5	217	130.2	8.2		33.0
Tier 1	US40427LAB09	HSBC	USD	10.176	30-Jun-30	Perpetual	SPV	Step	L+498	900	Jersey	145.4	6.3	190	148.5	7.6		43.8
Tier 1	US74927PAA75	RBS	USD	6.425	3-Jan-34	Perpetual	SPV	Step	L+194.25	394	New York	120.0	4.7	145	126.3	6.9		29.4
Tier 1	US780097AH44	RBS	USD	7.648	30-Sep-31	Perpetual	Holdco	Step	L+250	762	New York	124.0	5.3	198	131.4	7.9		35.0
Tier 1	XS0179407910	HSBC	GBP	5.844	5-Nov-31	Perpetual	SPV	Step	L+176	700	Jersey	120.1	3.6	224	135.8	8.5		40.5
Tier 1	XS0125686229	LLOYDS	GBP	7.281	31-May-26	Perpetual	Opco	Step	G+409.5	150	English	115.5	5.5	337	122.8	8.2		28.3
Tier 1	GB0058327924	LLOYDS	GBP	7.881	9-Dec-31	Perpetual	SPV	Step	G+440	245	Jersey	139.0	5.0	239	155.0	8.9		44.0
Tier 1	XS0408620721	LLOYDS	GBP	13	22-Jan-29	Perpetual	Opco	Step	G+1340	591	English	164.5	8.5	471	163.8	7.8		22.8
Tier 1	XS0368541032	RABOBK	GBP	6.91	10-Jun-38	Perpetual	Opco	Non-step	L+282.5	250	Dutch	143.5	4.1	207	157.2	7.6		52.0
Non- EU Law Bonds with Regulatory Par Calls																		
Tier 1	US05565AAB98	BNP	USD	7.195	25-Jun-37	Perpetual	Opco	Non-step	L+129	1100	New York	103.5	6.0	373			5.9	43.1
Tier 1	US780097AU54	RBS	USD	4.70613	30-Sep-27	Perpetual	Holdco	Non-step	L+232	1013	New York	91.0	5.5	293			8.3	18.8
Tier 1	US225313AA37	ACAFP	USD	3.93913	31-May-27	Perpetual	Opco	Non-step	L+123.25	107	New York	86.4	4.6	207			9.0	20.4
Tier 1	XS0124569566	SANUK	GBP	7.037	14-Feb-26	Perpetual	Opco	Step	G+375	238	English	119.0	5.0	253			0.8	26.8
Tier 1	US539473AE82	LLOYDS	USD	12	16-Dec-24	Perpetual	Opco	Step	L+1175.6	2000	English	118.3	11.5	513			5.5	6.3
Tier 2 Cocos	US06740L8C27	BACR	USD	7.625		21-Nov-22	Opco			3000	New York	105.3	6.1	314			5.7	-4.8
No Early Call Language																		
Tier 1	US06738C8284	BACR	USD	6.278	15-Dec-34	Perpetual	Opco	Non-step	L+155	581	English	99.8	5.6	318				21.2
Tier 1	US539439AC38	LLOYDS	USD	6.413	1-Oct-35	Perpetual	Holdco	Non-step	L+149.5	375	Scottish	99.3	5.7	336				-4.7
Tier 1	US539439AF68	LLOYDS	USD	6.657	21-May-37	Perpetual	Holdco	Non-step	L+127	434	Scottish	100.3	5.8	350				-5.7
Tier 1	US853254AA86	STANLN	USD	4.03038	30-Jan-27	Perpetual	Holdco	Non-step	L+151	750	English	81.0	5.2	278				15.6
Tier 1	US853254AB69	STANLN	USD	7.014	30-Jul-37	Perpetual	Holdco	Non-step	L+146	750	English	101.8	6.0	371				38.6
Tier 1	XS0214398199	BACR	EUR	4.75	15-Mar-20	Perpetual	Opco	Non-step	L+71	319	English	92.8	2.4	1129				5.4
Tier 1	XS0184519139	NWIDE	GBP	5.769	6-Feb-26	Perpetual	Opco	Step	G+208	84	English	105.8	4.1	339				24.2
Tier 1	GB0001777886	NWIDE	GBP	7.859	13-Mar-30	Perpetual	Opco	Step	G+445	38	English	125.8	5.6	332				40.8
Non-top Holdco UK Subordinated Debt																		
Tier 1	US06738C8284	BACR	USD	6.278	15-Dec-34	Perpetual	Opco	Non-step	L+155	581	English	99.8	5.6	318				21.2
LT2	US4041A3AG79	LLOYDS	USD	6		1-Nov-33	Holdco			466	New York	101.9	5.8	269				31.4
LT2	US002920AC09	SANUK	USD	7.95		26-Oct-29	Opco			261	New York	114.0	6.2	310				41.3
LT2	XS0204377310	HSBC	GBP	5.375	4-Nov-25	4-Nov-30	Opco	Step	L+150	350	English	113.4	3.2	177				24.0
LT2	XS0134886067	BACR	GBP	5.75		14-Sep-26	Opco			274	English	114.5	3.5	213				29.8
LT2	XS0247840969	HSBC	GBP	4.75		24-Mar-46	Opco			600	English	106.4	4.3	262				44.8
LT2	XS0174470764	HSBC	GBP	5.375		22-Aug-33	Opco			500	English	114.6	4.0	240				42.5
LT2	XS0120514335	HSBC	GBP	6.25		30-Jan-41	Opco			225	English	128.1	4.2	256.0				58.2
LT2	XS0088317853	HSBC	GBP	6.5		7-Jul-23	Opco			300	English	117.6	2.4	109.1				21.9
LT2	XS0503834821	LLOYDS	GBP	7.625		22-Apr-25	Opco			750	English	125.08	3.2	185.8				17.6
LT2	XS0043098127	LLOYDS	GBP	9.625		6-Apr-23	Opco			300	English	127.13	2.9	158.4				28.2
LT2	XS0103012893	SANUK	GBP	6.5		21-Oct-30	Opco			29.344	English	128.92	3.5	190.7				45.1
LT2	XS0744444588	LLOYDS	EUR	10.375	2/12/2019	12-Feb-24	Opco	Non-Step	MS+850	153.66	English	102.5	8.1	-194.0				0.5
LT2	XS0611398008	BACR	EUR	6.625		30-Mar-22	Opco			1000	English	112.5	2.6	261				11.9

Source: Bloomberg, Morgan Stanley Research; Prices updated around 4PM UK time on November 29, 2018. Legacy bonds are grandfathered until end-2021 under the CRR rules and this should not be superseded by the implementation of CRR2. However, for BACR $ 7.625%, this is not a CRR grandfathered bond so lose capital value as soon as CRR2 comes in. The earliest date for that is 1.1.20 and the YtRPC then is 2.7%.

Exhibit 41: The fate of legacy bonds (continued)

Structure	ISIN	Ticker	Currency	Coupon	Next Call	Maturity	Post-Trans Capital Value	MS Post-2021 Capital Eligibility	MS Post-CRR2 Capital Eligibility	Entity	Amt Os mn	Offer	Running Yield
Discos													
Discos	GB0000777705	BACR	USD	L+25	14-Jan-19	Perpetual	Tier 2	✗	✗	Opco	295	77.6	*4.1*
Discos	GB0000779529	BACR	USD	L+25	07-Jul-19	Perpetual	Tier 2	✗	✗	Opco	167	77.6	*4.4*
Discos	GB0000784164	BACR	USD	L+25	23-May-19	Perpetual	Tier 2	✗	✗	Opco	132	77.7	*4.4*
Discos	XS0015014615	BACR	GBP	L+100	30-Jan-19	Perpetual	Ineligible	✗	✗	Opco	21	78.7	*5.3*
Discos	FR0008131403	BNP	USD	L+7.5	29-Mar-19	Perpetual	Tier 2	✓	✓	Opco	274	64.0	*5.0*
Discos	GB0004955547	CMZB	USD	L+37.5	31-May-19	Perpetual	Ineligible	✗	✗	SPV	38	86.2	*4.1*
Discos	GB0040940875	DNBNO	USD	L+12.5	28-Feb-19	Perpetual	Tier 2	✗	✓	Opco	200	69.4	*4.7*
Discos	GB0042636166	DNBNO	USD	L+15	28-Feb-19	Perpetual	Tier 2	✗	✓	Opco	200	69.3	*4.8*
Discos	LU0001344653	DNBNO	USD	L+25	23-Feb-19	Perpetual	Tier 2	✗	✓	Opco	150	70.3	*4.8*
Discos	GB0005902332	HSBC	USD	L+25	31-Dec-18	Perpetual	Tier 2	✗	✗	Opco	750	72.2	*3.4*
Discos	XS0015190423	HSBC	USD	L+25	29-Mar-19	Perpetual	Tier 2	✗	✗	Opco	500	72.9	*4.7*
Discos	GB0004355490	HSBC	USD	L+18.75	27-Jan-19	Perpetual	Tier 2	✗	✗	Opco	400	72.9	*4.3*
Discos	GB0005903413	HSBC	USD	L+10	15-Jun-19	Perpetual	Tier 2	✗	✗	Opco	300	72.3	*4.5*
Discos	GB0005232391	LLOYDS	USD	L+10	28-Feb-19	Perpetual	Ineligible	✗	✗	Opco	166	77.9	*4.2*
Discos	GB0005205751	LLOYDS	USD	L+18.75	28-Feb-19	Perpetual	Ineligible	✗	✗	Opco	130	77.9	*4.3*
Discos	GB0005224307	LLOYDS	USD	L+25	21-Jun-19	Perpetual	Ineligible	✗	✗	Opco	129	87.5	*3.9*
Discos	GB0000765403	LLOYDS	USD	L+25	31-May-19	Perpetual	Ineligible	✗	✗	Opco	32	77.9	*4.4*
Discos	LU0001547172	RBS	USD	L+25	28-Feb-19	Perpetual	Ineligible	✗	✗	Opco	285	78.6	*4.3*
Discos	GB0006267180	RBS	USD	L+25	14-Feb-19	Perpetual	Ineligible	✗	✗	Opco	229	78.4	*4.0*
Discos	GB0006267073	RBS	USD	L+25	11-Jan-19	Perpetual	Ineligible	✗	✗	Opco	193	78.9	*4.0*
Discos	GB0007547507	RBS	USD	L+25	13-Jun-19	Perpetual	Ineligible	✗	✓	Holdco	107	78.5	*4.3*
Discos	FR0008202550	SOCGEN	USD	L+7.5	31-May-19	Perpetual	Ineligible	✗	✓	Opco	248	68.3	*4.7*
Discos	GB0008389008	STANLN	GBP	L+18.75	29-Mar-19	Perpetual	Tier 2	✗	✓	Holdco	12	86.4	*3.9*
Discos	GB0008387283	STANLN	USD	L+6.25	18-Jan-19	Perpetual	Tier 2	✗	✓	Holdco	16	87.0	*3.2*
Discos	XS0010826633	STANLN	USD	L+25	29-May-19	Perpetual	Tier 2	✗	✓	Holdco	69	87.0	*3.9*
Discos	XS0010159159	STANLN	USD	L+27.5	20-Jun-19	Perpetual	Tier 2	✗	✓	Holdco	50	87.0	*3.9*
CMS													
CMS	FR0010161026	ACAFP	EUR	CMS+2.5	04-Feb-19	Perpetual	Ineligible	✗	✓	Opco	251	80.9	*1.8*
CMS	XS0212581564	BFCM	EUR	CMS+10	25-Feb-19	Perpetual	Tier 2	✗	✓	Opco	250	71.6	*2.2*
CMS	XS0207764712	BFCM	EUR	CMS+10	15-Jun-19	Perpetual	Tier 2	✗	✓	Opco	750	70.4	*2.2*
CMS	DE000A0E5JD4	DB	EUR	10-2 CMS *10	27-Jun-19	Perpetual	Tier 2	✗	✗	SPV	300	74.0	*1.5*
CMS	DE000A0D24Z1	DPB	EUR	CMS+12.5	07-Jun-19	Perpetual	Tier 2	✗	✗	SPV	300	77.2	*2.1*
CMS	DE000A0DEN75	DPB	EUR	CMS+2.5	02-Jun-19	Perpetual	Tier 2	✗	✗	SPV	300	77.4	*1.9*
CMS	DE000A0DHUM0	DPB	EUR	10-2 CMS *4	23-Dec-19	Perpetual	Tier 2	✗	✗	SPV	500	98.4	*1.5*
CMS	NL0000113587	INTNED	EUR	DSL+50	31-Dec-18	Perpetual	Ineligible	✗	✓	Holdco	432	79.1	*2.5*
CMS	NL0000116127	INTNED	EUR	DSL+10	31-Mar-19	Perpetual	Ineligible	✗	✓	Holdco	563	75.6	*2.1*
CMS	XS0202197694	SANTAN	EUR	CMS+5	30-Mar-19	Perpetual	Tier 2	✓	✓	Opco	165	73.2	*2.1*
CMS	XS0225115566	BBVASM	EUR	CMS+10	10-Aug-19	Perpetual	Tier 2	✗	✗	SPV	75	73.2	*2.1*
CMS	FR0010128835	CCNORD	EUR	CMS+17.5	18-May-19	Perpetual	Tier 2	✗	✓	Opco	150	78.2	*2.1*
CMS	FR0010096826	CMARK	EUR	CMS+10	05-Jan-19	Perpetual	Tier 2	✗	✓	Opco	115	79.6	*2.0*
CMS	XS0212590557	JYBC	EUR	CMS+15	16-Mar-19	Perpetual	Tier 2	✗	✓	Opco	61	84.8	*1.9*
CMS	XS0194983366	JYBC	EUR	CMS+15	05-Jan-19	Perpetual	Tier 2	✗	✓	Opco	73	86.5	*1.9*
CMS	FR0010154278	KNFP	EUR	CMS+100	25-Jan-19	Perpetual	Ineligible	✗	✓	Opco	152	101.0	*1.5*
CMS	XS0197703118	ROTH	EUR	TEC10+35	05-Feb-19	Perpetual	Tier 2	✗	✗	SPV	150	80.5	*2.2*

Source: Bloomberg, Morgan Stanley Research; Prices updated around 4PM UK time on November 29, 2018. Legacy bonds are grandfathered until end-2021 under the CRR rules and this should not be superseded by the implementation of CRR2.

Exhibit 42: Valuation methodology and risks

Recommendation	Risks
<u>Section 1 - Still sellers of UK banks</u> We remain sellers of UK banks because we expect the continued Brexit-related uncertainty to impact spread performance. Our economists expect short-term volatility, but ultimately a softer outcome. Given that valuations have cheapened up, we are looking for entry points.	UK banks spreads are not impacted by any further uncertainty related to the Brexit outcome.
<u>Section 2 - 3Q exposure update</u> Bank capital has been negatively impacted by newsflow related to certain exposures in 2018, with particular sell-off triggered by headlines in Italy and Turkey. We remain cautious on certain exposures, and sell Italian banks, BNP and Credit Ag due to Italian exposure; BBVA, BNP, ING and UniCredit due to Turkish exposure; and BBVA on its Mexican business.	There are positive headlines in these jurisdictions which lead to spread tightening in exposed banks. Newsflow in jurisdictions that are not currently in focus causes underperformance in 2019.
<u>Section 3 - NPLs are not the problem</u> Spanish domestic bank fundamentals have continued to improve, with NPL ratios and REO assets falling consistently in 2018. The correlation between Italian and Spanish Tier 2 has also reduced, so we are less cautious on periphery spillover. We buy Caixa, Bankia and Bankinter Tier 2.	Spanish banks are more heavily impacted by wider moves in peripheral banks debt. The Spanish economy could perform worse than our economists expect, slowing or reversing the fundamental improvements experienced in recent years.
<u>Section 4 - CRR2 - changing capital characteristics</u> Bonds issued under foreign law will be ineligible after CRR2, which will include English law post-Brexit. These could lose capital value between 1.1.20 (EP proposal) or 30.6.25 (estimated EC proposal), so we sell long-call/maturity high-cash AT1 and Tier 2 on reg par call concerns, and buy low-cash AT1 and Tier 2 for the same reason. The UK regulator sees New York law bonds as an impediment to resolution and will use its Banking Act powers to force banks to remove these bonds, so we switch from English law bonds to New York law on potential tender upside.	AT1 and Tier 2 could be grandfathered longer than currently proposed, which would reduce reg par call risk. The UK regulator may soften in its approach of forcing banks to remove impediments to resolution.
<u>Section 5 - The fate of legacy bonds</u> We buy legacy Tier 1 with regulatory make-whole calls as we expect banks to exercise these calls when they are available in 2022; with Commerz \$8.151%, HSBC £5.844% and Lloyds £7.881% having attractive yields to make-whole call. We sell Barclays €4.75% on a low conviction of a 2020 call, with downside risk of holding Tier 1 risk at euribor+0.71%. We buy DNB discos as there is the potential for call/tender upside as these are English law bonds, so will be impediments to resolution post-Brexit.	Banks could choose not to exercise regulatory make-whole calls despite these bonds losing capital value and being impediments to resolution as they are governed by non-EEA law. Barclays could call its €4.75% despite it providing low-cost opco Tier 2 funding post-transition. DNB could not face regulatory pressure to remove its discos as impediments to resolution.
<u>Section 6 - Looking for low-beta liquidity in AT1</u> Low-reset AT1 has oversold on non-call concerns. These bonds carry the highest extension risk due to the low resets, however we think that while these bonds may not get called they should not trade to perp. Capital regulations get updated every 5-10 years and we think the regulator is likely to review the usefulness of AT1 as going concern capital in the next decade. Low-reset bonds look attractive on a yield-to-second-call valuation.	Issuers decide to call and refinance AT1 at the first call date despite it not making economic sense. Regulators decide never to review the usefulness of AT1 as going concern capital. Investor reaction to non-called AT1 could be more negative that we expect.
<u>Section 7 - Selective in Tier 2</u> Extension risk is not priced into callable Tier 2, so we sell low reset bonds which could fall sharply if the market prices in non-calls, preferring bonds with high resets or written under English law where we have more call certainty, as English law bonds will not qualify as capital post-Brexit. We also recommend switching from periphery-exposed or UK banks into core, domestic-focused eurozone banks to reduce volatility.	Issuers decide to call and refinance Tier 2 despite it not making economic sense. Issuers decide not to call Tier 2 even though it will lose capital/MREL value. Periphery-exposed and UK banks perform better than expected.
<u>Section 8 - Bail-inable seniors - trading better than they should</u> We sell bail-in seniors on the trading relationship between Tier 2, bail-in and preferred seniors. Bail-in seniors trade roughly halfway between the two, but given that we expect this to be written-down or converted in resolution, we think these should be trading closer to Tier 2 levels. We expect supply to contribute to bail-in seniors widening to this level.	The market continues to price bail-in seniors halfway between Tier 2 and preferred senior, despite the expected treatment in resolution. Supply could underwhelm, reducing this as a catalyst for widening.
<u>Section 9 - Supply tailwinds: TLTRO and MREL</u> We expect supply to increase next year as banks begin refinancing TLTRO and continue to be net issuers of bail-in senior for MREL. We are cautious on the outstanding bail-in seniors of HSBC, Barclays, BNP, SocGen and ING, who we expect to be the largest bail-in issuers in 2019. We sell ~24, ~26 and ~29 maturity bonds.	Banks could decide to take a literal reading of the lower SRB's subordination requirements and not build out large buffers of bail-in senior. The ECB could announce a TLTRO-refinancing operation faster than anticipated, reducing overall supply.

Source: Morgan Stanley Research

Exhibit 43: History of recommendations for Still sellers of UK banks

CCY	Ticker	Company Name	Cpn	Maturity Date	Entry Date	Type	Side	ISIN	Entry Level Price	Entry Level Spread	Entry Level Benchmark
USD	HSBC	HSBC HOLDINGS PLC	5.6250	Perp	21-Jul-17	AT1	Buy	US404280AR04	103.625	241.88	Z Spread
USD	HSBC	HSBC HOLDINGS PLC	6.8750	Perp	21-Jul-17	AT1	Buy	US404280BC26	109.375	242.66	Z Spread
USD	HSBC	HSBC HOLDINGS PLC	5.6250	Perp	5-Dec-17	AT1	Sell	US404280AR04	102.750	224	Z Spread
USD	HSBC	HSBC HOLDINGS PLC	6.8750	Perp	5-Dec-17	AT1	Sell	US404280BC26	108.000	225	Z Spread
USD	HSBC	HSBC HOLDINGS PLC	5.6250	Perp	25-May-18	AT1	Sell	US404280AR04	101.000	222.00	Z Spread
USD	HSBC	HSBC HOLDINGS PLC	6.8750	Perp	25-May-18	AT1	Sell	US404280BC26	105.300	214.000	Z Spread

Source: Morgan Stanley Research

Exhibit 44: History of recommendations for 3Q exposure update

CCY	Ticker	Company Name	Cpn	Maturity Date	Entry Date	Type	Side	ISIN	Entry Level Price	Entry Level Spread	Entry Level Benchmark
USD	INTNED	ING GROEP NV	6.5000	Perpetual	21-Jul-17	AT1	Sell	US456837AF06	107.000	332.21	Z Spread
USD	ACAFP	CREDIT AGRICOLE SA	8.1250	Perpetual	21-Jul-17	AT1	Sell	USF2R125CD54	118.000	336.35	Z Spread
EUR	ACAFP	CREDIT AGRICOLE SA	6.5000	Perpetual	21-Jul-17	AT1	Sell	XS1055037177	110.375	356.12	Z Spread
GBP	ACAFP	CREDIT AGRICOLE SA	7.5000	Perpetual	21-Jul-17	AT1	Sell	XS1055037920	113.625	443.07	Z Spread
EUR	BNP	BNP PARIBAS	6.1250	Perpetual	21-Jul-17	AT1	Buy	XS1247508903	112.375	314.85	Z Spread
EUR	BBVASM	BANCO BILBAO VIZCAYA ARG	8.8750	Perpetual	21-Jul-17	AT1	Sell	XS1394911496	116.375	405.27	Z Spread
EUR	UCGIM	UNICREDIT SPA	9.2500	Perpetual	21-Jul-17	AT1	Sell	XS1539597499	115.125	545.00	Z Spread
EUR	UCGIM	UNICREDIT SPA	6.6250	Perpetual	21-Jul-17	AT1	Sell	XS1619015719	102.625	575.19	Z Spread
EUR	ISPIM	INTESA SANPAOLO SPA	5.0000	23-Sep-19	4-Oct-17	Tier 2	BUY	XS0452166324	108.266	76.96	Z Spread
EUR	ISPIM	INTESA SANPAOLO SPA	5.1500	16-Jul-20	4-Oct-17	Tier 2	BUY	XS0526326334	111.778	75.37	Z Spread
EUR	BAMIIM	BANCO BPM SPA	6.0000	5-Nov-20	4-Oct-17	Tier 2	SELL	XS0555834984	108.600	278.03	Z Spread
EUR	BAMIIM	BANCO BPM SPA	7.1250	1-Mar-21	4-Oct-17	Tier 2	SELL	XS0597182665	111.500	314.55	Z Spread
EUR	BAMIIM	BANCO BPM SPA	6.3750	31-May-21	4-Oct-17	Tier 2	SELL	XS0632503412	110.200	310.68	Z Spread
EUR	UCGIM	UNICREDIT SPA	6.9500	31-Oct-22	4-Oct-17	Tier 2	BUY	XS0849517650	122.383	189.62	Z Spread
EUR	ISPIM	INTESA SANPAOLO SPA	5.0000	23-Sep-19	1-Dec-17	Tier 2	Buy	XS0452166324	108.254	59.34	Z Spread
EUR	ISPIM	INTESA SANPAOLO SPA	5.1500	16-Jul-20	1-Dec-17	Tier 2	Buy	XS0526326334	111.861	67.06	Z Spread
EUR	BAMIIM	BANCO BPM SPA	6.0000	5-Nov-20	1-Dec-17	Tier 2	Sell	XS0555834984	107.250	307.21	Z Spread
EUR	BAMIIM	BANCO BPM SPA	7.1250	1-Mar-21	1-Dec-17	Tier 2	Sell	XS0597182665	110.500	334.33	Z Spread
EUR	BAMIIM	BANCO BPM SPA	6.3750	31-May-21	1-Dec-17	Tier 2	Sell	XS0632503412	108.500	357.26	Z Spread
EUR	UCGIM	UNICREDIT SPA	6.9500	31-Oct-22	1-Dec-17	Tier 2	Buy	XS0849517650	124.564	151.77	Z Spread
EUR	UCGIM	UNICREDIT SPA	9.2500	Perp	1-Dec-17	AT1	Buy	XS1539597499	122.375	367.18	Z Spread
EUR	UCGIM	UNICREDIT SPA	6.6250	Perp	1-Dec-17	AT1	Buy	XS1619015719	109.875	432.67	Z Spread
USD	BBVASM	BANCO BILBAO VIZCAYA ARG	6.1250	Perp	5-Dec-17	AT1	Buy	US05946KAF84	102.750	339.269	Z Spread
USD	INTNED	ING GROEP NV	6.5000	Perpetual	5-Dec-17	AT1	Sell	US456837AF06	108.625	278.829	Z Spread
USD	ACAFP	CREDIT AGRICOLE SA	8.1250	Perp	5-Dec-17	AT1	Buy	USF2R125CD54	120.500	271.045	Z Spread
EUR	ISPIM	INTESA SANPAOLO SPA	5.0000	23-Sep-19	5-Dec-17	Opco Tier 2	Buy	XS0452166324	108.282	57	Z Spread
EUR	ISPIM	INTESA SANPAOLO SPA	5.1500	16-Jul-20	5-Dec-17	Opco Tier 2	Buy	XS0526326334	111.897	66	Z Spread
EUR	BAMIIM	BANCO BPM SPA	6.0000	5-Nov-20	5-Dec-17	Opco Tier 2	Sell	XS0555834984	107.250	342	Z Spread
EUR	BAMIIM	BANCO BPM SPA	7.1250	1-Mar-21	5-Dec-17	Opco Tier 2	Sell	XS0597182665	110.500	366	Z Spread
EUR	BAMIIM	BANCO BPM SPA	6.3750	31-May-21	5-Dec-17	Opco Tier 2	Sell	XS0632503412	108.500	373	Z Spread
EUR	UCGIM	UNICREDIT SPA	6.9500	31-Oct-22	5-Dec-17	Opco Tier 2	Buy	XS0849517650	124.653	150	Z Spread
EUR	ACAFP	CREDIT AGRICOLE SA	6.5000	Perp	5-Dec-17	AT1	Buy	XS1055037177	113.875	241.017	Z Spread
GBP	ACAFP	CREDIT AGRICOLE SA	7.5000	Perp	5-Dec-17	AT1	Buy	XS1055037920	120.125	337	Z Spread
EUR	BBVASM	BANCO BILBAO VIZCAYA ARG	8.8750	Perp	5-Dec-17	AT1	Buy	XS1394911496	119.000	294.451	Z Spread
EUR	UCGIM	UNICREDIT SPA	9.2500	Perp	5-Dec-17	AT1	Buy	XS1539597499	122.125	374	Z Spread
EUR	UCGIM	UNICREDIT SPA	6.6250	Perp	5-Dec-17	AT1	Buy	XS1619015719	109.500	442	Z Spread
EUR	BBVASM	BANCO BILBAO VIZCAYA ARG	5.8750	Perp	5-Dec-17	AT1	Buy	XS1619422865	108.625	366.025	Z Spread
EUR	UCGIM	UNICREDIT SPA	9.2500	Perp	1-May-18	AT1	Buy	XS1539597499	120.100	368.000	Z Spread
EUR	UCGIM	UNICREDIT SPA	6.6250	Perp	1-May-18	AT1	Buy	XS1619015719	109.000	426.000	Z Spread
EUR	UCGIM	UNICREDIT SPA	5.3750	Perp	1-May-18	AT1	Buy	XS1739839998	100.100	473.000	Z Spread
EUR	BAMIIM	BANCO BPM SPA	6.0000	5-Nov-20	1-May-18	Tier 2	Buy	XS0555834984	108.400	257.000	Z Spread
EUR	BAMIIM	BANCO BPM SPA	6.3750	31-May-21	1-May-18	Tier 2	Buy	XS0632503412	110.300	281.000	Z Spread
EUR	BAMIIM	BANCO BPM SPA	7.1250	1-Mar-21	1-May-18	Tier 2	Buy	XS0597182665	112.400	254.000	Z Spread
EUR	ISPIM	INTESA SANPAOLO SPA	5.0000	23-Sep-19	1-May-18	Tier 2	Buy	XS0452166324	106.600	47.000	Z Spread
EUR	ISPIM	INTESA SANPAOLO SPA	5.1500	16-Jul-20	1-May-18	Tier 2	Buy	XS0526326334	109.800	76.000	Z Spread
EUR	UCGIM	UNICREDIT SPA	6.9500	31-Oct-22	1-May-18	Tier 2	Buy	XS0849517650	122.900	136.000	Z Spread
USD	ACAFP	CREDIT AGRICOLE SA	8.1250	Perp	22-May-18	AT1	Buy	USF2R125CD54	112.400	305.00	Z Spread
EUR	ACAFP	CREDIT AGRICOLE SA	6.5000	Perp	22-May-18	AT1	Buy	XS1055037177	112.000	239.00	Z Spread
EUR	UCGIM	UNICREDIT SPA	9.2500	Perp	29-May-18	AT1	Sell	XS1539597499	109.400	618.000	Z Spread
EUR	UCGIM	UNICREDIT SPA	6.6250	Perp	29-May-18	AT1	Sell	XS1619015719	96.900	697.000	Z Spread
EUR	UCGIM	UNICREDIT SPA	5.3750	Perp	29-May-18	AT1	Sell	XS1739839998	87.300	715.000	Z Spread
EUR	BAMIIM	BANCO BPM SPA	6.0000	5-Nov-20	29-May-18	Tier 2	Sell	XS0555834984	102.000	475.000	Z Spread
EUR	BAMIIM	BANCO BPM SPA	6.3750	31-May-21	29-May-18	Tier 2	Sell	XS0632503412	102.500	512.000	Z Spread
EUR	BAMIIM	BANCO BPM SPA	7.1250	1-Mar-21	29-May-18	Tier 2	Sell	XS0597182665	105.000	442.000	Z Spread
EUR	ISPIM	INTESA SANPAOLO SPA	5.0000	23-Sep-19	29-May-18	Tier 2	Sell	XS0452166324	105.100	98.000	Z Spread
EUR	ISPIM	INTESA SANPAOLO SPA	5.1500	16-Jul-20	29-May-18	Tier 2	Sell	XS0526326334	105.900	221.000	Z Spread
EUR	UCGIM	UNICREDIT SPA	6.9500	31-Oct-22	29-May-18	Tier 2	Sell	XS0849517650	113.600	320.000	Z Spread
EUR	BBVASM	BANCO BILBAO VIZCAYA ARG	5.8750	Perp	29-May-18	AT1	Sell	XS1619422865	100.100	559.000	Z Spread
EUR	BBVASM	BANCO BILBAO VIZCAYA ARG	8.8750	Perp	29-May-18	AT1	Sell	XS1394911496	110.300	488.000	Z Spread
USD	BBVASM	BANCO BILBAO VIZCAYA ARG	6.1250	Perp	29-May-18	AT1	Sell	US05946KAF84	87.400	503.000	Z Spread
USD	INTNED	ING GROEP NV	6.5000	Perp	20-Jun-18	AT1	Buy	US456837AF06	99.500	366.54	Z Spread
EUR	BNP	BNP PARIBAS	6.1250	Perp	25-Jun-18	AT1	Sell	XS1247508903	109.4	348	Z Spread
EUR	UCGIM	UNICREDIT	9.2500	Perp	5-Sep-18	AT1	Sell	XS1539597499	109.500		Z Spread
GBP	ACAFP	Credit Agricole SA	7.5000	Perp	7-Sep-18	AT1	Sell	XS1055037920	112.5		Z Spread
USD	ACAFP	Credit Agricole SA	8.1250	Perp	7-Sep-18	AT1	Sell	USF2R125CD54	110.625		Z Spread
EUR	UCGIM	UNICREDIT SPA	9.2500	Perp	17-Sep-18	AT1	Sell	XS1539597499	113.3	517	
EUR	UCGIM	UNICREDIT SPA	6.6250	Perp	17-Sep-18	AT1	Sell	XS1619015719	100.5	625	
EUR	UCGIM	UNICREDIT SPA	5.3750	Perp	17-Sep-18	AT1	Sell	XS1739839998	91.8	642	
USD	BBVASM	BANCO BILBAO VIZCAYA ARG	6.1250	Perp	17-Sep-18	AT1	Sell	US05946KAF84	89.4	472	
EUR	BBVASM	BANCO BILBAO VIZCAYA ARG	5.8750	Perp	17-Sep-18	AT1	Sell	XS1619422865	102.0	517	
EUR	BBVASM	BANCO BILBAO VIZCAYA ARG	8.8750	Perp	17-Sep-18	AT1	Sell	XS1394911496	112.1	396	
USD	INTNED	ING GROEP NV	6.5000	Perp	17-Sep-18	AT1	Sell	US456837AF06	97.1	403	
EUR	BNP	BNP PARIBAS	6.1250	Perp	17-Sep-18	AT1	Sell	XS1247508903	110.5	302	
GBP	ACAFP	CREDIT AGRICOLE SA	7.5000	Perp	2-Nov-18	AT1	Sell	XS1055037920	108.375	462.09	
USD	ACAFP	CREDIT AGRICOLE SA	8.1250	Perp	2-Nov-18	AT1	Sell	USF2R125CD54	107.000	373.80	
EUR	UCGIM	UNICREDIT SPA	9.2500	Perp	2-Nov-18	AT1	Sell	XS1539597499	107.875	662.52	
EUR	UCGIM	UNICREDIT SPA	9.2500	Perp	2-Nov-18	AT1	Sell	XS1539597499	107.875	662.52	
EUR	UCGIM	UNICREDIT SPA	6.6250	Perp	2-Nov-18	AT1	Sell	XS1619015719	94.625	779.27	
EUR	UCGIM	UNICREDIT SPA	5.3750	Perp	2-Nov-18	AT1	Sell	XS1739839998	85.625	772.87	
USD	BBVASM	BANCO BILBAO VIZCAYA ARG	6.1250	Perp	2-Nov-18	AT1	Sell	US05946KAF84	86.625	506.81	
EUR	BBVASM	BANCO BILBAO VIZCAYA ARG	5.8750	Perp	2-Nov-18	AT1	Sell	XS1619422865	99.750	584.44	
EUR	BBVASM	BANCO BILBAO VIZCAYA ARG	8.8750	Perp	2-Nov-18	AT1	Sell	XS1394911496	111.500	397.04	
USD	INTNED	ING GROEP NV	6.5000	Perp	2-Nov-18	AT1	Sell	US456837AF06	95.125	432.58	
EUR	BNP	BNP PARIBAS	6.1250	Perp	2-Nov-18	AT1	Sell	XS1247508903	107.500	375.63	
EUR	BNP	BNP PARIBAS	6.1250	Perp	2-Nov-18	AT1	Sell	XS1247508903	107.500	375.63	
EUR	UCGIM	UNICREDIT SPA	9.2500	Perp	2-Nov-18	AT1	Sell	XS1539597499	107.875	662.52	
EUR	UCGIM	UNICREDIT SPA	6.6250	Perp	2-Nov-18	AT1	Sell	XS1619015719	94.625	779.27	
EUR	UCGIM	UNICREDIT SPA	5.3750	Perp	2-Nov-18	AT1	Sell	XS1739839998	85.625	772.87	
EUR	BBVASM	BANCO BILBAO VIZCAYA ARG	5.8750	Perp	2-Nov-18	AT1	Sell	XS1619422865	99.750	584.44	
EUR	BBVASM	BANCO BILBAO VIZCAYA ARG	8.8750	Perp	2-Nov-18	AT1	Sell	XS1394911496	111.500	397.04	
USD	BBVASM	BANCO BILBAO VIZCAYA ARG	6.1250	Perp	2-Nov-18	AT1	Sell	US05946KAF84	86.625	506.81	

Source: Morgan Stanley Research

Exhibit 45: History of recommendations for Update on NPLs

CCY	Ticker	Company Name	Cpn	Maturity Date	Entry Date	Type	Side	ISIN	Entry Level Price	Entry Level Spread	Entry Level Benchmark
EUR	BKIASM	BANKIA SA	3.3750	15-Mar-27	12-Jul-17	Tier 2	Buy	ES0213307046	102.698	250.01	Z Spread
EUR	CABKSM	CAIXABANK SA	3.5000	15-Feb-27	12-Jul-17	Tier 2	Buy	XS1565131213	104.768	215.16	Z Spread
EUR	BKIASM	BANKIA SA	3.3750	15-Mar-27	5-Dec-17	Opco Tier 2	Buy	ES0213307046	105.826	184.230	Z Spread
EUR	CABKSM	CAIXABANK SA	3.5000	15-Feb-27	5-Dec-17	Opco Tier 2	Buy	XS1565131213	106.808	171.219	Z Spread
EUR	CABKSM	CAIXABANK SA	3.5000	15-Feb-27	6-Feb-18	Tier 2	Buy	XS1565131213	107.270	135.00	Z Spread
EUR	BKIASM	BANKIA SA	3.3750	15-Mar-27	29-May-18	Tier 2	Sell	ES0213307046	102.300	253.000	Z Spread
EUR	CABKSM	CAIXABANK SA	3.5000	15-Feb-27	29-May-18	Tier 2	Sell	XS1565131213	103.100	234.000	Z Spread

Source: Morgan Stanley Research

Exhibit 46: History of recommendations for CRR2 – changing capital characteristics

CCY	Ticker	Company Name	Cpn	Maturity Date	Entry Date	Type	Side	ISIN	Entry Level Price	Entry Level Spread	Entry Level Benchmark
EUR	CABKSM	CAIXABANK SA	3.5000	15-Feb-27	12-Jul-17	Tier 2	Buy	XS1565131213	104.768	215.16	Z Spread
USD	ACAFP	CREDIT AGRICOLE SA	7.8750	Perpetual	21-Jul-17	AT1	Sell	USF22797RT78	111.750	371.67	Z Spread
GBP	ACAFP	CREDIT AGRICOLE SA	7.5000	Perpetual	21-Jul-17	AT1	Sell	XS1055037920	113.625	443.07	Z Spread
EUR	BNP	BNP PARIBAS	6.1250	Perpetual	21-Jul-17	AT1	Buy	XS1247508903	112.375	314.85	Z Spread
USD	ACAFP	CREDIT AGRICOLE SA	7.8750	Perpetual	11-Sep-17	AT1	Buy	USF22797RT78	111.875	383.65	Z Spread
USD	ACAFP	CREDIT AGRICOLE SA	7.8750	Perpetual	5-Dec-17	AT1	Buy	USF22797RT78	113.750	299.372	Z Spread
GBP	ACAFP	CREDIT AGRICOLE SA	7.5000	Perp	5-Dec-17	AT1	Buy	XS1055037920	120.125	337	Z Spread
EUR	CABKSM	CAIXABANK SA	3.5000	15-Feb-27	5-Dec-17	Opco Tier 2	Buy	XS1565131213	106.808	171.219	Z Spread
EUR	CABKSM	CAIXABANK SA	3.5000	15-Feb-27	6-Feb-18	Tier 2	Buy	XS1565131213	107.270	135.00	Z Spread
USD	ACAFP	CREDIT AGRICOLE SA	7.8750	Perpetual	8-Feb-18	AT1	Buy	USF22797RT78	112.400	275.000	Z Spread
EUR	CABKSM	CAIXABANK SA	3.5000	15-Feb-27	29-May-18	Tier 2	Sell	XS1565131213	103.100	234.000	Z Spread
EUR	BNP	BNP PARIBAS	6.1250	Perp	25-Jun-18	AT1	Sell	XS1247508903	109.4	348	Z Spread
GBP	ACAFP	Credit Agricole SA	7.5000	Perp	7-Sep-18	AT1	Sell	XS1055037920	112.5		Z Spread
USD	ACAFP	CREDIT AGRICOLE SA	7.8750	Perpetual	7-Sep-18	AT1	Sell	USF22797RT78	106.750		Z Spread
EUR	BNP	BNP PARIBAS	6.1250	Perp	17-Sep-18	AT1	Sell	XS1247508903	110.5	302	
GBP	ACAFP	CREDIT AGRICOLE SA	7.5000	Perp	2-Nov-18	AT1	Sell	XS1055037920	108.375	462.09	
USD	ACAFP	CREDIT AGRICOLE SA	7.8750	Perp	2-Nov-18	AT1	Sell	USF22797RT78	103.500	416.07	
EUR	BNP	BNP PARIBAS	6.1250	Perp	2-Nov-18	AT1	Sell	XS1247508903	107.500	375.63	
EUR	BNP	BNP PARIBAS	6.1250	Perp	2-Nov-18	AT1	Sell	XS1247508903	107.500	375.63	

Source: Morgan Stanley Research

Exhibit 47: History of recommendations for Supply tailwinds: TLTRO and MREL

CCY	Ticker	Company Name	Cpn	Maturity Date	Entry Date	Type	Side	ISIN	Entry Level Price	Entry Level Spread	Entry Level Benchmark
USD	HSBC	HSBC HOLDINGS PLC	4.3000	8-Mar-26	5-Dec-17	Holdco senior	Buy	US404280AW98	106.503	106	Z Spread
GBP	HSBC	HSBC HOLDINGS PLC	6.5000	20-May-24	5-Dec-17	Holdco senior	Buy	XS0429422271	126.941	81	Z Spread
GBP	HSBC	HSBC HOLDINGS PLC	2.2560	13-Nov-26	5-Dec-17	Holdco senior	Buy	XS1716248197	99.798	100	Z Spread

Source: Morgan Stanley Research

Definition of terms

Buy: The analyst expects that over the next 6 months the instrument's total return shall be greater than the total return of the benchmark composed of comparable instruments in the same currency and asset class issued by the other European banks.

Sell: The analyst expects that over the next 6 months the instrument's total return shall be lesser than the total return of the benchmark composed of comparable instruments in the same currency and asset class issued by the other European banks.

Unless otherwise specified, the price of financial instruments mentioned in the recommendation is as at the date and time of publication of the recommendation.

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(as of October 31, 2018)
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	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)			OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC)	
STOCK RATING CATEGORY	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MISC
Overweight/Buy	**1157**	**37%**	**305**	**42%**	**26%**	**544**	**39%**
Equal-weight/Hold	**1380**	**44%**	**335**	**46%**	**24%**	**632**	**45%**
Not-Rated/Hold	**47**	**1%**	**7**	**1%**	**15%**	**7**	**0%**
Underweight/Sell	**553**	**18%**	**82**	**11%**	**15%**	**220**	**16%**
TOTAL	**3,137**		**729**			**1403**	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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