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Forward thinking

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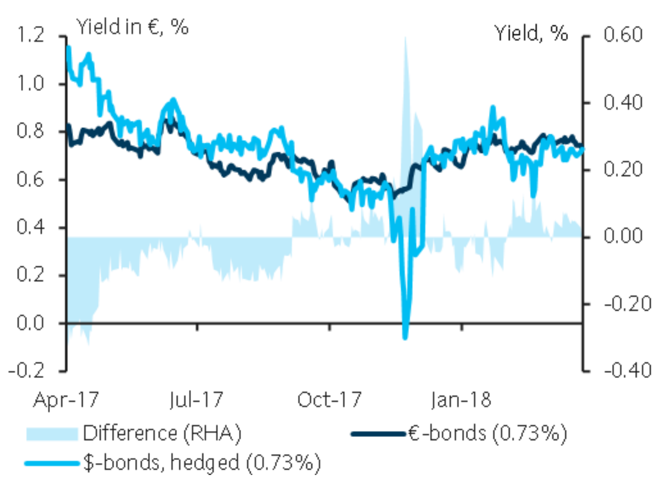
The rise in FX hedging costs in 2017 has been the prism through which we have viewed global relative value in IG credit and is central to our demand outlook for €-IG. Our economists' forecasts, forward rates for 3m Libor, and FX forward rates all imply that the cost of hedging EURUSD will continue to rise throughout this year. Either the EUR-USD basis in 3m Libor or the 3m cross currency basis would have to tighten to obviate this, both of which seem unlikely in the context of Fed normalisation and a patient ECB.

The headline yield of €-IG credit has languished below 1% since the beginning of the CSPP. At a glance, this made European corporate credit the least attractive of the major corporate bond markets, but appearances can be deceptive. Since mid-2014 we have noted that the yield and spread pickup offered by $-IG over €-IG was explained by the cost of hedging the FX and interest rate risks inherent in cross-market switches. However, it wasn't until these costs were expressed in 3m FX forwards, the most common approach to hedging FX risk in corporate bond portfolios, that we have seen investor views align with our own (see *Value across the Global Credit Curve* for a longer discussion of FX risk in corporate bond portfolios and the implications for $-IG/€-IG relative value). The end of the multi-year bull market in the USD has also shifted opinions on the value of FX hedges.

In Figure 1 we show our measure of cross-market relative value, based on a basket of name and tenor matched pairs of €- and $-IG bonds, hedged using rolling 3m FX forwards. The €-IG basket has yielded more than the $-IG basket for most of this year and that has helped generate demand for €-IG from non-domestic, primarily Asian, investors. A key premise of our 2018 European Investment Grade outlook is that this hedging cost will continue to rise and that it will increasingly encourage flows into European fixed income. This is founded on the forecasts of our US and European economists: specifically their expectations on the path of Fed and ECB policy rates. While our US economists' currently forecast a faster pace of Fed normalisation than the market consensus, if we instead estimate forward hedging costs (ie, the annualised cost of hedging using 3m FX forwards, in 3-, 6-, and 12-months' time) using market implied levels, it is notable that market forwards are also priced for a continued *rise* in the cost of hedging USD bonds into EUR, over the next 12 months (Figure 2).

FIGURE 1
Relative value has favored €-IG throughout 2018…



Note: Name- and tenor-matched baskets. Source: Bloomberg, Barclays Research

FIGURE 2
…reflecting the rising cost of hedging EURUSD exposure

Source: Barclays Research

Estimating forward FX hedge costs

The cost of hedging EURUSD at the spot rate is driven by the observable prices of spot FX and the 3 month FX forward:

$$Annualised\ cost = \frac{3m\ Forward\ Rate - Spot\ Rate}{Spot\ Rate} \text{ x } 4$$

Because forwards are quoted at several tenors, we can also calculate a market implied path for EURUSD and hence the implied Spot and Forward Rates for EURUSD at points in the future. From this we can construct the FX Fwd implied cost of hedging EURUSD in 3-, 6-, and 12-months' time, as shown in Figure 2.

Further, the 3m Forward Rate is theoretically fixed by arbitrage conditions (specifically by covered interest rate parity), with deviation from these relationships referred to as the cross-currency basis:

$$3m\ Forward\ Rate = \frac{3m\ USD\ Libor}{3m\ EUR\ Libor} \text{ x } Spot\ Rate + Cross\ Currency\ Basis$$

Hence, if we assume that the 3m cross-currency basis will be steady over the next 12 months we can also back out the market implied evolution of FX hedging costs that is embedded in the forward curves of 3m USD Libor and 3m EUR Libor. This is also shown in Figure 2 and differs from the path implied by the FX market due to the assumption that the cross-currency basis will be static over the next 12 months.

Finally, we note that 3m Libor can be thought of as the central bank policy rate (Fed funds rate for USD Libor, ECB deposit rate for EUR Libor) plus a spread. If we fix this spread, as well as the cross-currency basis, at today's levels for the next 12 months we can estimate the path of FX hedging costs as implied by our economists' forecasts.

A sum-of-the-parts approach

As noted in the technical box, the cost of 3m FX hedging is driven by three components: the relative path of ECB and Fed policy rates; the spread between policy rates and 3m Libor in each market; and the cross-currency basis swap. On top of these, relative value in credit is also a reflection of the relative path of credit yields, $-IG versus €-IG, which in turn can be broken down into a spread and a government yield component.

ECB policy set to further lag the Fed

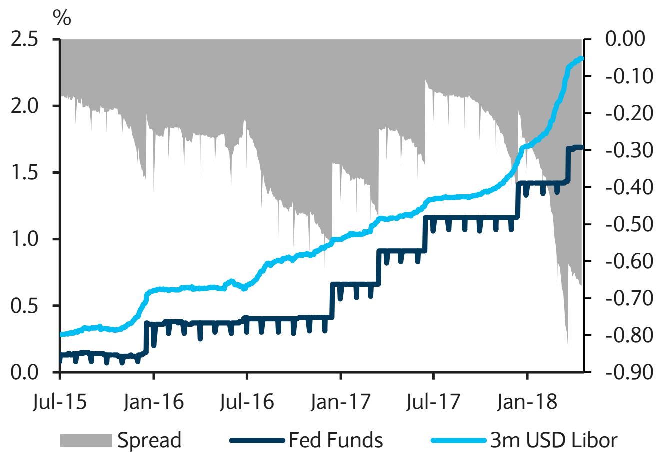
Our economists expect the Fed to hike three more times in 2018 (four in total, following the hike in March), followed by a further four in 2019. In contrast, our European economists do not expect the ECB to adjust its policy rate until Q2 2019, most likely in June, and forecast that the deposit rate will still be at 0bp at the end of 2019. If both forecasts are realised then this component of FX hedging costs will rise 135bp over the next 18 months.

Libor could fall back in line with policy rates

In recent quarters, 3m USD Libor has risen much faster than the fed funds rate (Figure 3), with the spread between them widening rapidly. This has been widely discussed through the lens of Libor-OIS widening, with a general view that Libor has underperformed due to a combination of lack of traded volumes (most Libor submissions are "Level 3" and hence inferred from other market rates) and a rise in US T-Bill yields following a sharp increase in issuance by the US Treasury. Our US money markets team cautiously forecast L-OIS (and by extension the spread between fed funds and 3m Libor) to hold steady through year end but note that this is highly uncertain (*LOIS outlook: Known Unknowns*, March 2018). That said, if Libor-fed funds returned to its historical average, lowering the cost of hedging EURUSD, the effect would be in the order of 30bp, ie it would offset roughly one Fed hike.

FIGURE 3

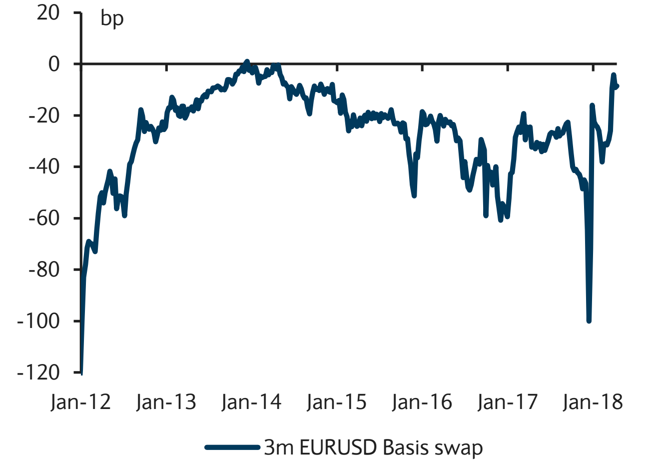
3m USD Libor has risen faster than the fed funds rate



Source: Bloomberg, Barclays Research

FIGURE 4

The 3m EURUSD basis is at a multi-year tight



Source: Barclays Research

EURUSD 3m basis swap already close to zero

The 3m EURUSD basis swap is the wedge between the cross market difference in 3m Libor (USD-EUR) and the actual cost of hedging with 3m FX forwards: a negative basis means that the cost of hedging EURUSD is higher than what would be implied by interest rate differentials alone. As shown in Figure 4, this wedge has shrunk (away from some year-end noise) and is at a three-year low. The spread is unlikely to turn positive, hence there is only limited room for this component of FX hedging costs to contract further.

We expect €-IG and $-IG to perform similarly through year end

In *Value across the Global Credit Curve*, we highlighted that $-IG underperformed €-IG in the March weakness and that the spread differential between the two markets had moved to levels consistent with our year-end forecast. Per Figure 7, on a name and tenor matched basis, €-IG and $-IG now trade in line and we expect them to track each other until the end of 2018, for better or worse.

5y German yields are expected to rise more than 5y US yields

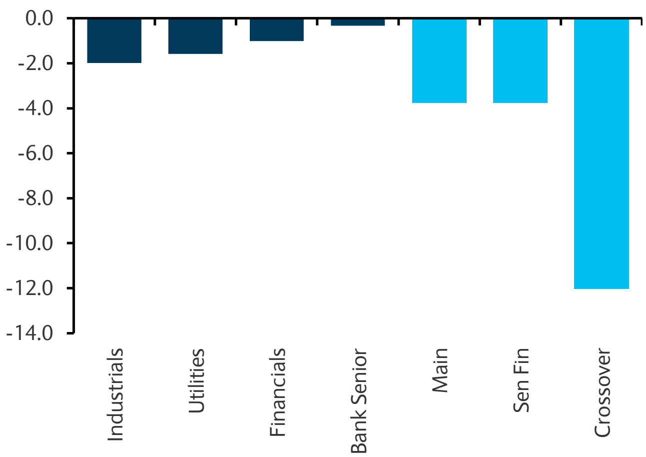
We reference our colleagues' forecasts for government bond yields at the 5y point as these are the closet match to our €-IG index (average tenor 5.75 years). Our US rates team expect the 5y UST to yield 2.70% in Q4, essentially in line with current valuations. By comparison, 5y Germany currently yields -5bp and our European colleagues see that rising to 15bp by year end. This should make €-IG look relatively more attractive to investors who hedge with FX forwards, as they (implicitly) buy credit on a yield basis.

Putting it together

We remain comfortable with our view that FX hedging costs will rise in 2018 and that this will outpace any adjustment in the relative yields of €- and $-IG. Hence, on a hedged basis, €-IG should become increasingly attractive over the course of 2018. Short term movements in the cross-currency basis or 3m USD Libor could take the edge off further hikes by the Fed but, given the relative size of moves that our colleagues forecast in each of these markets, the path of policy rates should dominate the cost of FX hedging over the next 12 months. While our house forecasts are for a slightly more rapid pace of policy normalisation by the Fed than consensus, we note that our view is also supported by the market implied path of FX hedging costs embedded in both the FX and interest rate markets. Finally we highlight the *Barclays Japanese Investor Survey*, which indicates that Japanese investors have and are likely to continue to allocate to European over US fixed income in 2018.

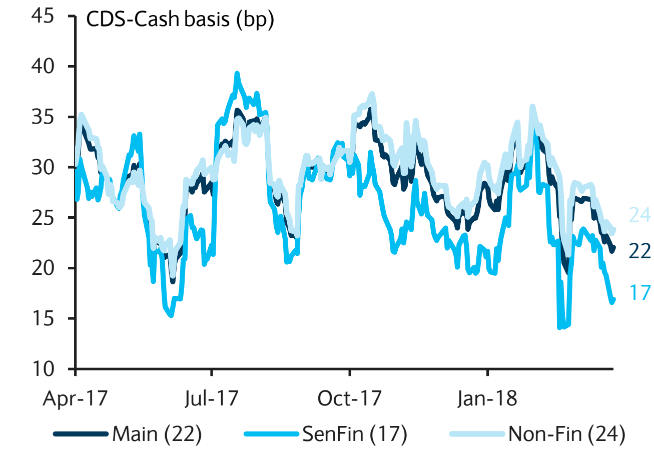
IG credit at a glance

FIGURE 5
Week-on-week change in bond and CDS indices



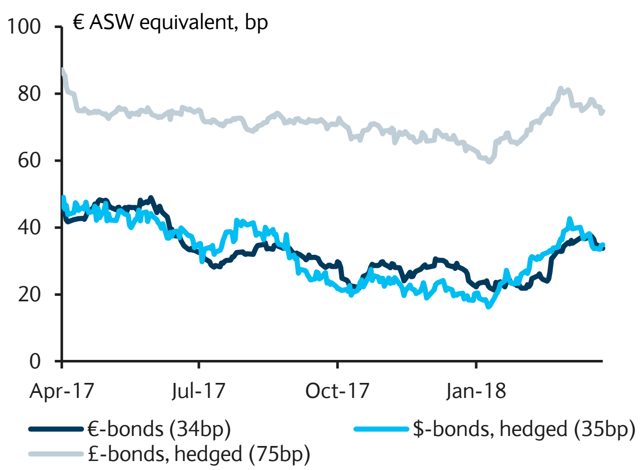
Note: Wednesday-to-Wednesday. Source: Barclays Research

FIGURE 6
CDS-Cash basis



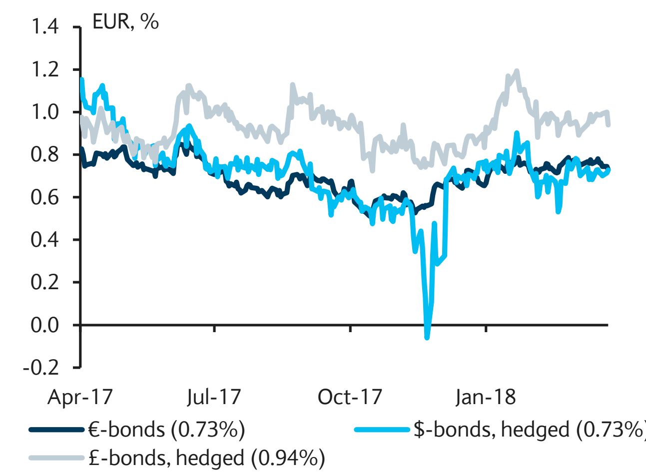
Source: Barclays Research

FIGURE 7
Cross-currency RV (hedged to EUR using xccy basis)



Source: Barclays Research

FIGURE 8
Cross-currency RV (hedged to EUR using 3m FX forwards)



Source: Barclays Research

FIGURE 9
€-IG and £-IG issuance trends

	EUR Fin (€bn)	EUR Non-Fin (€bn)	EUR total (€bn)	GBP total (£bn)
Last week	7.5	3.7	11.2	0.7
MTD	20.2	10.6	30.8	1.4
YTD	**109.0**	**75.5**	**184.5**	**13.0**
Year/Year	20%	-23%	-2%	-24%
Net YTD	**27.1**	**18.5**	**45.6**	**2.5**
FY18 f/c	200	285	485	60.0
Remaining Issuance (forecast)				
Gross	91.0	209.5	300.5	47.0
Net	0.5	109.5	109.9	19.3

Note: Volumes taken at COB on Wednesday. Source: Dealogic, Barclays Research

FIGURE 10
€-IG issuance trends

	2017 Issuance	2018 Issuance	2017 Redemptions	2018 Redemptions
Jan	62.0	52.2	55.5	38.7
Feb	44.6	35.8	52.0	37.5
Mar	66.6	65.7	48.9	34.8
Apr	24.5	30.8	30.8	28.2
May	69.1		31.5	31.5
Jun	54.0		42.4	28.9
Jul	22.6		21.6	19.6
Aug	22.0		15.8	9.1
Sep	52.5		42.7	22.7
Oct	29.3		37.6	26.9
Nov	55.2		25.7	28.9
Dec	10.2		15.4	18.2

Note: Volumes taken at COB on Wednesday. Source: Dealogic, Barclays Research

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