

## Seeing through the haze with a factor model

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**Refreshing our factor model for €HY, we take a balanced view on BB vs B, as valuations now look more fair. We believe BBs will only underperform Bs if risk-free rates rise meaningfully. 2s5s curves are steep and compelling, and longer-dated bonds look more attractive, whereas we are cautious on the short-call bonds. After recent weakness, the rise in pick-up for UK names in €HY from its low since the EU referendum is starting to make risk-reward look more compelling. We are cautious on Italian HY and worry about contagion to Spanish HY, which has outperformed. We are cautious on US issuers in €HY on a valuation basis.**

### The big picture

Our HY spread model seeks to identify how much investors are being paid for taking exposure to different factors, by tracking them over time and relating them to one another and other tradable quantities.

Our spread model has a decent fit to observed spreads (Figure 1), currently capturing about 75% of the variation in credit spreads. Historically there has been a relatively strong correlation between how well our model explains spreads and the level of spreads: the weaker the market, the less can be explained.

Starting late 2017, however, there has been a meaningful disconnect – with the ability of our model to explain spreads being somewhat lower given the relatively tight spreads. We take this as quantification of the degree of idiosyncratic risk in European HY markets. Considering the general environment and that a meaningful part of the spread of a given company cannot be solely explained by more common factors when valuing credit, such as rating, duration and regional exposure (see details of our model below), we think the EUR HY market has increasingly become a name-picker's paradise.

#### *Model ingredients – a brief look*

We explain our model in detail in *HY model refined - the rules*, 26 January 2018. A brief description:

We use the Barclays Bloomberg High Yield index, restricting ourselves to non-financial bonds in €, rated between BAA2 and CAA1, between 10 and 1200bp in OAS, and between 1 and 10 in OAD. We perform cross-sectional regressions for each month-end. We include the two lower BBB ratings in order to better “anchor” our model and better capture the pricing of Fallen Angels/Rising Stars.

We use a multitude of explanatory variables:

**Credit rating:** We index ratings of individual bond issues, translated into Moody's WARF, and we include a dummy variable for 'IG fund habitat' for BBs.

**Duration:** We use a polynomial shape, expressed in option adjusted duration (OAD).

**Callability:** We include a dummy variable for callable bonds, as well as a variable measuring time to call (in years).

**Regional risk:** We employ dummy variables for the 'Periphery', UK and the US-issued bonds.

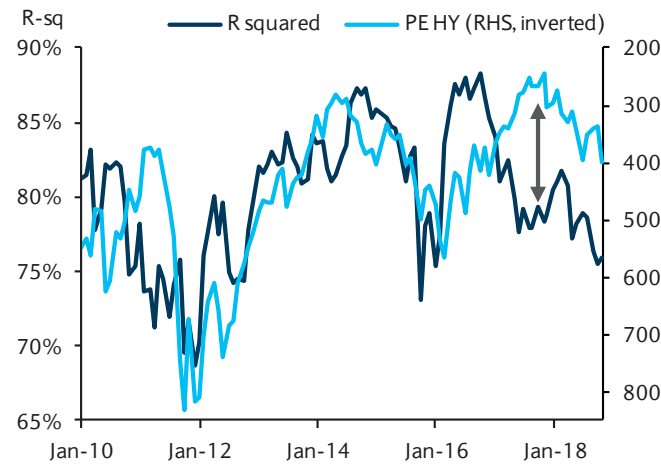
**Commodity exposure:** We employ a dummy variable for bonds exposed to commodity prices.

**Liquidity:** We use Barclays Liquidity Cost Score (LCS), defined as the cost of a standard, institutional-size, round-trip transaction.

Tracking these factors over time, translated into market-relevant quantities in terms of bp, allows us to get a clear picture of which risk factors investors are being compensated for.

FIGURE 1

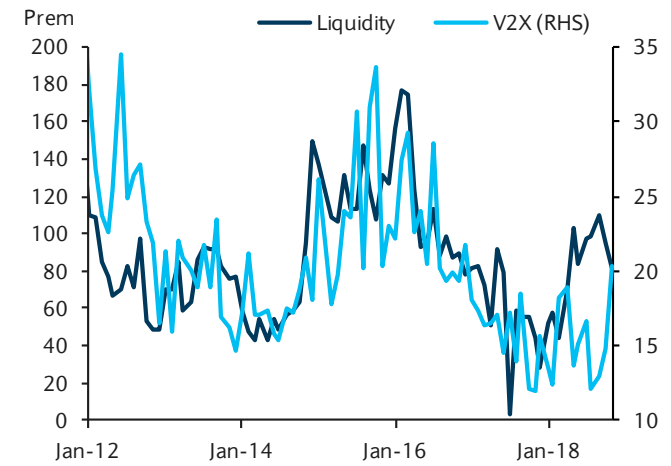
R-sq of the model has historically had a strong inverse relationship to spreads, but doesn't currently



Source: Barclays Research

FIGURE 2

Compensation for liquidity risk has a strong correlation to market volatility, measured by the V2X index



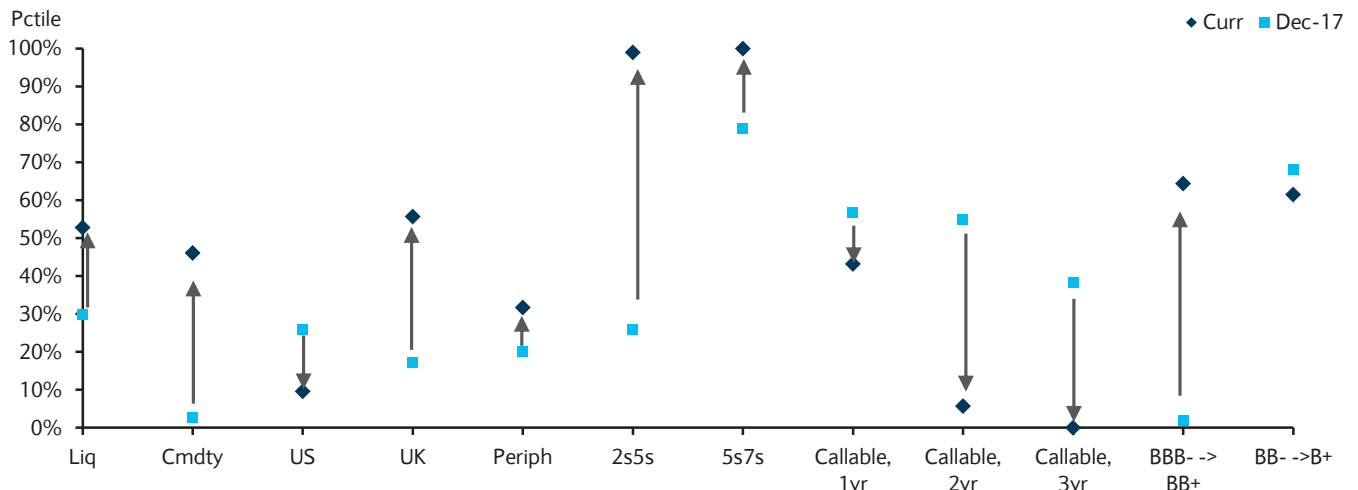
Source: Barclays Research

Fitting with this increase in idiosyncratic risk, the compensation for buying illiquid bonds (Figure 2) jumped early this year from a cyclical low; given the degree of downside risk, investors are, justifiably, demanding a higher premium for buying illiquid bonds. We do not expect this environment to change materially in 2019 and believe this level of compensation could remain.

More generally, surveying all risk factors embedded in our model (Figure 3), many have seen an increase in compensation compared with observations in end-2017. In particular the premium for taking UK and peripheral risk has risen, and the curve has steepened materially. The pick-up for buying BBs vs. BBBs has also risen meaningfully. In contrast, the premium for buying US-domiciled companies has fallen, as has the premium for buying callable bonds. We explore all of these in detail below.

FIGURE 3

Current parameter estimates and Dec-17 vs 2010 ranges, expressed as percentiles



Note: Current and Dec-17 parameter estimates/conversions expressed as percentiles since Jan-2010.

Source: Barclays Research

## The details: Rating, Curve and Regions

We discuss rating, curve and regional RV in turn.

### Rating: Hold your B vs.BB compression horses

Much (including our) ink has been spilt on the topic of BB versus B-rated bond spread pick-up. When all is said and done, the compensation is effectively unchanged currently versus what prevailed at end-2017 (Figure 3 and Figure 4). One could argue that compared with history, based on spread levels, the compensation for going down in rating from BB to B in late 2017 was high (ie, BBs were tight), but as the pick-up has remained essentially unchanged since then for meaningfully wider spreads, the pick-up no longer looks particularly high by historical standards.

We quantified this further in *Bund yields are to blame for rating cliffs*, 27 July 2018, where we built a model specifically to explain the BB- to B+ spread pick-up, giving a strong fit to the observed pick-ups (Figure 5). This model shows that, taking into account the current spread and Bund yield levels, the pick-up is about as expected. Furthermore, we only expect the pick-up to drop (ie. BBs to underperform) if rates rise meaningfully: we estimate that for each 10bp move higher in the 5yr bund, BBs should underperform Bs by 4bp.

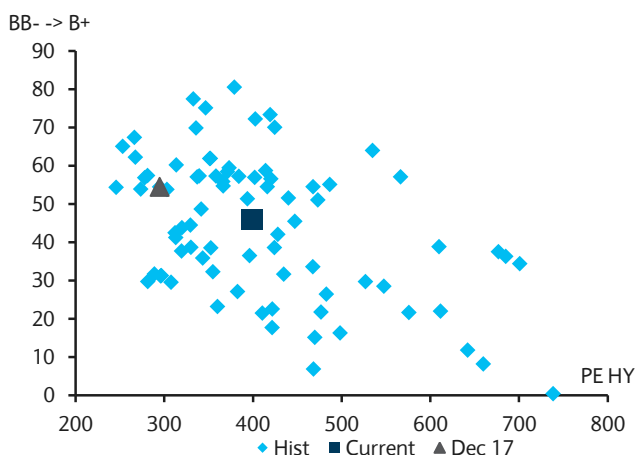
As such, a view of BB underperformance versus Bs, based on a perception of 'IG tourist' involvement in HY, really hinges on a bearish rate view. Given the current weakening economic numbers (and thus our expectations for rates to remain relatively low), we are not convinced that BBs will underperform Bs (on a spread basis) in 2019.

### Curve: Out of short-call bonds, into the curve instead

From trading relatively flat in the beginning of this year, 2s5s have steepened significantly and now trade at multi-year highs (Figure 6). Thinking of the curve steepness of duration preference, this is interesting for two reasons.

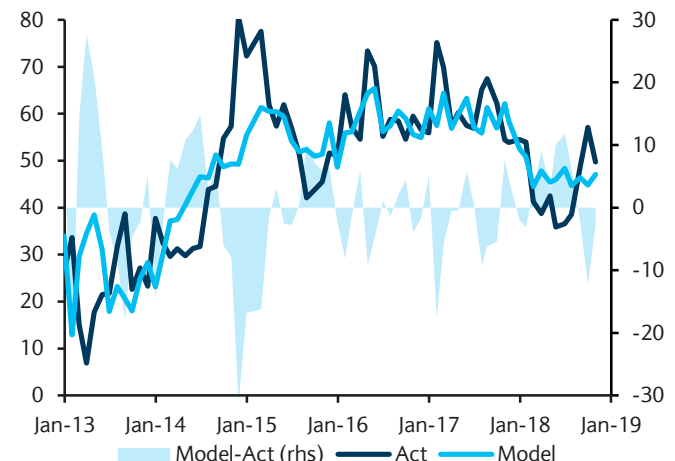
First, the premium for buying bonds callable in 1yr used to have a strong correlation to 2s5s, which makes sense as both are expressions of duration – with short-call and long-dated bonds having the most downside to rising rates. However, with the sudden steepening of curves, short-call bonds have not attracted a greater premium. This pattern seems inconsistent to us; short-call bonds should be weaker or curves should flatten. We

FIGURE 4  
Pick-up from low BB to high B has held steady but looks more middle-of-the-range given the general spread widening...



Source: Barclays Research

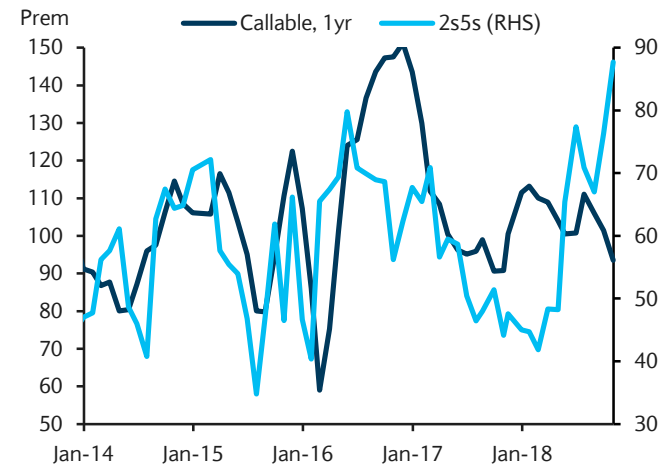
FIGURE 5  
... and the BB → B+ pick-up is in line with our model using spread levels, V2X, 5yr Bund and a dummy for CSPP activity



Source: Barclays Research

FIGURE 6

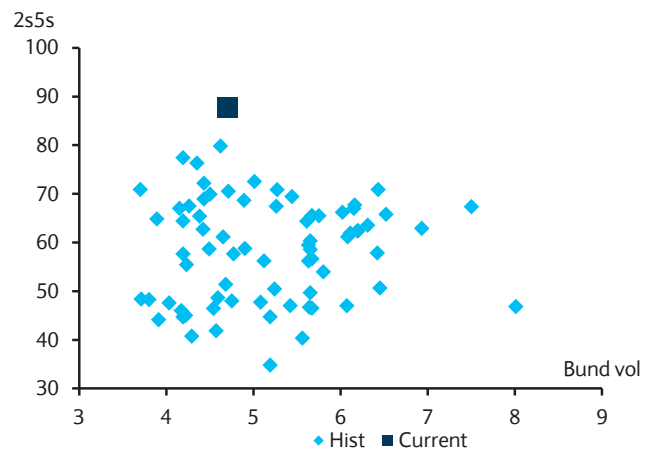
2s5s premium at multi-year highs and disconnected from premium for buying bonds callable in 1yr



Source: Barclays Research

FIGURE 7

2s5s premium also appears high relative to the level of Bund volatility



Note: Implied volatility of Bund future. Source: Barclays Research

believe one reason for this divergence may have been the fact that, anecdotally, short-duration funds have seen a more steady demand picture to date, and they are natural buyers of short-call paper. If that is the case, there is even more reason to prefer longer-dated bonds; if rates rise, short-duration funds could see outflows, which could lead to liquidation of short-call positions and underperformance.

Second, the steepness of 2s5s is inconsistent with continued relatively low levels of implied Bund volatility (Figure 7). If no concerns are being expressed in rate land about Bund volatility, and no rate hike is expected by the ECB until September 2019, this is at odds with the very steep curve.

As such, we find the steep curves compelling and think longer-dated bonds look more attractive, whereas we are cautious on the short-call bonds.

### Regional risk: Italy with a dash of UK, hold your Spain and US

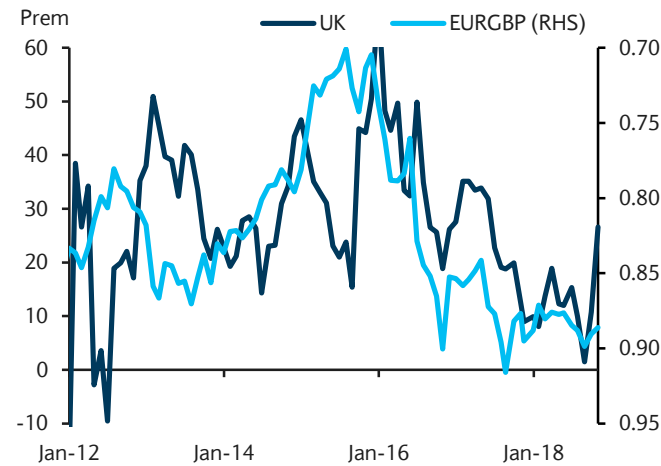
In terms of Brexit risk in €HY, the premium for UK-domiciled names jumped to 60bp after the EU referendum (Figure 8) but has since whittled away to essentially zero. However, it now appears that some pricing of Brexit risk is present again, with the premium rising to nearly 30bp, in spite of EURGBP not moving. As we argued in *Sterling pick-ups*, 12 October 2018, there was only a UK premium in £Bs and not in €HY (warranting caution), but after the recent sell-off, this is more balanced, although on the margin we still prefer £Bs as a way to fade 'Brexit weakness'.

For Italian exposure, there has been a meaningful increase in the premium for Italian-domiciled entities (Figure 9), currently standing at 72bp. However, as we argued in *Italian risk premia and Spanish 'anti-contagion'*, 5 October 2018, considering the degree of moves in the BTP-Bund spread, this appears inadequate, warranting caution on Italian HY. Investors looking to fade Italian weakness would arguably be better off just buying BTPs.

In spite of ongoing concerns about possible contagion to other countries, Spanish HY commands virtually no risk premium. In fact, as we argued in *Italian risk premia and Spanish 'anti-contagion'*, 5 October 2018, Spanish HY has outperformed significantly, and currently trades 90bp tight in a macro-model context. It may be that Spanish HY has been a beneficiary of Italian 'flight to HY safety', but should we see contagion, Spanish HY appears vulnerable to us.

FIGURE 8

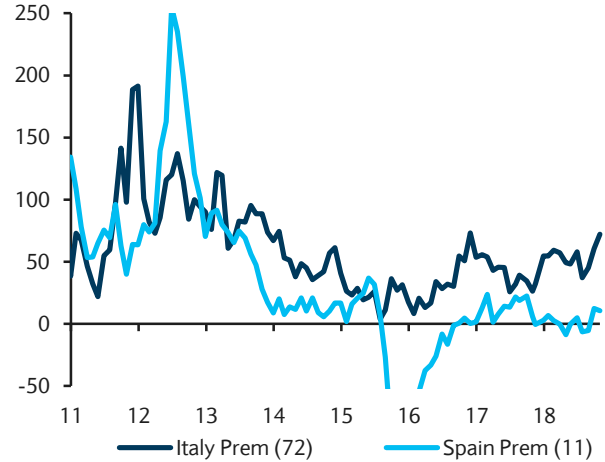
Premium for UK risk rose ahead of the EU referendum and has picked up recently in spite of EURGBP remaining steady



Source: Barclays Research

FIGURE 9

Spanish HY risk premia are very low compared with Italian premia



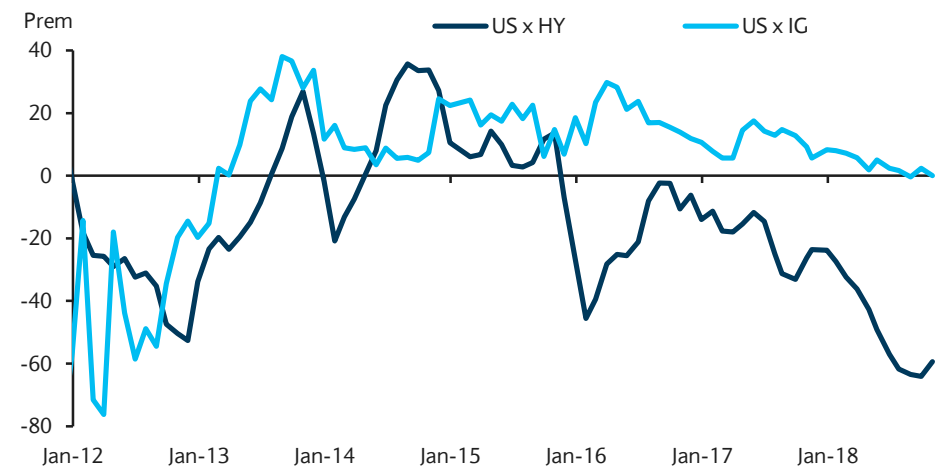
Source: Barclays Research

On the other hand, US issuers have done relatively well, with the premium in HY being negative 60bp (Figure 10), the tightest US issuers in €HY have traded, including the sovereign crisis. There are two valid reasons for this: i) US investors can get paid for buying these swapped back into USD, creating a stronger demand technical; ii) given the currency-hedged RV between US and European HY, there are arguably very low expectations of issuance by US companies in Europe currently, leading to a scarcity premium for the existing US €HY bonds.

We have argued recently in *Seeing value in EUR versus USD HY*, 19 Oct 2018 that given the prevalence of home bias, global investors agnostic to marketplace and domicile of issuer should consider the EUR bonds of US issuers as well as the USD bonds of European issuers. And while we think that EUR HY still offers attractive relative value versus USD HY, the increasing negative spread premium makes us cautious on US issuers within the €HY space.

FIGURE 10

Reverse Yankees trade at historical tightness in HY and have zero premium in IG

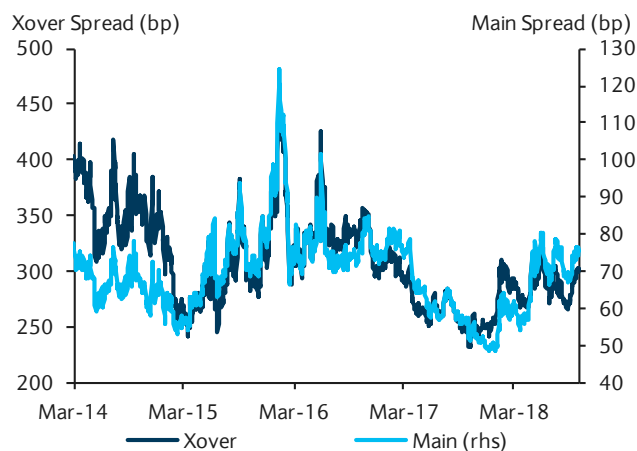


Source: Barclays Research

## HY credit at a glance

FIGURE 11

### iTraxx Crossover vs. iTraxx Main

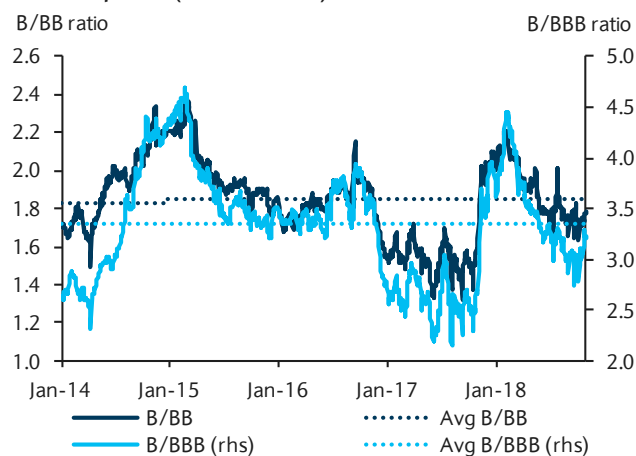


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Source: Markit, Barclays Research

FIGURE 13

### Pan-Europe HY (ex-financials): B vs. BB and BBB ratios



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Source: Bloomberg Barclays Indices, Barclays Research

FIGURE 15

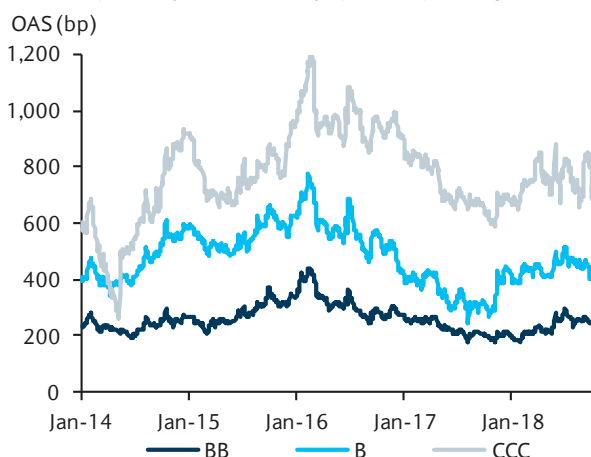
### European HY issuance

Issuers:	All firms, in any European currency		European firms
Market:	Pan-European High Yield		US High Yield
Crncy:	€	£, CHF, other	\$
WTD	0.0	0.0	0.0
MTD	0.0	0.0	0.0
YTD	50.5	4.1	9.5
YoY	-22%	-68%	+68%
YTD '17	64.9	12.6	5.6

Source: S&P LCD, Bloomberg, Barclays Research Note: Supply in billion.

FIGURE 12

### Pan-Europe HY (ex-financials) spread by rating

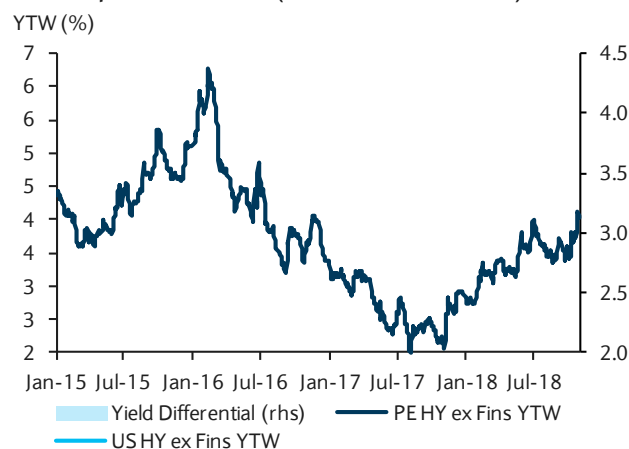


Please click [here](#) to see on Barclays Live.

Source: Bloomberg Barclays Indices, Barclays Research

FIGURE 14

### Pan-Europe HY vs. US HY (ex-financials for both)



Please click [here](#) to see on Barclays Live.

Source: Bloomberg Barclays Indices, Barclays Research

FIGURE 16

### European HY issuance monthly trends

Issuers:	All firms, in any European currency				European firms	
Market:	Pan-European High Yield				US High Yield	
Crncy:	€		£, CHF, other		\$	
Year:	2017	2018	2017	2018	2017	2018
Jan	2.9	4.7	2.8	1.6	1.1	
Feb	6.2	3.3	0.7	0.1	1.3	1.3
Mar	11.2	8.7	1.5	0.6	0.4	1.4
Apr	6.1	8.4	1.2	0.3		1.4
May	2.2	3.6	0.6	0.3	0.5	0.8
Jun	7.2	6.5	2.1		0.4	0.8
Jul	6.8	5.4	0.7		0.5	1.5
Aug		0.5				
Sep	9.1	6.6	1.8	1.3		0.6
Oct	13.0	3.0	1.1		2.6	0.4
Nov	7.8		0.5		1.1	
Dec	4.3		0.8		0.3	
Total	76.7	50.5	13.9	4.1	7.0	9.5

Source: S&P LCD, Bloomberg, Barclays Research Note: Supply in billion.

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