Jobs to the rescue

Credit Analysis

- Jobs to the rescue. Coming in close to expectations on headline Nonfarm payrolls, as a slight miss was more than offset by upward revisions, and no wage inflation today's jobs report for September really is close to goldilocks for IG credit. This kind of data supports the notion that the US economy is strong and not going into recession, while at the same time the lack of inflation provides the Fed cover to deliver rate cuts investors expect. Looking at the details not surprisingly manufacturing was weak shedding 2K jobs in September. However private services grew 109K jobs, which is a bit below the 130K average this year but decent.
- One particularly disturbing aspect about yesterday's disappointing reading on ISM Non-Manufacturing was the large decline in the employment component from 53.1 to 50.4, the lowest in more than five years. However, the lack of a large decline in the actual count of jobs in the services sector for payrolls supports a more natural gradual decline in employment instead of a jump to recession. We think this week's widening in IG credit spreads presents investors with yet another buying opportunity as the ISM-infused increase in recession fears fades. Of course next week could be volatile given high level trade negotiations between the US and China in Washington, DC.
- You're my large Angel. We find that the median Fallen Angel (FA) underperforms the cross-over (BBB+BB) space by 42% of cross-over benchmark spreads over the year leading to the downgrade date 23% of which occurs during the last three months and then outperforms 15% during the year after the downgrade. However, for larger FAs accounting for more than 0.6% of the HY index (currently >\$7.2bn) the one-year pre-downgrade underperformance is much higher at 106% of cross-over spreads especially during the last few months leading up to the downgrade but once they hit HY outperformance is stronger at 35% the first year than for median sized companies. For FAs less than 0.6% of the of the HY market, size does not appear to be a further differentiator for performance. Long maturities (>10 years) underperform in line with shorter maturities (<10 years) leading up to the downgrade and, but then struggle and outperform only 9% of the benchmark once in HY compared with 20% for shorter maturities.
- EUR / USD cross currency relative value. On a fully currency hedged basis EUR-denominated spreads are currently rich vs. USD for European issuers. On the other hand US-issuer EUR-denominated spreads are cheap for bonds 5-year or shorter and rich for 7-10yr bonds. When hedging with 3M FX forwards EUR-denominated yields are more attractive, partially due to a seasonal spike in hedging costs prior to year-end. Based on 12M forward 3M hedging costs EUR yields are cheap for US-issuer bonds and USD spreads are cheap for European-issuer bonds.
- M&A announcement volume declined in September. North American M&A announcement volume declined notably to \$106bn in September from \$189bn.
- Accelerating high grade inflows. \$4.89bn US IG fund/ETF inflow.
- Light supply during earning blackouts. \$12.2bn this week. \$10-15bn next week.

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Refer to important disclosures on page 30 to 32.

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Name

Data and charts:

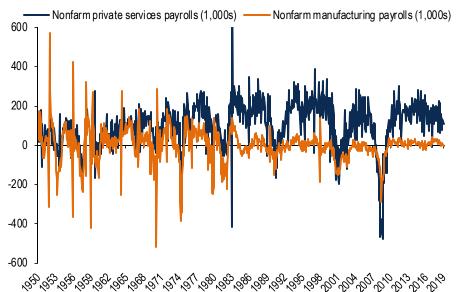
Corporate credit spreads and returns
Spread and supply forecasts
Sector views
High Grade Spreads by Sector
High grade sector historical performance
Sector performance and relative value
Supply statistics
Mutual fund flows
Corporate spread curves
Liquidity premium in high grade spreads
Dealer inventories
CDS cash basis
USD EUR relative value
Rating actions summary

Macro

Jobs to the rescue

Coming in close to expectations on headline Nonfarm payrolls, as a slight miss was more than offset by upward revisions, and no wage inflation today's jobs report for September really is close to goldilocks for IG credit. This kind of data supports the notion that the US economy is strong and not going into recession, while at the same time the lack of inflation provides the Fed cover to deliver rate cuts investors expect (Figure 2). Looking at the details not surprisingly manufacturing was weak shedding 2K jobs in September. However private services grew 109K jobs, which is a bit below the 130K average this year and 160K average over the post-crisis years (Figure 1). But declining jobs growth was always to be expected given a super low unemployment rate that declined to 3.5%. So private services jobs growth is not too bad – and not even the lowest this year – had 65K in February and 76K in May. For context over the past 35 years private services added 125K jobs monthly on average while manufacturing shed 12K. Private services now employ 108mn people while just 12.9mn work in manufacturing.

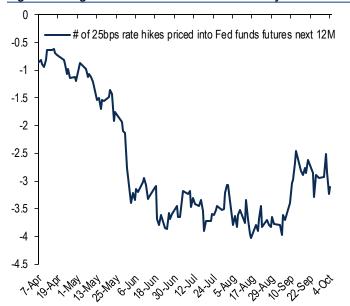
Figure 1: US labor market is driven by private services



Source: Bureau of Labor Statistics,

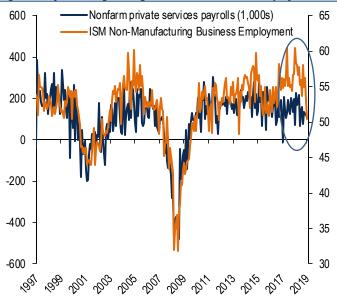
One particularly disturbing aspect about yesterday's disappointing reading on ISM Non-Manufacturing was the large decline in the employment component from 53.1 to 50.4, the lowest in more than five years. However, the lack of a large decline in the actual count of jobs in the services sector for payrolls supports a more natural gradual decline in employment instead of a jump to recession. In fact looking at the relation over time between services payrolls and ISM suggests the latter is volatile and had been somewhat elevated the past few years (Figure 3). We think this week's widening in IG credit spreads presents investors with yet another buying opportunity as the ISM-infused increase in recession fears fades. Of course next week could be volatile given high level trade negotiations between the US and China in Washington, DC.

Figure 2: Pricing about three Fed rate cuts over the next year



Source: Bloomberg, BofA Merrill Lynch Global Research

Figure 3: Payrolls mitigated big decline in ISM services employment

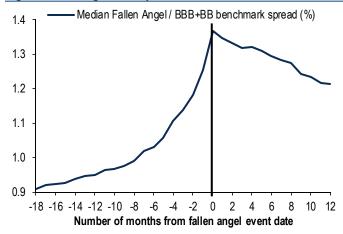


Source: Bureau of Labor Statistics, Institute for Supply Management

You're my large Angel

Historically Fallen Angels (FA) underperformed the cross-over space (BBB+BB) significantly leading up to the downgrade, culminating with max forced liquidations around the IG index deletion date (Figure 4). Then as they enter the HY index FAs get bought at cheap valuations and tend to outperform subsequently. Ford Motor Co is a very large issuer (\$36.41bn in IG index; would be 3.0% of HY index) that furthermore has sizable notional outstanding in the long end (\$5.79bn 10+ year would be 9.1% of that segment in HY). While Moody's downgraded the company to HY (Ba1) last month, both Standard & Poor's and Fitch maintain IG (BBB) ratings with negative outlooks and thus the company remains in the IG index. However, since late last year bonds transitioned to trade in line with HY (BBs, Figure 5). While we have no opinion on the name a situation like this raises the question of how much worse large Fallen Angels perform relative to more typically sized companies – especially in the long end which is a poor match for typical HY investors that are more used to take credit as opposed to duration risk.

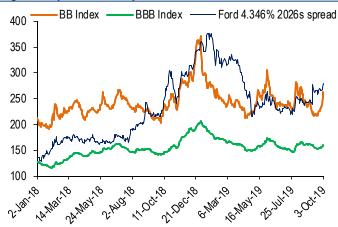
Figure 4: Fallen angel issuer spread vs benchmark



Note: Overall sample includes 326 DM fallen angels 2000-2019 with at least two index bonds outstanding at the time of the fallen angel event, based on ICE BofAML indices. BBB+BB benchmark is a market value weighted blend between the BBB and BB corporate bond indices.

Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

Figure 5: Liquid Ford bond spread relative to BBB and BB indices



Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

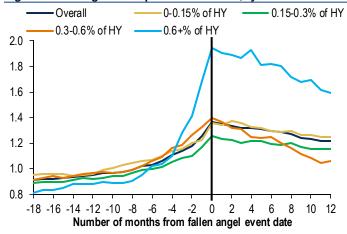
Fallen Angels by size

We find that the median FA underperforms the cross-over space by 42% of cross-over benchmark spreads over the year leading to the downgrade date – 23% of which occurs during the last three months – and then outperforms 15% during the year after the downgrade (Figure 6). However, for larger FAs accounting for more than 0.6% of the HY index (currently >\$7.2bn) the one-year pre-downgrade underperformance is much higher at 106% of cross-over spreads - especially during the last few months leading up to the downgrade – but once they hit HY outperformance is stronger at 35% the first year than for median sized companies. For FAs less than 0.6% of the of the HY market, size does not appear to be a further differentiator for performance.

Fallen Angels by maturity

Long maturities (>10 years) underperform in line with shorter maturities (<10 years) leading up to the downgrade and, but then struggle and outperform only 9% of the benchmark once in HY compared with 20% for shorter maturities (Figure 7). That makes sense due to more limited investor base in HY for longer maturities. Focusing on the 25 largest FAs measured by >10 year bond notional only, the underperformance for long maturity bonds during the 12 months leading up to the downgrade is 76%, followed by 22% outperformance during the first year as a HY company (Figure 8). Also keep in mind that many large FAs historically ultimately were heading for default. Not because they are large, but because of the material importance of IG ratings for large capital structures. That means the kind of situations leading to large FAs tend to be idiosyncratic and catastrophical such as fraud.

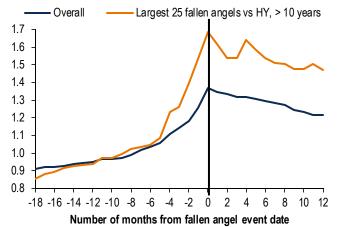
Figure 6: Fallen angel issuer spread vs benchmark, by size



Note: Overall sample includes 326 DM fallen angels 2000-2019 with at least two index bonds outstanding at the time of the fallen angel event, based on ICE BofAML indices. By size breakdown: 0-0.15% of HY at the fallen event dates in 112 cases, 0.15-0.3% of HY in 103 cases, 0.3-0.6% of HY in 64 cases, 0.6+% of HY in 47 cases. BBB+BB benchmark is a market value weighted blend between the BBB and BB corporate bond indices.

Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

Figure 8: Fallen angel issuer spread vs benchmark, overall vs largest 25



Note: Overall sample includes 326 DM fallen angels 2000-2019 with at least two index bonds outstanding at the time of the fallen angel event, based on ICE BofAML indices. Largest 25 fallen angel events calculated at the fallen angel event dates. BBB+BB benchmark is a market value weighted blend between the BBB and BB corporate bond indices.

Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

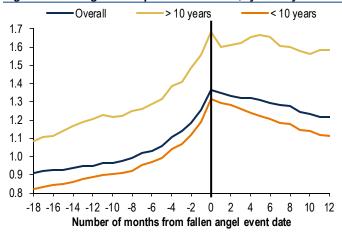
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Situation Room: Bad is good 03 October 2019

Bad is good

Today's disappointing 52.6 reading on ISM Non-Manufacturing vs. 55 consensus (Figure 9) to our surprise ended up another bad news is good news event, as the market priced in more Fed rate cuts (Figure 10). We continue to monitor whether weakness in the small US manufacturing sector spills into the much more important services sector and this reading was not encouraging. However, at the end of the day the market is

Figure 7: Fallen angel issuer spread vs benchmark, by maturity



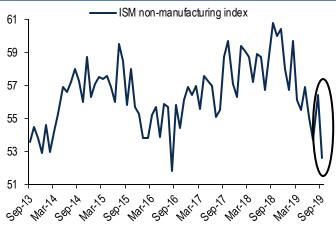
Note: Overall sample includes 326 DM fallen angels 2000-2019 with at least two index bonds outstanding at the time of the fallen angel event, based on ICE BofAML indices. By maturity breakdown: <10 years 278 cases, >10 years 101 cases. BBB+BB benchmark is a market value weighted blend between the BBB and BB corporate bond indices.

Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC



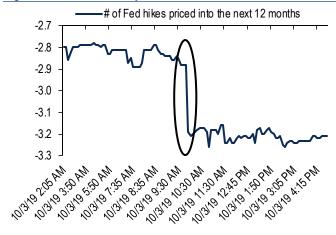
probably right, as our economists discuss, that this kind of data warrants more Fed eases to combat economic weakness as opposed to just insurance cuts - which would represent an important dovish shift at the Fed. However tomorrow's jobs report is hard data as opposed to expectations, and we think given overall concerns good news is good and bad news is bad. ADP was decent, showing good jobs creation in services. Should that disappoint materially in the jobs report and/or the work week decline - not our baseline - we think that ignites recession fears leading to wider credit spreads.

Figure 9: Today's weak ISM Non-Manufacturing...



Source: Institute for Supply Management

Figure 10: ... led markets to price in more Fed rate cuts



Source: Bloomberg

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Situation Room: Brexit and trade risks 02 October 2019

Brexit and trade risks

Yesterday's big decline in interest rates on the back of a weak ISM non-manufacturing report was followed by another drop in rates today and a 1.79% decline in stocks on an escalation in Brexit risks and additional tariffs on European goods. UK stocks were down 3.23% after the UK government announced a proposal on Brexit that envisions the country exiting European customs union (a "hard" Brexit) at the end of the transition period. In addition the WTO ruled that the US can impose tariffs on \$7.5bn of European goods in the long-running case related to government aid to Airbus. Later in the afternoon the US Treasury announced 10 to 25% duties that are to take effect on October 18. On a positive note today's ADP private employment report for September came in close to expectations. Similarly 3Q auto sales announced today by GM, Ford and Fiat Chrysler were also largely on top of expectations.

The US Treasury yield curve bull steepened again today. Treasury yields declined 8bps, 6bps, 4bps and 0bps for 2, 5, 10 and 30-year maturities. CDX IG widened 2.6bps today following a 1.0bps move wider yesterday, while CDX HY price declined \$0.52pts. IG cash bond spreads widened 2-5bps on average, performing in line with the decline in rates and stocks.

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Situation Room: At your service 01 October 2019

At your service

News articles to start this week suggest the biggest Japanese pension fund (GPIF) is relaxing its constraints on investments in foreign bonds (at the expense of domestic bonds) and that Japan Post is expanding investments in CLOs. That highlights our theme that - given the collapse in yields - foreign investors are forced to "pick their poison": i.e. take more credit, duration, liquidity and currency risk. This global grab for USD yield is likely to put upward pressures on leverage in US fixed income over time. We continue to consider US IG corporate bonds defensive within this move, as companies already leveraged up 2015-2107 and there is little room for additional debt. As the BOJ at the same time tries to manage a steeper JGB curve, and thus may scale back QE purchases, it makes sense that demand at today's government auction was weak. That led to a jump in global yields before a very weak US ISM Manufacturing reading more than reversed the rates move (Figure 11). We continue to disregard data from the manufacturing sector and watch services that rebounded last month - ISM Non-Manufacturing and jobs this week are crucial data points.

Figure 11: Intraday 10-year Treasury yield



Source: Bloomberg

According to news reports Japan's Government Pension Investment Fund (GPIF) will reclassify hedged foreign bond holdings as domestic debt. As of June 2019 the holdings of foreign bonds, at 18% or Yen 29tr, were close to the upper limit of the target range (see <u>Japan Rates and FX Watch</u>). Therefore classifying FX-hedged foreign bonds into the domestic bond category should allow GPIF to increase foreign bond purchases going forward to cope with low JGB yields available in the domestically.

In addition news reports suggest that Japan Post Bank is planning to rotate investments from US leveraged loan mutual funds and into senior CLO tranches (collateralized loan obligations). As of June 2019 bank CLO holdings totaled 1.3tr Yen.

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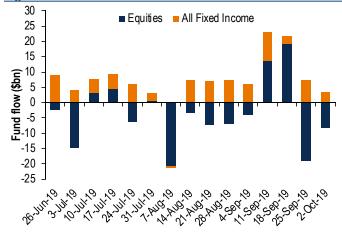
Situation Room: Bad is good 03 October 2019

Accelerating high grade inflows

Inflows to US high grade bond funds and ETFs accelerated to \$4.89bn this past week ending on October 2, up from a \$3.88bn inflow a week earlier and a \$2.53bn inflow for the week ending on September 18. The inflows have now reached a relatively high level, above the \$3.4bn weekly average year to date. Also over the last three weeks high grade inflows have shifted almost entirely out of short-term and into intermediate and longer duration funds and ETFs. However, the overall inflow to bonds actually declined to \$3.45bn from \$7.28bn as flows for all other fixed income asset classes weakened, including for high yield, munis, EM and government bonds. Selling of stocks eased to \$8.36bn this past week from \$19.02bn sold in the prior week (Figure 12).

Inflows to short-high grade declined close to a flat reading of 0.07bn, down from an also relatively small 0.71bn inflow a week earlier. On the other hand inflows ex. short-term increased to 4.83bn from 3.16bn. High grade inflows also shifted toward funds (to 2.91 from 1.25) and away from ETFs (to 1.99bn from 2.62bn, Figure 13). On the other hand outflows form high yield increased to 0.45bn form 0.18bn, while outflows from loans were little changed at 0.52bn. Inflows to munis declined to 0.64bn from 1.57bn, while flows for government bonds turned negative with a 0.23bn outflow following a 2.30bn inflow. Similarly global EM bonds reported a 1.26bn outflow after a 0.85bn inflow. Finally money markets had a 1.26bn inflow this past week and a 0.85bn inflow in the prior week.

Figure 12: Flows for the broad US asset classes: stocks and bonds



Note: data are for US-domiciled funds only

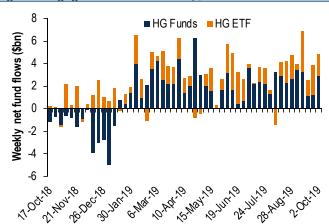
Figure 14: Fund flows summary

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	Last week (% of AUM for weekly reporting	YTD (% of AUM for all	
Asset class	funds/ETFs)	funds/ETFs)	YTD (\$bn)
High grade: total	0.29%	6.9%	198.9
High grade: ex short-term	0.38%	6.7%	148.3
High y ield: total	-0.20%	5.7%	16.3
High y ield: ETFs only	-0.81%	29.6%	10.7
Loans	-0.66%	-21.9%	-31.5
EM	-0.25%	5.4%	31.1
Munis	0.13%	8.5%	66.1
All fix ed income	0.12%	6.3%	299.4
Money markets	0.48%	12.8%	410.6
Equities	-0.13%	-1.1%	-123.1

Note: Last week flow as % of AUM is based on AUM for weekly reporting funds / ETFs only. YTD flow as % of AUM is based on AUM for the full fund/ ETF universe as of December 31 2018. Global EM funds, US-domiciled funds only for other fund types.

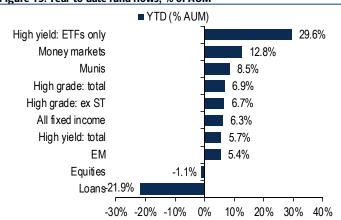
Source: EPFR Global, BofA Merrill Lynch Global Research

Figure 13: High grade fund and ETF flows, \$bn



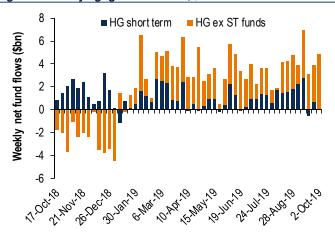
Note: data are for US-domiciled funds only. Source: EPFR Global.

Figure 15: Year to date fund flows, % of AUM



Note: Global EM funds, US-domiciled funds only for other fund types. Source: EPFR Global, BofA Merrill Lynch Global Research

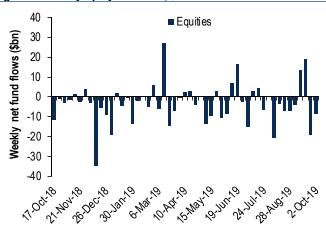
Figure 16: Weekly high grade fund flows, \$bn



Note: the flows data is for US-domiciled funds and ETFs. The flows include high grade bond funds, high grade corporate bond bunds, and total return bond funds. We exclude two volatile funds from our aggregate data. Short-term refers to duration of 0 to 4 years.

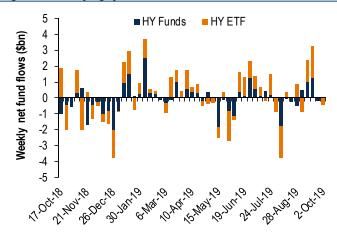
Source: EPFR Global, BofA Merrill Lynch Global Research

Figure 18: Weekly equity fund flows, \$bn



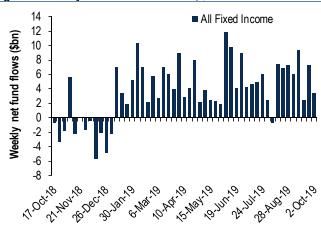
Note: the flows data is for US-domiciled funds and ETFs. Source: EPFR Global.

Figure 17: Weekly high yield fund flows, \$bn



Note: the flows data is for US-domiciled funds and ETFs. Source: EPFR Global.

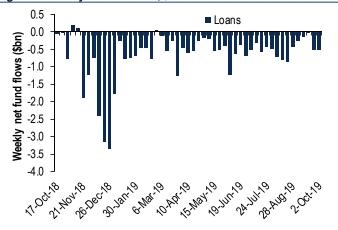
Figure 19: Weekly fixed income fund flows, \$bn



Note: the flows data is for US-domiciled funds and ETFs. The flows include the following asset dasses: high grade (corporate and government), high yield, mortgage backed, floating rate, total return, municipals, inflation protected.

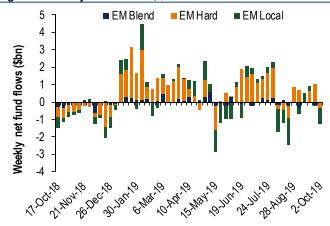
Source: EPFR Global.

Figure 20: Weekly loan fund flows, \$bn



Note: the flows data is for US-domiciled funds and ETFs Source: EPFR Global.

Figure 21: Weekly EM fund flows, \$bn



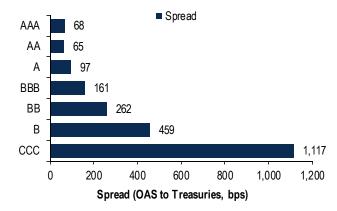
Note: the flows data is for US-domiciled funds and ETFs Source: EPFR Global

Appendix: defining high grade

We define our high grade flows metric as a combination of "bond," "corporate bond" and "total return" fixed income funds and ETFs domiciled in the US (and investing in any currency, although the majority is invested in USD). The "bond" category refers to the broad high grade market, which includes Treasuries, mortgages and agencies in addition to corporate bonds. This category accounts for the majority of AUM and flows. On the other hand the dedicated corporate bond funds and ETFs are much smaller in terms of assets under management. We also include the "total return" bond category in our tracking of high grade flows. Finally note that "short-term" maturity refers to duration of 0 to 4 years.

Corporate credit spreads and returns

Figure 22: Corporate spreads by rating



Source: ICE Data Indices, LLC, BofA Merrill Lynch Global Research

Figure 23: Month to date credit returns by rating



Source: ICE Data Indices, LLC, BofA Merrill Lynch Global Research

High Grade

EUR / USD cross currency relative value

Below we illustrate relative value between IG USD and EUR-denominated corporate bond on an issuer and maturity based basis. On a fully currency hedged basis EUR-denominated spreads are currently rich vs. USD for European issuers (Figure 25). On the other hand US-issuer EUR-denominated spreads are cheap for bonds 5-year or shorter and rich for 7-10yr bonds (Figure 26). When hedging with 3M FX forwards EUR-denominated yields are more attractive (Figure 28, Figure 29), although that is partially due to a seasonal spike in hedging costs prior to year-end (Figure 24). Based on 3M hedging costs 12 months forward EUR yields are cheap for US-issuer bonds and USD spreads are cheap for European-issuer bonds (Figure 31, Figure 32).

330 - 3M EUR/USD FX hedging cost (bps)
310 - 290 - 280 - 270 - 260 - 250

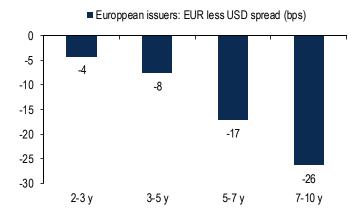
Figure 24: 3M EUR/USD FX hedging costs increase seasonally into year-end

Source: BofA Merrill Lynch Global Research, Bloomberg

Fully currency hedged spreads

We convert current EUR Libor bond spreads to USD on a fully currency hedged basis. The conversion is based on maturity matched cross currency basis swaps to fully currency hedge principal and interest rate payments, and forward FX rates to fully hedge the stream of spread payments. We also adjust for the difference in quoting conventions with a 3 to 6M Euribor swap. Finally, we calculate simple average spread differences between the EUR and USD spreads, broken out by maturity and region (Figure 25, Figure 26) as well as by sector (Figure 27).

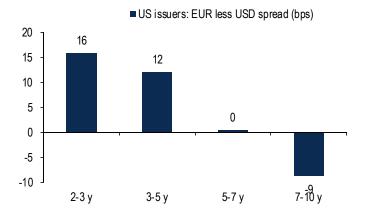
Figure 25: Fully FX-hedged EUR less USD IG bond spread relative value: European issuers



Note: the chart plots issuer-matched spreads on a fully currency hedged basis. We use maturity matched cross currency basis swaps to fully currency hedge principal and interest rate payments, and forward FX rates to fully hedge the stream of spread payments. We also adjust for the difference in quoting conventions with a 3 to 6M Euribor swap.

Source: BofA Merrill Lynch Global Research, Bloomberg, ICE Data Indices, LLC

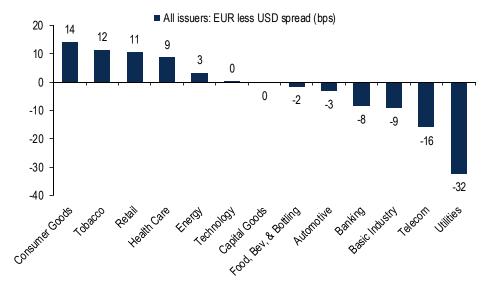
Figure 26: Fully FX-hedged EUR less USD IG bond spread relative value: US issuers



Note: the chart plots issuer-matched spreads on a fully currency hedged basis. We use maturity matched cross currency basis swaps to fully currency hedge principal and interest rate payments, and forward FX rates to fully hedge the stream of spread payments. We also adjust for the difference in quoting conventions with a 3 to 6M Euribor swap.

Source: BofA Merrill Lynch Global Research, Bloomberg, ICE Data Indices, LLC

Figure 27: Fully FX-hedged EUR less USD IG bond spreads, by sector



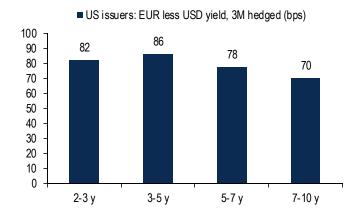
Note: the chart plots issuer-matched spreads on a fully currency hedged basis. We use maturity matched cross currency basis swaps to fully currency hedge principal and interest rate payments, and forward FX rates to fully hedge the stream of spread payments. We also adjust for the difference in quoting conventions with a 3 to 6M Euribor swap.

Source: BofA Merrill Lynch Global Research, Bloomberg, ICE Data Indices, LLC

Yields hedged with 3-month FX forwards

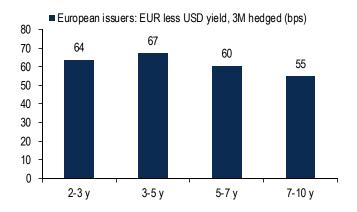
Below we compare yields on USD bonds with currency-hedged yields on EUR-denominated bonds, hedged with 3-month FX forwards. The values are simple averages across the corresponding bond pairs.

Figure 28: EUR less USD IG bond yields, hedged with 3M FX forwards: European issuers



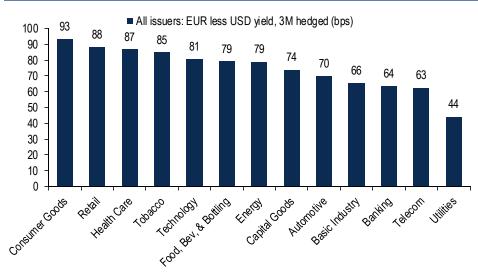
Source: BofA Merrill Lynch Global Research, Bloomberg, ICE Data Indices, LLC

Figure 29: EUR less USD IG bond yields, hedged with 3M FX forwards: US issuers



Source: BofA Merrill Lynch Global Research, Bloomberg, ICE Data Indices, LLC

Figure 30: EUR less USD IG bond yields based on a 3M FX forward hedge, by sector

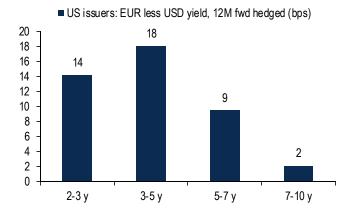


Source: BofA Merrill Lynch Global Research, Bloomberg, ICE Data Indices, LLC

Yields based on 3-month hedged 12 months forward

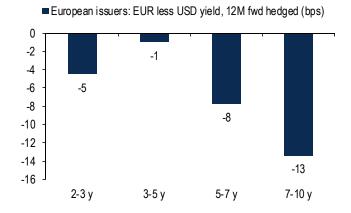
Below we consider relative USD and EUR yields based on 3M hedging costs that are priced in a year from now. Specifically the hedging cost is calculated based on 15 and 12-month FX forward rates. Since the hedging cost is largely a function of the difference in short-term rates between the two currencies, the 12 month forward hedging cost reflects the market pricing of monetary policies rates in the US and Euro area.

Figure 31: EUR less USD IG bond yields based on 12 month forward hedging cost: European issuers



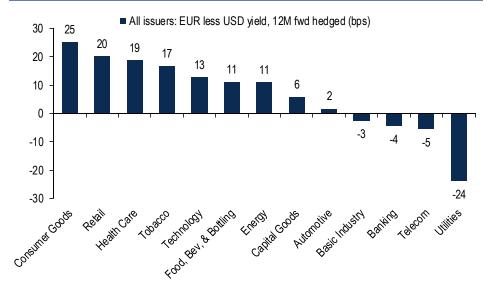
Source: BofA Merrill Lynch Global Research, Bloomberg, ICE Data Indices, LLC

Figure 32: EUR less USD IG bond yields based on 12 month forward hedging cost: US issuers



Source: BofA Merrill Lynch Global Research, Bloomberg, ICE Data Indices, LLC

Figure 33: EUR less USD IG bond yields based on 12 month forward hedging cost, by sector



Source: BofA Merrill Lynch Global Research, Bloomberg, ICE Data Indices, LLC

Appendix: bond selection methodology

We identify pairs of senior (including senior preferred for banks) bonds denominated in USD and EUR in the current ICE BofAML Global Corporate Index GOBC. The bonds in each pair are form the same issuer, have the same average index rating and are less than a year apart in terms of time to maturity (based on the workout date). We use bonds with maturities of two years or longer. Below we list the resulting bond pair and issuer counts (Figure 34, Figure 35).

Figure 34: US / EUR cross currency relative value: issuer and bond counts by maturity bucket

	US iss	uers	European issuers		Other re	egions	Total		
Maturity	Bond pair count	Issuer count	Bond pair count	Issuer count	Bond pair count	Issuer count	Bond pair count	Issuer count	
2-3y r	26	24	29	29	29	14	84	67	
3-5y r	35	15	54	26	26	6	115	47	
5-7y r	39	7	18	3	3	1	60	11	
7-10y r	28	3	26	2	2	0	56	5	
10+y r	9	1	11	1	1	0	21	2	
Total	137	50	138	61	61	21	336	132	

Source: BofA Merrill Lynch Global Research

Figure 35: US / EUR cross currency relative value: issuer and bond counts by sector

Sector	Bond pair count	Issuer count
Automotiv e	16	6
Banking	117	44
Basic Industry	9	8
Capital Goods	13	5
Consumer Goods	6	2
Energy	27	8
Food, Bev, & Bottling	14	7
Health Care	28	17
Retail	5	3
Technology	15	6
Telecom	30	8
Tobacco	9	4
Utilities	9	5
Rest	38	9
Total	336	132

Source: BofA Merrill Lynch Global Research

Previously published here

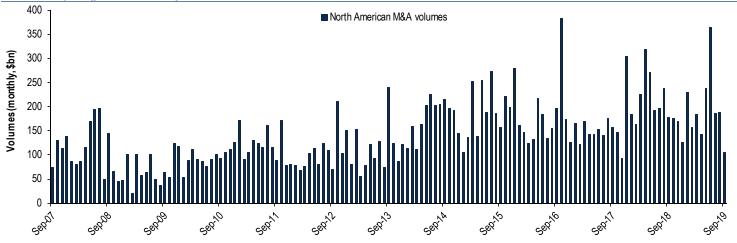
Situation Room: Calm after the storm 30 September 2019

M&A announcement volume declined in September

North American M&A announcement volume declined notably to \$106bn in September from \$189bn in August, the lowest level since November 2017 (Figure 36). At the same time, the pipeline value of announced deals with potential IG funding implications declined to \$338bn currently from \$379bn at the end of August (Figure 37), and M&A-related US IG issuance also declined to \$6.8bn in September from \$21.7bn in August (Figure 38). None of the current six large (EV > \$10bn) pending deals appears imminent due to regulatory hurdles and/or alternative funding options available. See details in the Pipeline of M&A deals with IG issuance implications section below.

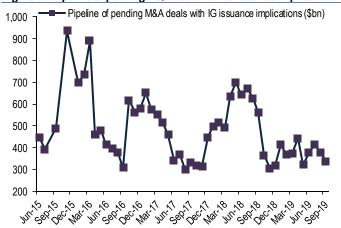
Figure 36: Monthly North American M&A volumes

Note: limited to pending and closed deals only. Cancelled deals are excluded.



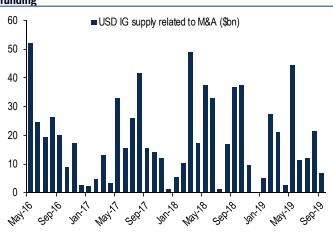
Source: Bloomberg

Figure 37: Pipeline of pending M&A deals with IG issuance implications



BofA Merrill Lynch Global Research, Bloomberg.

Figure 38: High grade new issue supply primarily related to M&A funding

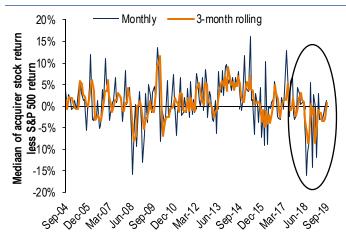


BofA Merrill Lynch Global Research

Equity investor sentiment towards M&A deal announcements

Equity investor sentiment towards M&A deal announcements turned more positive in September. The stock prices of companies announcing larger acquisitions (over 25% of the acquirer's EV) outperformed the S&P 500 by 1.3% in September following a 0.3% outperformance in August (Figure 39). At the same time, companies repurchasing the most shares in the S&P 500 outperformed the market by 1.92% in September after underperforming the market by 1.88% in August (Figure 40).

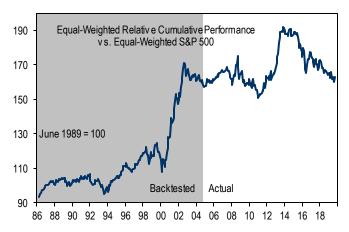
Figure 39: Acquirer stock performance



Note: The stock performance is based on the period from 2 day prior to the deal announcement to 2 days following the deal announcement.

Source: BofA Merrill Lynch Global Research, Bloomberg.

Figure 40: Cumulative Relative Performance of S&P 500 Top Decile by Share Repurchase (3/31/86-9/30/19)



Note: the shaded area shows backtested results during the period from month-end March 1986 to month-end Dec. 2004. The unshaded portion represents actual performance since Jan. 2005. Backtesting is hypothetical in nature and reflects application of the screen prior to its introduction. It is not actual performance and is not intended to be indicative of future performance. The back-tested performance results are based on criteria applied retroactively with the benefit of hindsight and knowledge of factors that may have positively affected its performance, and cannot account for all financial risks that may affect the performance of the screen going forward. See Appendix for performance data and calculation methodology.

Source: BofA Merrill Lynch US Equity & US Quant Strategy

Pipeline of M&A deals with IG issuance implications

The T-Mobile and Sprint merger saga continues with the IG bond deal size estimated at around \$23bn to refinance outstanding high yield debt, term loans and revolvers, according to management commentaries on the 2Q19 earnings call. The timing remains uncertain, subject to the ongoing state AG lawsuits and the only remaining state of California's regulatory commission approval, although the company intends to prefund the merger prior to deal close. The company completed US and European fixed income investor meetings in May.

Mylan N.V. and Upjohn, Pfizer Inc.'s off-patent branded and generic medicine business, entered into a definitive agreement to combine on July 29th, 2019 with the deal expected to close by mid-2020, subject to Mylan's shareholder approval. Upjohn will issue about \$12bn of debt at or prior to separation with proceeds retained by Pfizer.

London Stock Exchange announced the acquisition of Refinitiv for \$27bn on August 1st, 2019. The company has a \$13.5bn bridge loan in place and is expected to refinance Refinitiv's EUR and USD bonds and term loans in full upon deal completion. Recent news articles suggest \$10bn of IG issuance needs prior to deal close, subject to obtaining regulatory approvals. The new company is expected to maintain IG ratings.

Pfizer closed the \$11.4bn all-cash acquisition of Array BioPharma funded mostly with commercial papers on July 31st, 2019. Management stated that they plan to issue new debt to fund a majority of the deal with the remainder in cash. The company ended 1Q19 with \$12bn of cash on hand.

Broadcom announced acquisition of enterprise security business for \$10.7bn on August 8^{th} with new debt issuance expected to make up majority of the financing needs. The company has entered into a new term loan facility, which the company could prepay as they expect to rapidly delever. Hence the bond issuance timing to term out current loans could take place prior to expected deal close by the end of the company's reporting year in February 2020.

Our criteria for inclusion in the list of announced deals listed in Figure 41 consists of deals at least \$1bn in size (in terms of EV) announced by USD high grade issuers. We further restrict the list to deals with a cash component, suggesting to us that the company may choose to fund all or portion of that cash component in the high grade bond market. Finally the list excludes deals that have already been funded in the corporate bond market and deals that have been rejected by regulators.

Figure 41: M&A deals with potential high grade bond funding needs

Deal announcement		grade bond runding needs		Announced	Expected
date	Acquirer Ticker	Acquirer Name	Target Name		completion date
13-Feb-19	JNJ US	Johnson & Johnson	Auris Health Inc	3.4	Apr-19
14-Mar-19	EQM US	EQM Midstream Partners LP	Eureka Midstream, Hornet Midstream	1.0	Apr-19
22-Feb-19	SAP CN	Saputo Inc	Dairy Crest Group Ltd	1.6	Apr-19
2-Apr-19	C US	Citigroup Inc	Two residential mortgages and	6.4	Apr-19
16-Apr-19	COLDUS	Americold Realty Trust	Chiller Holdco LLC	1.2	May -19
18-Oct-18	NZ US	Invesco Ltd	OppenheimerFunds Inc	4.0	May -19
23-Apr-19	MUR US	Murphy Oil Corp	Deep Water Gulf of Mexico oil	1.4	Jun-19
7-Jan-19	DXC US	DXC Technology Co	Lux oft Holding Inc	1.9	Jun-19
14-Dec-18	MRK US	Merck & Co Inc	Antelliq Holdings France SASU	3.7	Jun-19
9-May -19	NOVN SW	Novartis AG	Xiidra 5%	3.4	Jul-19
19-Mar-19	JLL US		HFF Inc	2.0	Jul-19 Jul-19
21-Mar-19	PTTEP TB	Jones Lang LaSalle Inc	Murphy Sabah Oil Co Ltd, Murphy Sarawak Oil Co	2.0	Jul-19 Jul-19
		PTT Exploration & Production P			
1-Apr-19	0852591D LX	Ferrero International SA	Cookies & Fruit Snacks busines	1.3	Jul-19
17-Jun-19	PFE US	Pfizer Inc	Array BioPharma Inc	11.0	Jul-19
2-Jul-19	UGIUS	UGI Corp	UGI Appalachia LLC	1.3	Aug-19
29-Jul-19	PH US	Parker-Hannifin Corp	Exotic Metals Forming Co LLC	1.7	Sep-19
11-Jul-19	CL US	Colgate-Palmoliv e Co	Laboratoires Filorga Cosmetiqu	1.7	Sep-19
13-Mar-19	BAM/A CN	Brookfield Asset Management Inc	Oaktree Capital Group LLC	4.8	Sep-19
21-May -19	MRK US	Merck & Co Inc	Peloton Therapeutics Inc_	1.1	Sep-19
3-Jul-19	UTG LN	UNITE Group PLC/The	Liberty Living Management Two	1.9	Sep-19
22-Aug-19	VMW US	VMw are Inc	Carbon Black Inc	1.8	Oct-19
25-Feb-19	ROG SW	Roche Holding AG	Spark Therapeutics Inc	3.7	Oct-19
7-Aug-19	CRM US	salesforce.com Inc	ClickSoftware Technologies Ltd	1.4	Oct-19
29-Apr-18	TMUS US	T-Mobile US Inc	Sprint Corp	57.8	Dec-19
24-Apr-19	6501 JP	Hitachi Ltd	JR Automation Technologies LLC	1.4	Dec-19
25-Mar-19	1680Z CN	ENMAX Corp	Emera Maine	1.3	Dec-19
13-Aug-19	BBU-U CN	Brookfield Business Partners L	Genworth MI Canada Inc	1.8	Dec-19
14-Aug-19	BAM/A CN	Brookfield Asset Management Inc	Aveo Group	1.3	Dec-19
22-Aug-19	HAS US	Hasbro Inc	Entertainment One Ltd	3.5	Dec-19
3-Sep-19	O US	Realty Income Corp	454 single-tenant retail prope	1.3	Dec-19
15-Sep-19	BX US	The Blackstone Group Inc	Dream Global Real Estate Inves	4.2	Dec-19
23-Sep-19	VNA GR	Vonovia SE	Hembla AB	3.0	Dec-19
8-Aug-19	AVGO US	Broadcom Inc	Enterprise security business/S	10.7	Feb-20
29-May -19	NXPI US	NXP Semiconductors NV	Wi-Fi Connectivity business/Ma	1.8	Mar-20
19-Jul-19	PEP US	PepsiCo Inc	Pioneer Foods Group Ltd	1.9	Mar-20
16-Sep-19	ET US	Energy Transfer LP	SemGroup Corp	3.7	Mar-20
29-Jul-19	MYL US	Mylan NV	Upjohn medicine business/Pfize	32.7	Jun-20
1-Jul-19	AMAT US	Applied Materials Inc	Hitachi Kokusai Electric Inc	2.2	Jun-20
6-Aug-19	MA US	Mastercard Inc	Corporate Services Businesses	3.2	Jun-20
20-Aug-19	ELAN US	Elanco Animal Health Inc	Animal-health unit/ Bayer AG	7.6	Jun-20
21-Aug-19	PPL CN	Pembina Pipeline Corp	Kinder Morgan Cochin LLC	1.5	Jun-20
9-Jul-19	CSCO US	Cisco Systems Inc	Acacia Communications Inc	2.5	Jul-20
25-Jul-19	SCHW US	Charles Schwab Corp/The		1.8	Dec-20
1-Aug-19	LSE LN	London Stock Exchange Group PL	Brokerage And Wealth Managemen Refinitiv Holdings Ltd	27.0	Dec-20
23-May -18	0772700D US	Global Atlantic Financial Grou	1.7 Gigaw atts 26 facilities So	1.2	n.a.
6-Jun-19	GOOGL US	Alphabet Inc	Looker Data Sciences Inc	2.6	n.a.
21-Jun-19	UNH US	UnitedHealth Group Inc	Equian LLC	3.2	n.a.
25-Jun-19	1644Z CN	Ontario Power Generation Inc	Cube Hydro Partners LLC	1.1	n.a.
16-Jul-19	PLD US	Prologis Inc	Industrial Property Trust Inc	5.5	n.a.
22-Jul-19	MSFT US	Microsoft Corp	OpenAl Inc	1.0	n.a.
25-Sep-19	5056Z US	Clay ton Dubilier & Rice LLC	Holding Socotec SAS	2.0	n.a.
27-Sep-19	DAL US	Delta Air Lines Inc	Latam Airlines Group SA	1.9	n.a.

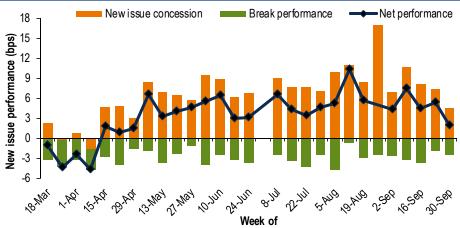
Source: BofA Merrill Lynch Global Research, Bloomberg.

Light supply during earning blackouts

US IG new issuance declined further to \$12.2bn this week from \$16.4bn last week, including \$3.6bn of financials, \$4.2bn of high-quality industrials and \$4.4bn of BBB industrials. Looking ahead, next week's calendar will be light as well with most US companies in 3Q19 earnings-related blackouts. Then four of the six largest US banks and brokers will report after Columbus Day on October 15th with the other financial and industrial companies to follow thereafter. Hence we look for a modest \$10-15bn of supply next week from mostly Yankee issuers.

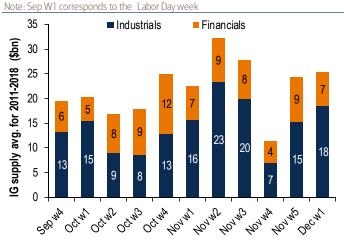
New issue performance improved as the average new issue concession declined to 4.5bps this week from 7.4bps last week, and the average break performance improved to 2.6bps tighter this week from 2.0bps tighter last week. As a result, the overall new issue performance, which we measure as new issue concession plus break performance, improved to 1.9bps this week from 5.4bps last week (Figure 42). This week's new issues are trading 1.8bps tighter on average from pricing.

Figure 42: Weekly new issue supply performance



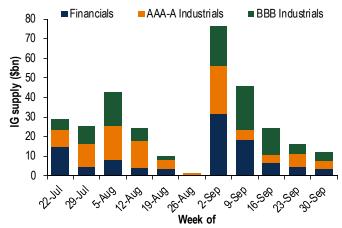
Source: BofA Merrill Lynch Global Research

Figure 43: Weekly IG supply seasonality



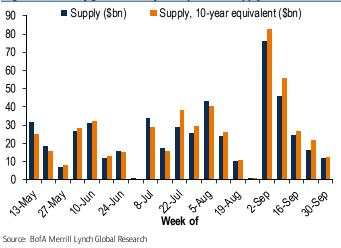
Source: BofA Merrill Lynch Global Research

Figure 44: Weekly IG supply volumes



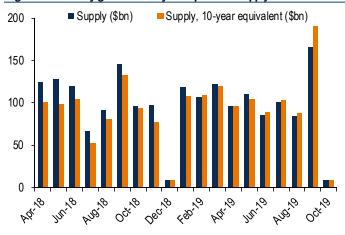
Source: BofA Merrill Lynch Global Research

Figure 45: Weekly gross and 10-year equivalent supply volumes



Source: BofA Merrill Lynch Global Research

Figure 46: Monthly gross and 10-year equivalent supply volumes



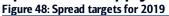
Source: BofA Merrill Lynch Global Research

Figure 47: Recent new issue pricing and new issue concessions

				Size	Moody's/S&P	Coupen	Px Spread	New Issue	* Break	Current
Date	Ticker	Name	Tenor	(\$mm)	Rating	(%)	(bps)		performance	
2019-09-30	AMT	American Tower Corp	7	\$750	Baa3/BBB-	2.75	115	n.a.	-1	118
2019-09-30	AMT	American Tower Corp	30	\$600	Baa3/BBB-	3.7	160	n.a.	2	166
2019-09-30	DGELN	Diageo Capital PLC	5	\$600	A3/A-	2.125	58	0	-2	56
2019-09-30	DGELN	Diageo Capital PLC	10	\$1,000	A3/A-	2.375	80	8	-5	77
2019-09-30	GBLATL	Global Atlantic Fin Co	10	\$500	Baa3/BBB-	4.4	275	n.a.	-8	269
2019-10-01	BRKHEC	MidAmerican Energy Co	10	\$250	Aa2/A+	3.65	75	3	0	74
2019-10-01	BRKHEC	MidAmerican Energy Co	31	\$600	Aa2/A+	3.15	107	12	-1	103
2019-10-01	DLR	Digital Realty Trust Inc	PERP	\$300	Baa3/BB+	5.2	n.a.	n.a.	n.a.	n.a.
2019-10-01	MAR	Marriott International Inc/MD	3	\$550	Baa2/BBB	2.125	70	-1	-5	65
2019-10-01	NEE	NextEra Energy Capital Holdings Inc	10	\$1,000	Baa1/BBB+	2.75	115	3	0	115
2019-10-01	OWLRCK	Owl Rock Capital Corp	5	\$425	Baa3/BBB-	4	260	11	-8	263
2019-10-02	BPCEGP	BPCE SA	10	\$150	A1/A+	2.7	n.a.	n.a.	n.a.	n.a.
2019-10-02	NACN	National Bank of Canada	3	\$750	Aa3/A	2.15	72	n.a.	-5	70
2019-10-02	NWMLIC	Northwestern Mutual Life Insurance Co/The	40	\$747	Aa2/AA-	3.625	n.a.	n.a.	n.a.	n.a.
2019-10-02	TOYOTA	Toy ota Motor Credit Corp	2	\$850	Aa3/AA-	FRN	3mL+29	n.a.	n.a.	n.a.
2019-10-02	TOYOTA	Toy ota Motor Credit Corp	2	\$400	Aa3/AA-	1.8	33	4	-4	29
2019-10-02	TOYOTA	Toy ota Motor Credit Corp	5	\$500	Aa3/AA-	2	60	9	-3	57
2019-10-02	UDR	UDR Inc	10	\$100	Baa1/BBB+	3.2	123	4	-1	122
2019-10-02	UDR	UDR Inc	15	\$300	Baa1/BBB+	3.1	155	n.a.	-5	150
2019-10-02	VIP	VEON Holdings BV	6	\$700	Ba2/BB+	4	258	n.a.	n.a.	n.a.
2019-10-03	ARENRJ	Adani Renewable Energy RJ Ltd	20	\$363	Baa3/NA	4.625	n.a.	n.a.	n.a.	n.a.
2019-10-03	BDN	Brandy wine Operating Partnership LP	5	\$100	Baa3/BBB-	4.1	133	-3	-4	129
2019-10-03	BDN	Brandy wine Operating Partnership LP	10	\$100	Baa3/BBB-	4.55	180	n.a.	2	178
2019-10-03	NEE	NextEra Energy Capital Holdings Inc	3	\$450	Baa1/BBB+	1.95	61	n.a.	n.a.	n.a.
2019-10-03	SHBASS	Svenska Handelsbanken/New York NY	3	\$51	Aa2/AA-	1.75	n.a.	n.a.	n.a.	n.a.
2019-10-03	STANLN	Standard Chartered Bank/New York	2	\$100	A2/BBB+	FRN	3mL+23	n.a.	n.a.	n.a.
2019-09-30	AMT	American Tower Corp	7	\$750	Baa3/BBB-	2.75	115	n.a.	-1	118
2019-09-30	AMT	American Tower Corp	30	\$600	Baa3/BBB-	3.7	160	n.a.	2	166
2019-09-30	DGELN	Diageo Capital PLC	5	\$600	A3/A-	2.125	58	0	-2	56
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2019-10-01	MAR	Marriott International Inc/MD	3	\$550	Baa2/BBB	2.125	70	-1	-5	65
2019-10-01	NEE	NextEra Energy Capital Holdings Inc	10	\$1,000	Baa1/BBB+	2.75	115	3	0	115
2019-09-19	WMT	Walmart Inc	30	\$1,000	Aa2/AA	2.95	80	10	-2	78

Note: We calculate new issue concessions by estimating the difference between new issue bond spread and interpolated G spread from comparable liquid secondary bonds of the same issuer prior to the new issue deal announcement, adjusted for the spread impact of dollar prices deviating from par. Break performance is computed as the difference between new issue pricing and secondary closing spread on the first day of trading. Source: BofA Merrill Lynch Global Research

Spread and supply forecasts





Source: ICE Data Indices, LLC, BofA Merrill Lynch Global Research

Sector views

Figure 49: BofAML High Grade Sector Views Summary

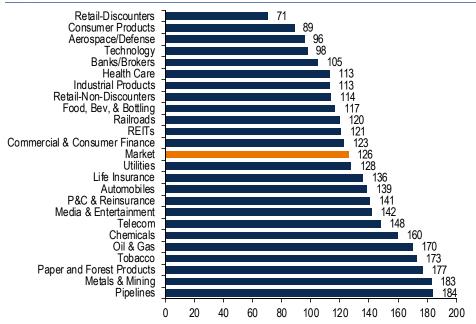
Overweight	View	Market weight	View	Underweight	View
Basic Materials	Over	Food, Bev, & Bottling	Market	Aerospace & Defense	Under
Chemicals	Ov er	Healthcare	Market	Autom obiles	Under
Metals & Mining	Market	REITS	Market	Banks/Brokers	Under
Paper and Forest Produ	cts Ov er	Tobacco	Market	Consumer Products	Under
Energy	Over	Utilities	Market	Industrial Products	Under
Oil & Gas	Market			Retail	Under
Pipelines	Ov er			Discounters	Under
Insurance	Over			Non-Discounters	Market
Life Insurance	Ov er			Technology	Under
P&C & Reinsurance	Market			Transportation	Under
Media & Entertainment	Over			Railroads	Under
Telecommunications	Over				

Source: BofA Merrill Lynch Global Research

High Grade Spreads by Sector

Figure 50: High grade spreads by sector (bps)

Sector spreads for BofAML HG U.S. Corporate Master COA0 as of October 3, 2019. Results include subordinated and hybrid securities



Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

High grade sector historical performance

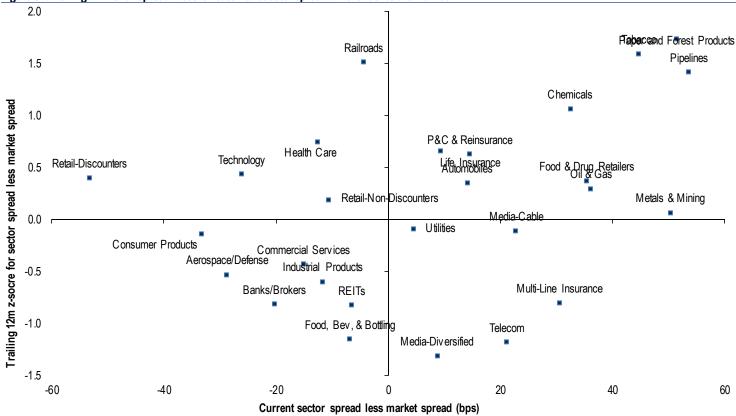
Figure 51: High Grade Sector Performance as of October 03, 2019
Sector spreads and performance for BofAML HG U.S. Corporate Master COAO. Results include subordinated and hybrid securities

						_		Exce	ess Re	eturn (bps)	Spre	ead Ch	ange	(bps)	Total Return
Sector	Rating	OAS	Duration	Yield	Price	Face (\$bn)	% Mkt Value	MTD	QTD	YTD	YOY	MTD	QTD	YTD	YOY	QTD
Aerospace/Defense	BBB1	96	8.6	2.57	110.9	113.8	1.73	-38	-38	383	50	4	4	-33	7	70
Automobiles	BBB1	139	4.3	2.86	103.5	180.0	2.54	-34	-34	293	-10	5	5	-39	30	40
Banks/Brokers	A3	105	5.2	2.56	106.9	1,516.9	22.16	-27	-27	356	126	4	4	-42	3	57
Basic Materials	BBB2	170	7.7	3.29	110.1	309.4	4.67	-46	-46	374	-19	6	6	-29	29	58
Building Materials	BBB2	172	8.4	3.31	107.4	21.0	0.31	-15	-15	508	89	2	2	-33	22	97
Chemicals	BBB2	160	7.5	3.17	108.0	138.0	2.04	-35	-35	355	-2	5	5	-28	30	67
Homebuilders	BBB1	84	4.4	2.27	107.4	3.1	0.04	3	3	276	140	0	0	-115	-64	80
Metals & Mining	BBB1	183	8.2	3.44	113.0	103.9	1.61	-69	-69	415	-44	10	10	-34	31	36
Paper and Forest Products	BBB2	177	7.3	3.33	111.6	43.5	0.66	-40	-40	298	-68	5	5	-15	38	63
Commercial Services	A3	109	10.1	2.73	113.3	72.8	1.13	-27	-27	317	91	3	3	-29	2	91
Consumer Products	A2	89	7.0	2.43	108.4	67.9	1.01	-23	-23	208	53	2	2	-21	5	76
Energy	BBB1	175	7.9	3.35	109.3	757.1	11.32	-64	-64	346	-170	7	7	-26	37	40
Oil & Gas	A3	170	7.6	3.28	108.8	493.8	7.35	-63	-63	346	-159	7	7	-27	35	39
Pipelines	BBB2	184	8.3	3.47	110.1	263.3	3.97	-66	-66	347	-191	7	7	-25	39	41
Finance	A3	123	6.0	2.74	108.0	147.2	2.17	-19	-19	315	102	3	3	-43	4	71
Commercial & Consumer Finance	BBB1	123	4.1	2.68	105.0	70.7	1.02	-13	-13	349	141	3	3	-44	13	63
Finance-Other Services	A3	123	7.7	2.81	110.7	76.5	1.16	-25	-25	285	67	3	3	-43	-4	79
Food, Bev, & Bottling	BBB1	117	8.5	2.79	109.9	281.7	4.23	-36	-36	523	117	3	3	-40	13	71
Health Care	A3	113	8.8	2.76	110.3	606.5	9.14	-37	-37	273	-43	3	3	-19	20	73
Industrial Products	A3	113	7.3	2.70	107.6	196.7	2.89	-31	-31	368	-67	3	3	-40	20	67
Insurance	A3	138	8.7	3.07	112.9	264.4	4.09	-34	-34	383	52	4	4	-26	15	75
Insurance-Other	BBB1	122	7.9	2.82	110.7	23.7	0.36	-20	-20	344	75	1	1	-36	-1	84
Life Insurance	A2	136	8.3	3.07	111.6	149.7	2.29	-40	-40	341	15	4	4	-29	14	67
Multi-Line Insurance	BBB1	153	8.6	3.19	112.8	24.3	0.37	-44	-44	655	75	3	3	-48	10	67
P&C & Reinsurance	A3	141	9.8	3.12	116.7	66.8	1.07	-24	-24	382	117	3	3	-8	25	93
Leisure	BBB3	145	4.8	2.89	106.7	27.9	0.41	-25	-25	486	194	3	3	-62	-2	63
Media & Entertainment	BBB1	142	9.3	3.06	112.9	206.5	3.19	-57	-57	457	56	5	5	-36	4	56
Media-Cable	BBB1	151	9.8	3.17	113.8	127.6	1.99	-74	-74	478	80	7	7	-30	1	44
Media-Div ersified	BBB1	128	8.5	2.89	111.4	76.3	1.16	-31	-31	443	35	3	3	-47	2	77
Media-Publishing	BBB1	91	4.8	2.32	106.0	2.6	0.04	8	8	269	169	-2	-2	-26	9	93
Real Estate Dev & Mgt	A3	134	6.3	2.84	110.8	7.0	0.11	-18	-18	341	200	3	3	-39	-5	81
REITs	BBB1	121	6.5	2.71	106.7	163.5	2.38	-20	-20	335	144	2	2	-35	2	81
Retail	A3	103	8.9	2.65	111.0	212.7	3.23	-49	-49	355	-35	4	4	-38	6	62
Food & Drug Retailers	BBB2	163	7.7	3.22	107.9	25.9	0.38	-50	-50	446	19	5	5	-15	40	52
Retail-Discounters	A1	71	9.1	2.33	113.5	81.2	1.26	-57	-57	302	8	4	4	-25	9	56
Retail-Non-Discounters	BBB1	114	9.1	2.77	109.8	105.6	1.58	-42	-42	343	-92	4	4	-31	11	68
Technology	A2	98	7.7	2.55	108.6	508.1	7.54	-30	-30	334	4	4	4	-28	17	73
Telecom	BBB1	148	9.7	3.13	114.1	272.3	4.25	-69	-69	615	193	6	6	-42	4	48
Tobacco	BBB1	173	8.1	3.32	105.3	73.8	1.06	-64	-64	406	-285	6	6	-24	62	43
Transportation		405	10.1	3.02	110.6	158.5	2.39	-64	-64	249	-142	5	5	-17	20	54
	BBB1	135	10.1	3.02	110.0						—	-				
Railroads	BBB1 A3	135 120	11.9	2.94	114.1	86.0	1.34	-71	-71	238	-167	4	4	-13	20	58
·							1.34 1.06	-71 -55				4 5	4 5	-13 -23		
Railroads	A3	120	11.9	2.94	114.1	86.0			-71	238	-167				20	58

Source: ICE Data Indices, LLC, BofA Merrill Lynch Global Research

Sector performance and relative value

Figure 52: Trailing 12 month spread Z-score vs. current sector spread differential to the market



Source: ICE Data Indices, LLC, BofA Merrill Lynch Global Research

Supply statistics

Figure 53: High grade supply summary, \$bn

Sector	WTD	MTD	QTD	YTD
US Financials	2.6	2.1	2.1	228.3
US Industrials	6.0	4.6	4.6	466.0
European Financials	0.3	0.3	0.3	81.3
European Industrials	2.3	0.7	0.7	69.8
EM Yankees	0.4	0.4	0.4	78.0
Non-Euro Non-EM Yankees	0.8	0.8	0.8	76.9
Total	12.2	8.8	8.8	1,000.3

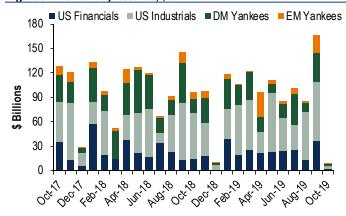
Source: BofA Merrill Lynch Global Research

Figure 55: Cumulative High grade supply YTD, \$bn

Sector	YTD 2016	YTD 2017	YTD 2018	YTD 2019
Financials	423.6	476.0	462.5	386.7
AAA-A Industrials	336.0	284.8	238.2	285.0
BBB Industrials	317.0	370.2	381.3	328.6
Total	1,076.6	1,131.0	1,082.0	1,000.3
%-change		5%	-4%	-8%
US	662.5	755.1	694.8	694.4
Europe	217.7	173.7	223.0	151.1
EM	69.7	73.9	64.7	78.0
Other DM	126.6	128.3	99.5	76.9

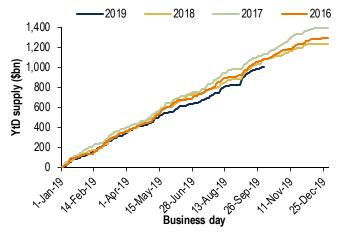
Source: BofA Merrill Lynch Global Research

Figure 54: HG monthly issuance, \$bn



Source: BofA Merrill Lynch Global Research

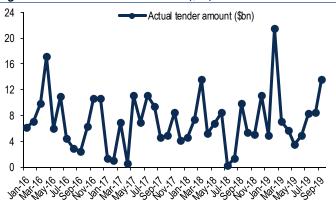
Figure 56: Cumulative High grade supply, \$bn



Source: BofA Merrill Lynch Global Research

Announced vs actual tenders & related supply

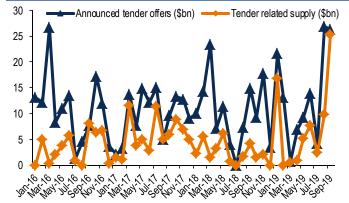
Figure 57: Actual USD IG tender volume (\$bn)



Note: Limited to issuers with public tender offer announcements $\,$ for USD bonds $\,$ with at least one HG rating from Moody's, S&P and Fitch.

Source: BofA Merrill Lynch Global Research, Bloomberg, company reports

Figure 58: USD IG tender offer vs. tender-related supply volume (\$bn)



Note: Tender related supply refers to USD bonds with at least one HG rating from Moody's, S&P and Fitch that contains specific reference to tender activities in the use of proceeds language. Source: BofA Merrill Lynch Global Research, Bloomberg, company reports

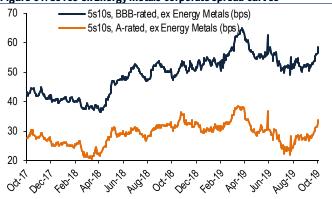
Corporate spread curves

Figure 59: 5s10s non-financial corporate spread curves



Note: the curve is computed for individual issuers first, and then aggregated to create the average. Source: BofA Merrill Lynch Global Research

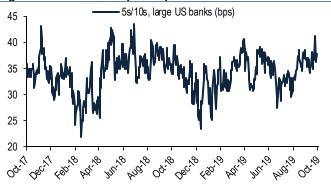
Figure 61: 5s10s ex Energy Metals corporate spread curves



Note: the spread curve calculation is restricted to issuers that have bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual issuer curves.

Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

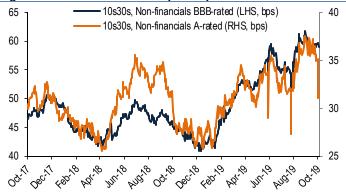
Figure 63: 5s10s Banks corporate spread curves



Note: the spread curve calculation is restricted to BAC, JPM, C and WFC that have senior bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual issuer curves.

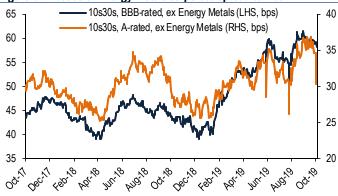
Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

Figure 60: 10s30s non-financial corporate spread curves



Note: the curve is computed for individual issuers first, and then aggregated to create the average. Source: BofA Merrill Lynch Global Research

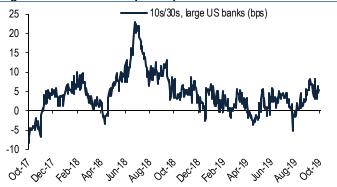
Figure 62: 10s30s ex Energy Metals corporate spread curves



Note: the spread curve calculation is restricted to issuers that have bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual issuer curves.

Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

Figure 64: 10s30s Banks corporate spread curves



Note: the spread curve calculation is restricted to BAC, JPM, C and WFC that have senior bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual issuer curves.

Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

Liquidity premium in high grade spreads

Figure 65: Liquidity premium in high grade spreads

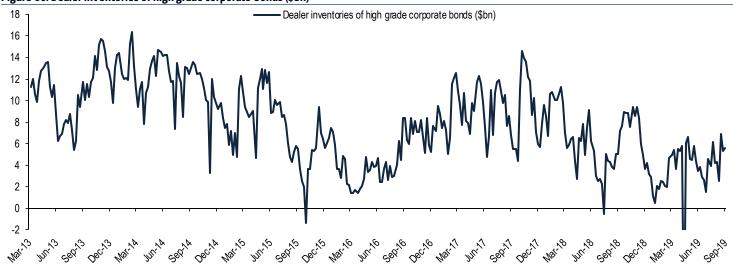


Note: our liquidity premium is the spread difference between old bonds that have rolled down to the 9, 8, 7,6 and 4-year tenors and on-the-run 10-year and 5-year (for the 4-year tenor) bonds, adjusted for the credit curve.

Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

Dealer inventories

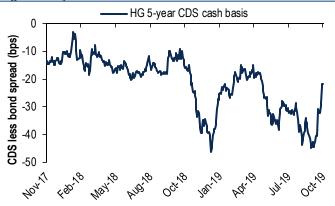
Figure 66: Dealer inventories of high grade corporate bonds (\$bn)



Source: BofA Merrill Lynch Global Research, Federal Reserve Bank

CDS cash basis

Figure 67: 5-year CDS cash basis

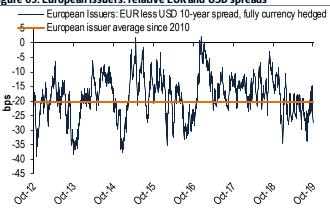


Note: CDS-Cash and based on spreads of the following 30 issuers: AlG, AMGN, AXP, BAC, BRK, C, CAT, CMCSA, COF, CVS, DE, DIS, F, GE, GS, HD, HPQ, IBM, JPM, MET, MO, MS, PFE, PRU, SPG, T, VZ, WFC, WMT, VIA

Source: BofA Merrill Lynch Global Research

USD EUR relative value

Figure 69: European issuers: relative EUR and USD spreads

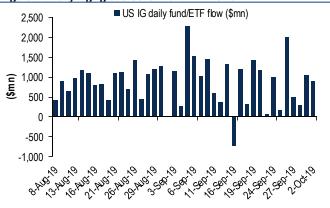


Note: the chart plots issuer-matched spreads on a fully currency hedged basis. We use maturity-matched cross currency basis swaps to fully currency hedge principal and interest rate payments, and forward FX rates to fully hedge the stream of spread payments. We also adjust for the difference in quoting conventions with a 3 to 6M Euribor swap.

Source: BofA Merrill Lynch Global Research, Bloomberg, ICE Data Indices, LLC

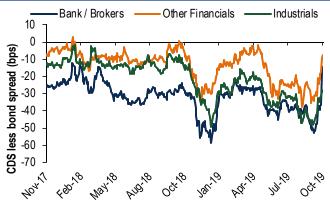
Mutual fund flows

Figure 71: Daily high grade US fund and ETF flows



EPFR Global, BofA Merrill Lynch Global Research

Figure 68: 5-year CDS cash basis by broad sector



Note: CDS-Cash and based on spreads of the following 30 issuers: AIG, AMGN, AXP, BAC, BRK, C, CAT, CMCSA, COF, CVS, DE, DIS, F, GE, GS, HD, HPQ, IBM, JPM, MET, MO, MS, PFE, PRU, SPG, T, VZ, WFC, WMT, VIA

Source: BofA Merrill Lynch Global Research

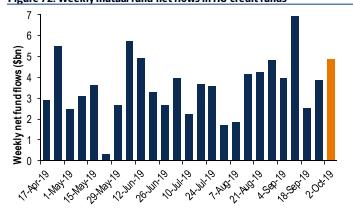
Figure 70: US issuers: relative EUR and USD spreads



Note: the chart plots issuer-matched spreads on a fully currency hedged basis. We use maturity-matched cross currency basis swaps to fully currency hedge principal and interest rate payments, and forward FX rates to fully hedge the stream of spread payments. We also adjust for the difference in quoting conventions with a 3 to 6M Euribor swap.

Source: BofA Merrill Lynch Global Research, Bloomberg, ICE Data Indices, LLC

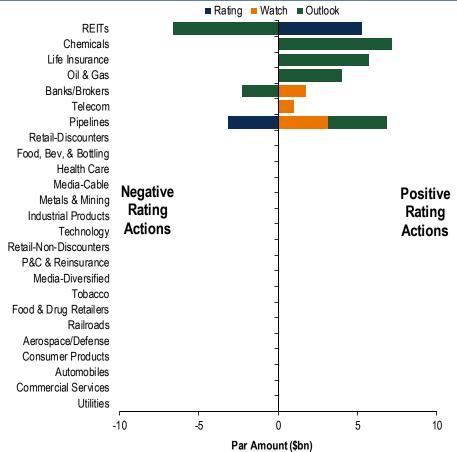
Figure 72: Weekly mutual fund net flows in HG credit funds



Source: BofA Merrill Lynch Global Research, EPFR.

Rating actions summary

Figure 73: Weekly rating actions by sector, notional value in HG Master index

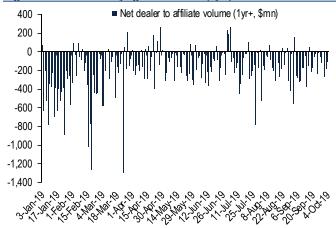


Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

Daily foreign demand tracker

We believe net dealer-to-affiliate volumes from Trace are correlated with foreign buying of US HG corporate bonds - i.e., negative numbers mean foreign investor buying (US dealers taking down inventory in favor of foreign affiliates). For supporting material see our "primer" on tracking foreign inflows (See: Credit Market Strategist: One year round-trip in spreads 15 July 2016). Figure 74 shows the overall daily dealer-to-affiliate volumes while Figure 75, Figure 76 and Figure 77 show subsets of this data. In particular Figure 75 shows net dealer-to-affiliate volumes for longer maturity (12+ years) bonds, Figure 76 displays volumes reported to Trace before 8am NY time (biased toward Asian buying) and Figure 77 shows the subset of net trades reported between 8am and noon (biased toward European buying). Figure 74 and Figure 75 include data from today, whereas Figure 76 and Figure 77 run through the previous business day.

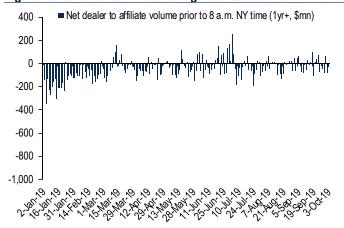
Figure 74: Net dealer buying from affiliate (1yr+)



Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.

Source: Bloomberg, TRACE

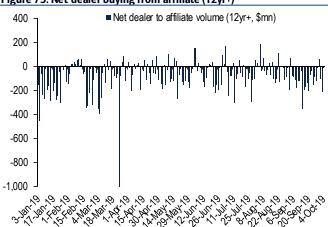
Figure 76: Net dealer-to-affiliate trading volumes before 8 a.m. NY time



Note: Morning share of daily trading volume is correlated with secondary market activity of foreign investors due to different time zones.

Source: BofA Merrill Lynch Global Research, TRACE

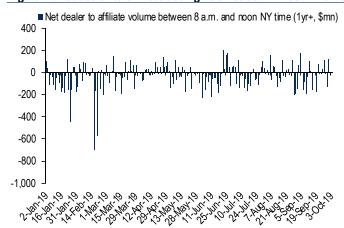
Figure 75: Net dealer buying from affiliate (12yr+)



Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.

Source: Bloomberg, TRACE

Figure 77: Net dealer-to-affiliate trading volumes 8 a.m. - noon NY time



Note: Morning share of daily trading volume is correlated with secondary market activity of foreign investors due to different time zones.

Source: BofA Merrill Lynch Global Research, TRACE

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