Credit Market Strategist

Libor vs. Renminbi

Credit Analysis

09 August 2019

- **Libor vs. Renminbi.** Corporate credit spreads continue to be driven by the two big longer term stories: 1) monetary policy easing (lower Libor) asserts tightening pressure while 2) US-China trade dispute (weaker CNY) adds widening pressure. Of course these two are interrelated but the former creates very favorable technicals for US IG credit and the latter increases uncertainties that weigh on economic growth and raises recession risk. While we continue to think the interplay and tradeoffs between these two are consistent with meaningful spread tightening for US IG, obviously US HY would be better off in an environment of higher growth and less monetary policy accommodation. This because the proportion of credit spreads compensating for default losses is much higher than in IG. Hence the recent outperformance of IG over HY on a risk-adjusted basis.

- **You're gonna need a bigger allocation to corporates.** This week showed that sometimes there is just too much volatility for IG – particularly on Wednesday the ranges for interest rates and credit spreads were very wide. We continue to expect that a wall on money (foreign as well as domestic moving out the curve) will flow into the US IG corporate bond market. However, current elevated volatility levels, especially on the rates side, slow/delay that process. But the fact that IG credit has outperformed and is currently about 17bps rich to equity and rates vol suggests these flows are already having an influence. Despite relative richness we consider current spread levels an attractive buying opportunity. Fool me once, fool me twice. IG credit investors should increasingly discount rates and equity vol related to the US-China trade dispute.

- **Trade vs. Brexit.** For US IG credit up until this point the situation reminds us a lot about the aftermath of the UK's Brexit vote in the summer of 2016. We count 19 macro selloffs over the past decade with a median IG spread widening of 19% and 28 business days to reach the wides. The Brexit episode was comparatively shallow and short lived, as following the no vote IG spreads reached peak widening of +10bps in two business days and subsequently retraced all of that in 11 days. US IG fixed income currently pays 90% (vs. 83% max post Brexit) of all global IG yield. We suggest there will be a time where things stabilize a bit and a big fight for US corporate bonds ensues because there are few other places to go.

- **July Senior Loan Officer Survey: still easing standards**.

- **Preliminary 2Q HG fundamentals.** Gross leverage for US non-Financial non-Utility IG issuers increased to 2.61x in 2Q from 2.54x in 1Q-19.

- **It's different this time.** The IG index spread widening since last Thursday on the back of escalating trade tensions led to an outsized increase in issuer spread dispersion – unlike in other recent selloffs.

- **Fund flows: Outflows from bonds and stocks**. $1.86bn IG fund/ETF inflow

- **Supply: Supply to remain heavy**. $41.3bn this week. Expect $30-40bn next week.

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Publication	Name
Situation Room	Trade vs. Brexit
Situation Room	It's different this time
Situation Room	Duration risk on, duration risk off
Situation Room	Outflows across the board
Monthly HG Market Review	Jul '19: Good data and rate cut
Credit Market Strategist	Jul '19 US Credit Investor Survey: Still all about China
Credit Market Strategist	Summer 2018 snapshot of the HG market

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
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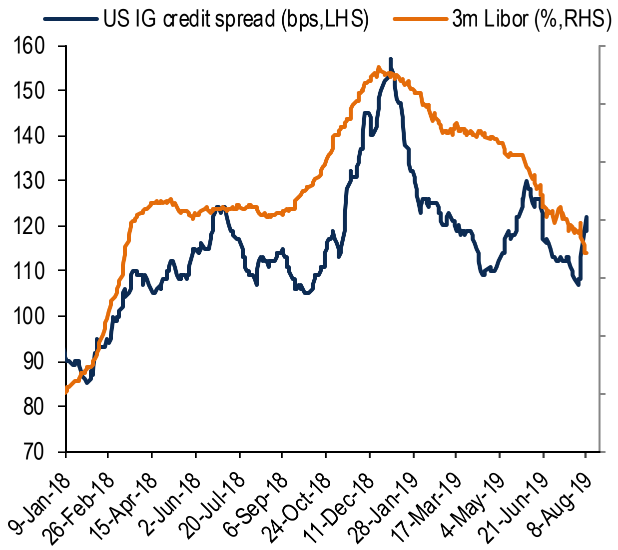
Rating actions summary
Daily foreign demand tracker

Macro

Libor vs. Renminbi

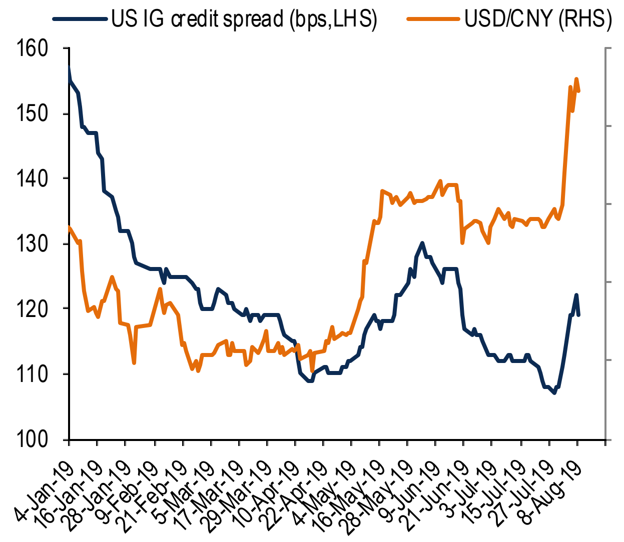
Corporate credit spreads continue to be driven by the two big longer term stories: 1) monetary policy easing (lower Libor) asserts tightening pressure (Figure 1) while 2) US-China trade dispute (weaker CNY) adds widening pressure (Figure 2). Of course these two are interrelated but the former creates very favorable technicals for US IG credit and the latter increases uncertainties that weigh on economic growth and raises recession risk. While we continue to think the interplay and tradeoffs between these two are consistent with meaningful spread tightening for US IG, obviously US HY would be better off in an environment of higher growth and less monetary policy accommodation. This because the proportion of credit spreads compensating for default losses is much higher than in IG (Figure 3). Hence the recent outperformance of IG over HY on a risk-adjusted basis (Figure 4).

Figure 1: Monetary policy easing leading to tighter credit spreads



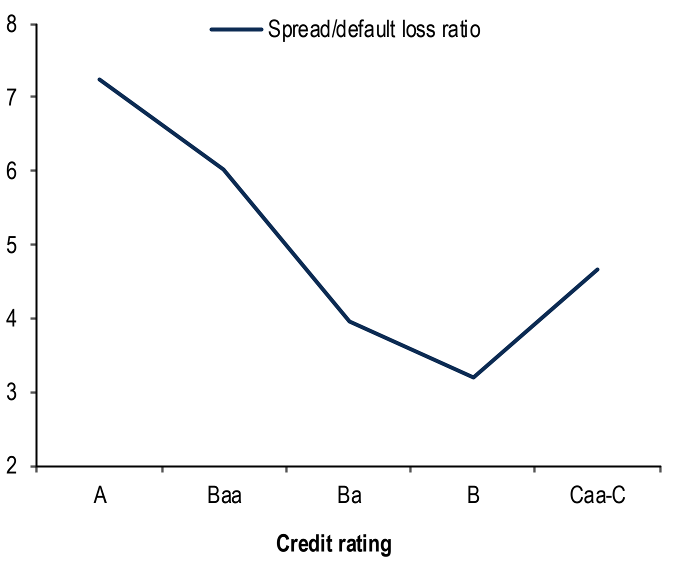
Source: Bloomberg, Barclay's, BofA Merrill Lynch Global Research

Figure 2: US-China trade dispute taking credit spreads wider



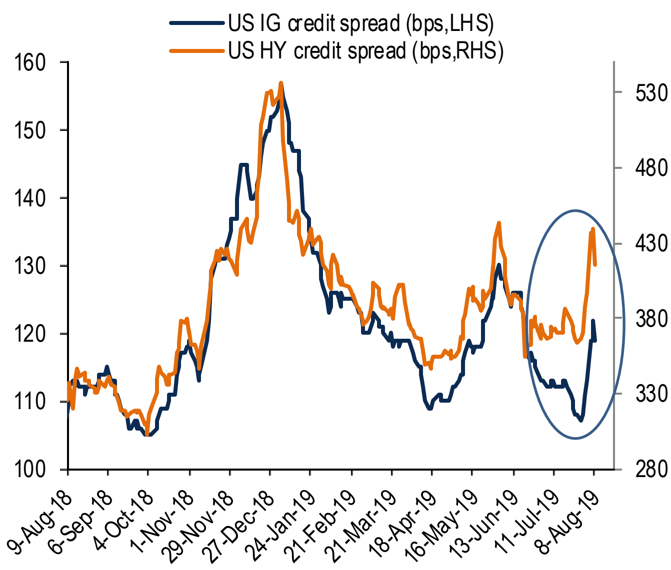
Source: Bloomberg, Barclay's, BofA Merrill Lynch Global Research

Figure 3: IG credit spreads driven less by credit risk than HY



Note: Average daily spreads 8/9/1999-8/8/2019 divided by Moody's long term annualized default losses for 10-year holding periods.
Source: ICE Data Indices, LLC, Moody's

Figure 4: Recent outperformance of IG over HY on risk-adjusted basis

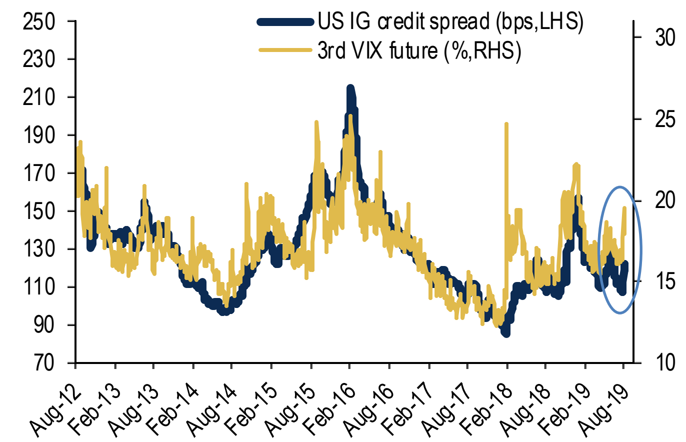


Source: Bloomberg, Barclay's, BofA Merrill Lynch Global Research

You're gonna need a bigger allocation to corporates

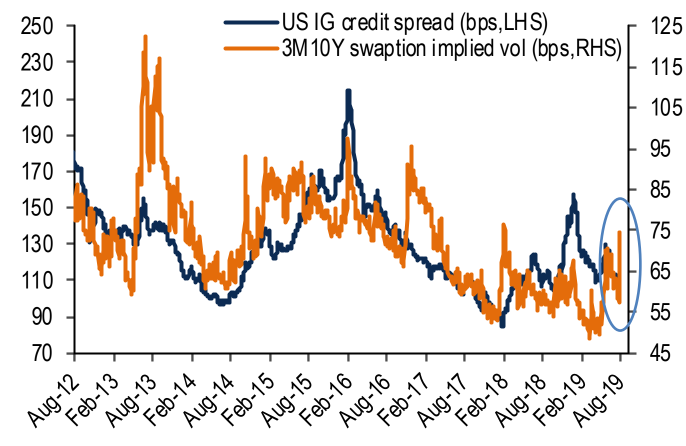
This week showed that sometimes there is just too much volatility for IG – particularly on Wednesday the ranges for interest rates and credit spreads were very wide. We continue to expect that a wall on money (foreign as well as domestic moving out the curve) will flow into the US IG corporate bond market. However, current elevated volatility levels (Figure 5), especially on the rates side (Figure 6), slow/delay that process. But the fact that IG credit has outperformed and is currently about 17bps rich to equity and rates vol (Figure 7) suggests these flows are already having an influence. Despite relative richness we consider current spread levels an attractive buying opportunity. Fool me once, fool me twice. IG credit investors should increasingly discount rates and equity vol related to the US-China trade dispute.

Figure 5: IG spreads rich relative to equity vol



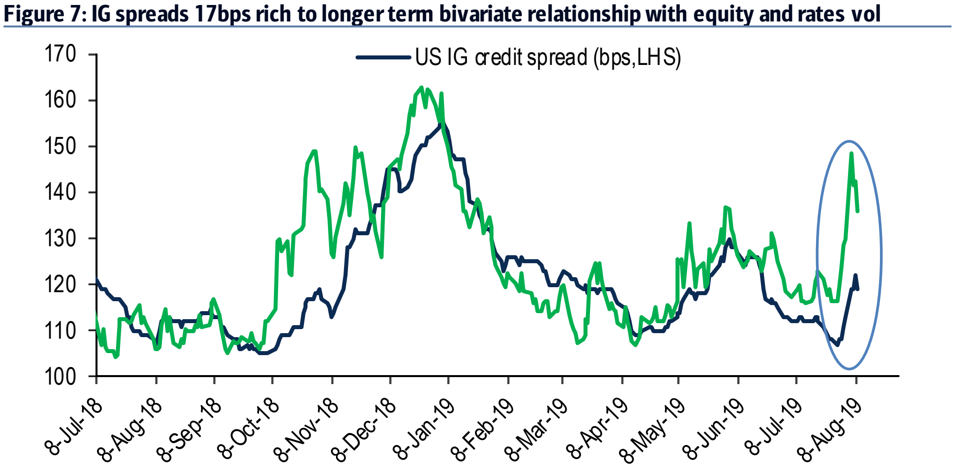
Source: Bloomberg, Barclay's, BofA Merrill Lynch Global Research

Figure 6: IG spreads rich relative to rates vol



Source: Bloomberg, Barclay's, BofA Merrill Lynch Global Research

Figure 7: IG spreads 17bps rich to longer term bivariate relationship with equity and rates vol



Note: Relationship is: -30.28+7.24*3rd VIX futures+0.49*3M10Y normal swaption implied vol. Estimated using daily data 1/3/12 to present
Source: Bloomberg, Barclay's, BofA Merrill Lynch Global Research

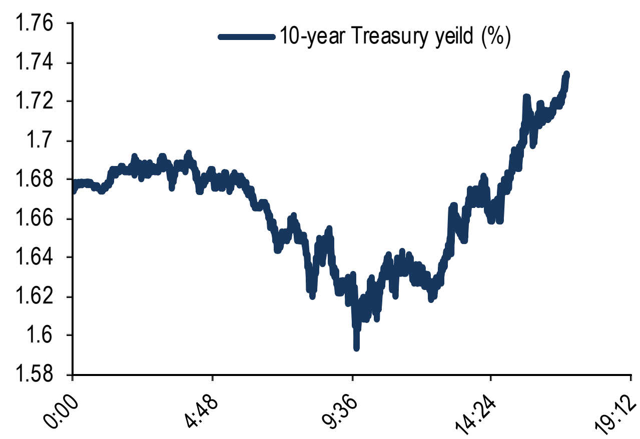
Previously published here

[Situation Room: Duration risk on, duration risk off 07 August 2019]

Duration risk on, duration risk off

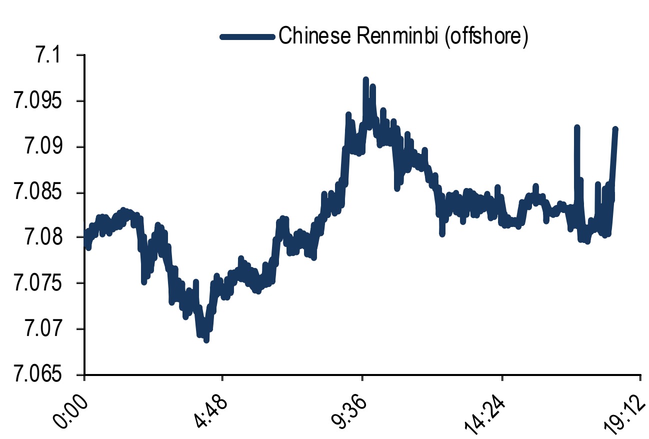
Our global Head of FX, rates and EM strategy, David Woo, laid out a range for 10-year Treasury yields of 1.25%-2.5% between the two extreme scenarios for the US-China trade dispute - full blown trade war and a trade deal. With such wide range not surprisingly the rates market can sometimes overreact to news that by the end of the day is understood to move the needle very little. That probably helps explain today's rates volatility where for example 10-year Treasury yields declined 9bps intraday only to rebound and close up 3bps by the close (Figure 8), as NZ cut the policy rate by 50bps, German production data showed weakness and President Trump Tweeted that the Fed was not cutting rates sufficiently aggressively. We also saw CNH closing off its peak morning weakness (Figure 9) and oil recouping some losses (Figure 10) on a report that the Saudis will try to stem the declines. CDX indices reversed losses and closed little changed whereas IG corporate bond spreads ended 1-3bps wider, well of the +5bps wides of the day. We are bullish on corporate spreads but need rates to stabilize some more or increase for that to play out. Yesterday we saw such stability. Rapid declines in interest rates - like today - lead to wider spreads (roughly 1/3 the move in 10-year rates).

Figure 8: 10-year Treasury declined 9bps intraday



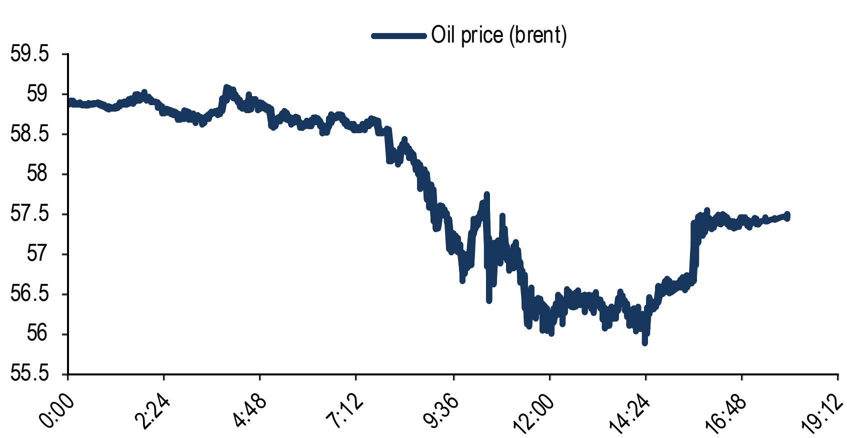
Source: Bloomberg

Figure 9: CNH closed off the peak this morning



Source: Bloomberg

Figure 10: Oil recoupled some intra-day losses



Source: Bloomberg

Previously published here (updated)
[Situation Room: Trade vs. Brexit 05 August 2019]

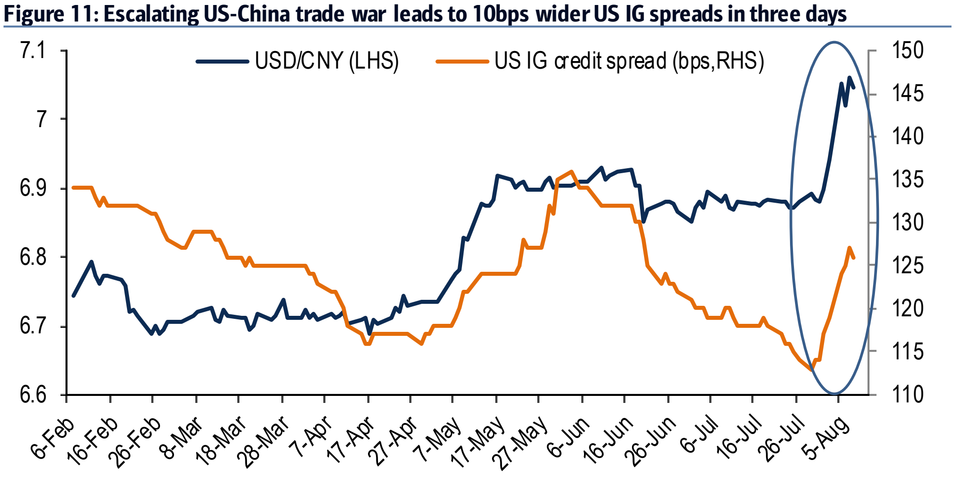
Trade vs. Brexit

With China signaling retaliation by allowing its currency to creep above 7 (Figure 11) and suspending US farm purchases, after US President Trump announced 10% tariffs last week, a trade war has replaced the truce between the two countries. There could well be further near-term negative developments in the US-China trade dispute, as highlighted by the Treasury Department designating China as a currency manipulator and delayed action on Huawei.

For US IG credit up until this point the situation reminds us a lot about the aftermath of the UK's Brexit vote in the summer of 2016. We count 19 macro selloffs over the past decade with a median IG spread widening of 19% and 28 business days to reach the wides (Figure 14). The Brexit episode was comparatively shallow and short lived, as following the no vote IG spreads reached peak widening of +10bps in two business days and subsequently retraced all of that in 11 days. While the present trade war certainly holds the potential to become much more systemic than Brexit we note that both began on a Thursday (although Brexit after markets closed). By the end of Monday following Brexit 10-year Treasury yields had plunged 31bps, equities declined 5.34% and IG spreads widened 10bps - a very rapid pace compared with other shocks (Figure 14).

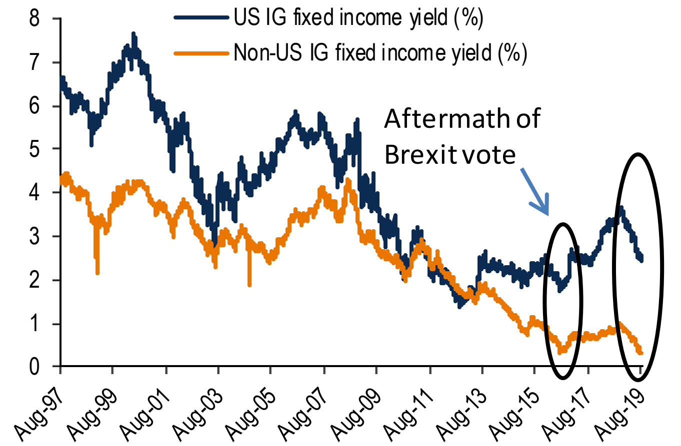
Monday, following President Trump's tariff announcement last Thursday, 10-year Treasury yields had also dropped 31bps, equities shed 4.55% and IG credit spreads were 10bps wider as well. In our opinion the crucial similarity between the two episodes is the collapse in global IG fixed income yields, and especially that non-US yields currently at 25bps (vs. 34bps min post Brexit vote) are on a relentless march toward zero (Figure 12). US IG fixed income currently pays 90% (vs. 83% max post Brexit) of all global IG yield (Figure 13). We suggest there will be a time where things stabilize a bit and a big fight for US corporate bonds ensues because there are few other places to go.

Figure 11: Escalating US-China trade war leads to 10bps wider US IG spreads in three days



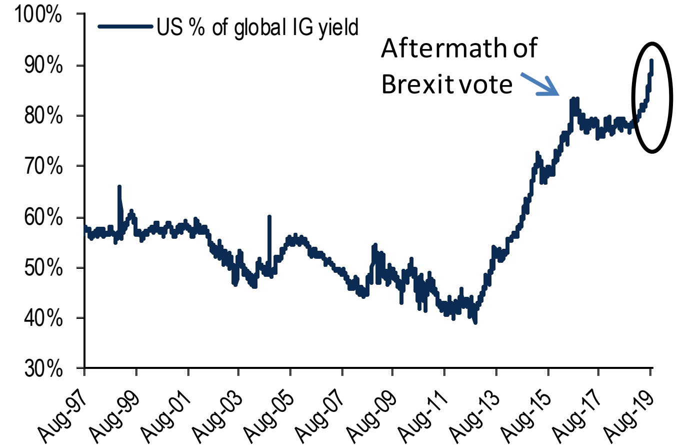
Source: Bloomberg, ICE Data Services, LLC, BofA Merrill Lynch Global Research

Figure 12: Collapsing global yields like in the aftermath of Brexit



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

Figure 13: Spike in US share of global yields like in the aftermath of Brexit



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

Figure 14: Macro selloffs over the past decade (bps unless otherwise noted)

Date	Region	Notes	-1 day to +1 day	+1 month	+3 month	tights to wides	tights to wides (%)	wides to +3m tights after the event	wides days after event
27-Apr-10	EMEA	S&P downgrades Greek Sovereign Debt to junk/1st Greek Bailout	2	46	38	60	41%	-57	33
15-Mar-11	EMEA	Arab Spring: Syrian/Libyan civil war begins	6	-8	10	17	11%	-19	66
5-Aug-11	US	S&P downgrades US debt	17	50	52	108	64%	-96	42
1-Oct-13	US	US government shuts down	-1	-11	-27	4	3%	-27	0
18-Mar-14	EMEA	Russia annexes Crimea	-3	-10	-15	3	2%	-16	0
15-Jan-15	EMEA	Swiss abandons cap on Franc vs. Euro FX rate	1	-10	-20	10	7%	-24	0
11-Aug-15	APAC	China: Devalues yuan	3	5	-1	32	20%	-19	38
16-Sep-15	APAC	S&P downgrades Japan credit rating	0	6	8	16	10%	-19	11
16-Dec-15	US	Fed - 1st rate hike - increase interest rate 25bp	-1	18	7	59	34%	-49	40
23-Jun-16	**EMEA**	**Brexit: UK votes to leave the EU**	**5**	**-8**	**-13**	**10**	**6%**	**-26**	**2**
10-Aug-17	APAC	Escalating geopolitical risks with North Korea	4	3	-8	9	8%	-17	20
5-Feb-18	US	Elevated wage inflation + cyclical high 59.9 ISM non-manufacturing = rate fears	3	14	26	27	30%	-26	40
23-Mar-18	US/APAC	Escalating US-China trade tensions with North Korean leader visiting China and additional tariffs on Chinese goods	2	-4	14	31	27%	-19	66
29-May-18	EMEA	Increasing likelihood of elections around Italian EU and EUR membership, concerns around a more populist government	4	10	-2	18	15%	-16	22
10-Oct-18	US/APAC /EMEA	Perfect storm of macro risks - such as soft foreign growth, trade war, Italy, Saudi Arabia - and Fed was expected to hike rates aggressively.	3	10	42	52	46%	-50	61
19-Dec-18	US	US government shutdown risk, recession risk, big selloffs in risk assets and the Fed appeared unresponsive at Dec 19 FOMC meeting.	3	-3	-24	27	18%	-38	11
20-Mar-19	US/EMEA	Fed global growth concerns, disappointing European manufacturing PMIs, inverted 3m/10s Treasury curve fueling recession fears.	0	-9	2	11	9%	-20	53
6-May-19	US & APAC	US-China trade negotiations break down (tariffs on $300bn Chinese, $60bn US goods)	1	16	-2	20	17%	-20	20
1-Aug-19	**US/APAC**	**US-China trade war escalates (10% tariffs, CNY>7, suspended farm purcha.)**	**5**						
		Average	**3**	**6**	**5**	**29**	**20%**	**-31**	**29**
		Median	**3**	**4**	**1**	**19**	**16%**	**-22**	**28**

Note: Column headings refer to the event date. Thus for example -1 day to +1 day is from the day before to the day after the event.
Source: BofA Merrill Lynch Global Research

Previously published here
[Situation Room: Trade vs. Brexit 05 August 2019]

July Senior Loan Officer Survey: still easing standards

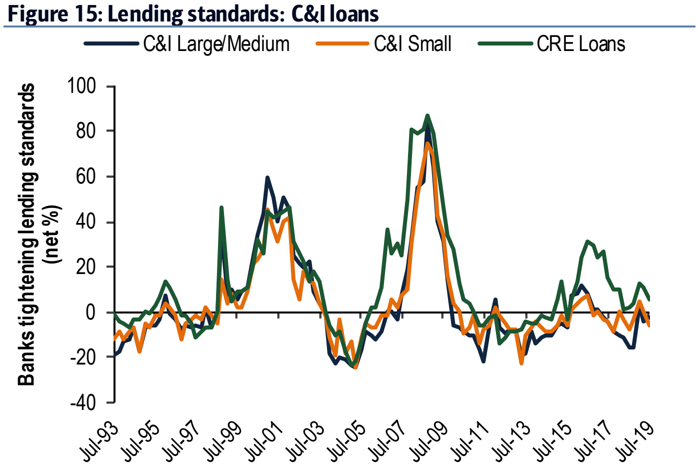
The Fed's July senior loan officer survey released today shows that banks continued to ease standards for large C&I loans in the second quarter. Banks also reported easing standards for small C&I loans but tightened them for CRE loans. At the same time banks reported notably stronger demand for mortgage, credit card and auto loans even as lending standards for these types of loans remained relatively stable. The special question in the July survey asked how lending standards currently compared to the midpoint of the range since 2005. Banks reported that the current lending standards were at the easier end of the range for C&I loans, tighter end of the range for CRE and mortgage loans, and near the mid-point of the range for credit card and auto loans to prime borrowers.

C&I and CRE loans

A net 2.8% of banks said they were easing standards for large/medium C&I loans, down a bit from 4.2% in the prior April survey. A net 5.8% reported easing standards for small C&I loans compared to an unchanged reading in April. The share reporting tightening standards to CRE loans declined to 6.0% in the July survey from 10.8% in the April survey (Figure 15). Note that the CRE value reported here is the average for the three separate questions on loans for construction and land development, loans secured by nonfarm nonresidential structures, and loans secured by multifamily residential structures.

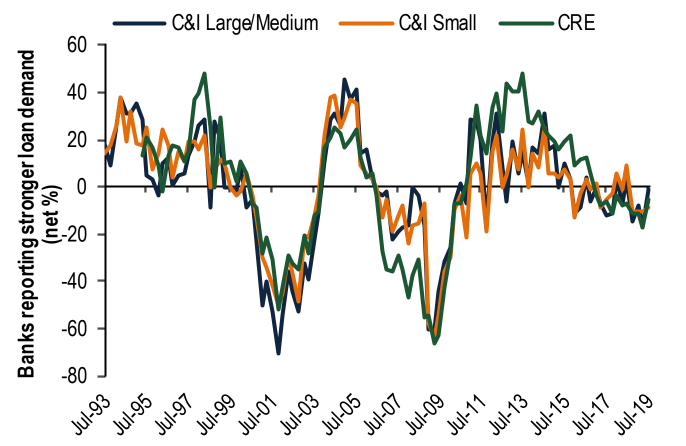
A smaller net share of banks reported weaker demand relative to the prior April survey. Hence the net share reporting weaker demand fell to 1.4% from 16.9% for C&I loans from large/medium firms, to 9% from 10.3% for C&I loans from small firms and to 5.1% from 16.9% for CRE loans (Figure 16).

Figure 15: Lending standards: C&I loans



Source: Federal Reserve

Figure 16: Loan demand: C&I loans



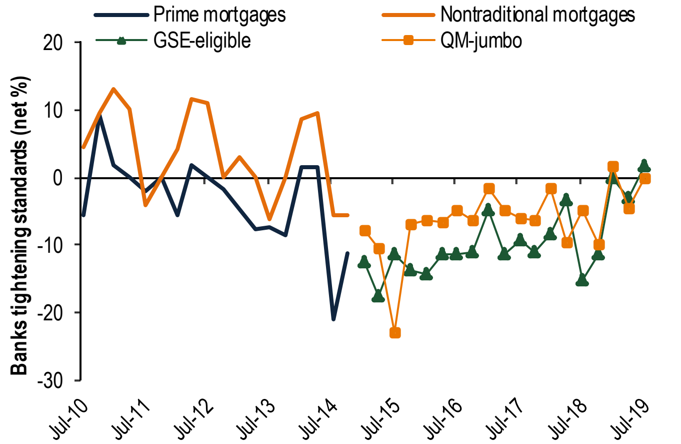
Source: Federal Reserve

Mortgages

A net 1.6% share of banks reported tightening lending standards for GSE-eligible mortgages in July, compared to a net 3.2% easing standards in April. Standards were unchanged for QM-jumbo mortgage loans in the July survey, compared to a net 4.6% of banks easing standards in April (Figure 17). Stronger demand was reported by net 52.4%

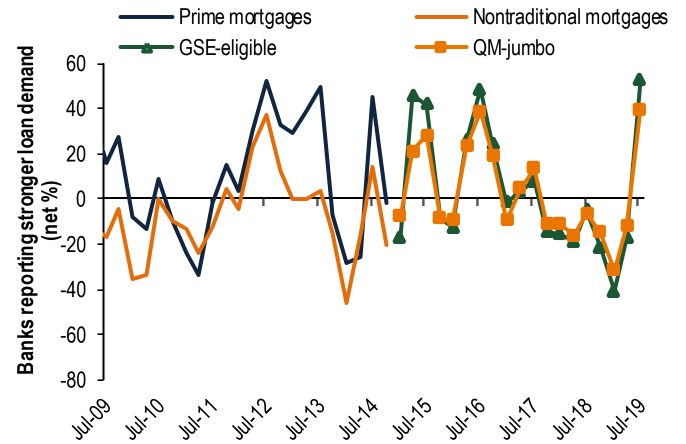
of banks for GSE-eligible loans and net 39.4% of banks for QM-jumbo mortgage loans in July. On the other hand net 17.5% and 12.3% of banks saw weaker demand in April for GSE-eligible and QM-jumbo mortgage loans, respectively (Figure 18).

Figure 17: Lending standards: residential mortgages



Source: Federal Reserve

Figure 18: Loan demand: residential mortgages

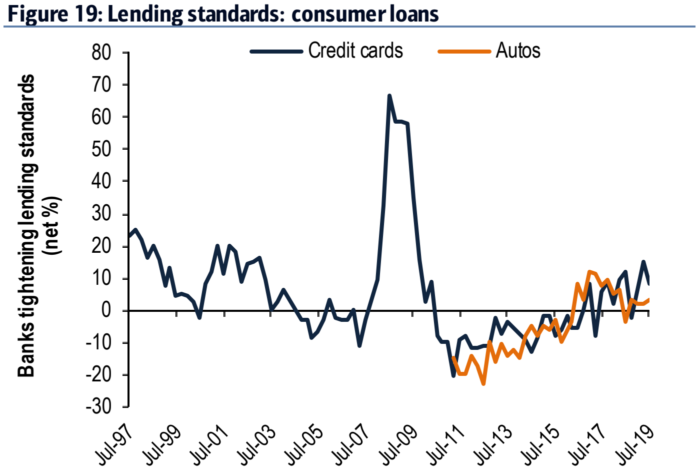


Source: Federal Reserve

Consumer loans

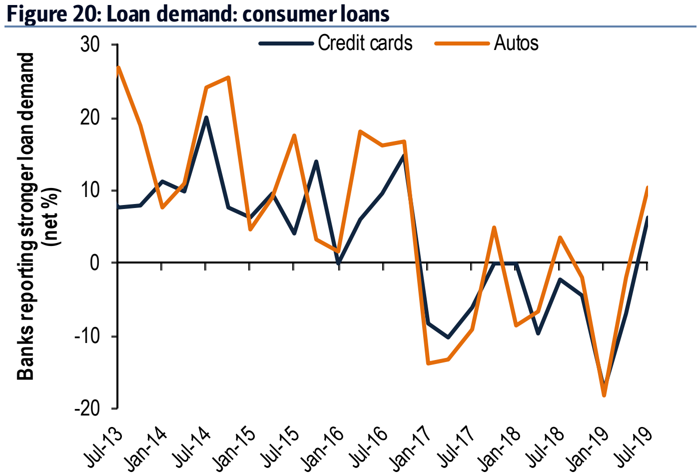
Net 8.5% and 3.5% of banks reported tightening lending standards for credit card and auto loans in the current July survey. This compares to net 15.2% and 1.8% of banks tightening lending standards on credit card loans and auto loans in the prior April survey (Figure 19). Similarly to mortgage loans the demand for credit card and auto loans increased notably. Net 6.4% and 10.5% of banks reported stronger demand for credit card and auto loans in July, up from net 6.8% and 1.8% reporting weaker demand in April (Figure 20).

Figure 19: Lending standards: consumer loans



Source: Federal Reserve

Figure 20: Loan demand: consumer loans



Source: Federal Reserve

Previously published here

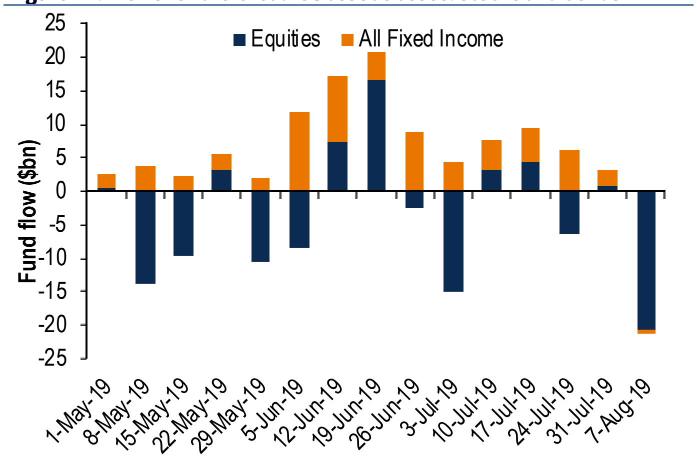
[Situation Room: Outflows across the board 08 August 2019]

Outflows from bonds and stocks

US mutual fund and ETF investors sold both stocks and bonds during this past week ending on August 7. The $20.61bn outflow from stocks was the biggest since December, and down from a small $0.63bn inflow in the prior week. Bonds had the first outflow this year of $0.76bn, compared to a $2.46bn inflow a week earlier (Figure 21). High yield, loans, global EM and government bonds were sectors driving the outflow from fixed income, while the inflow to high grade was little changed.

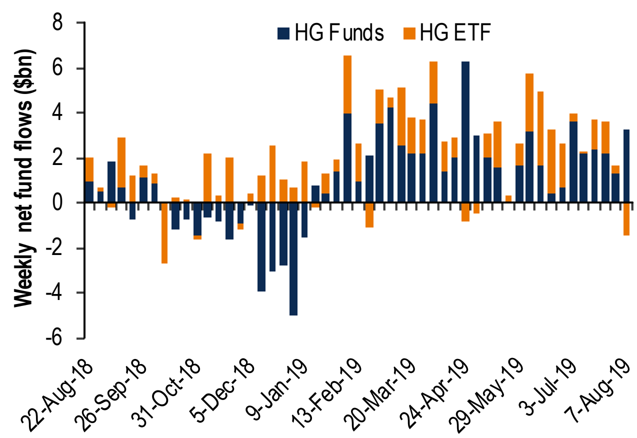
Inflows to high grade increased a bit to $1.86bn from $1.70bn. While the overall level was little changed the composition shifted towards short-term, where inflows accelerated to $1.70bn from $0.56bn. On the flip side ex. short-term inflows declined to $0.16bn from $1.15bn. HG ETFs, dominated more by institutional investors, reported a $1.43bn outflow following a $0.42bn inflow a week earlier. By contrast inflows to HG funds increased to $3.29bn from $1.29bn (Figure 22). The $3.75bn outflow from high yield was the biggest since December – similar to stocks – and an increase from a $0.85bn outflow in the prior week. Outflows form loans also accelerated to $0.73bn from $0.48bn. Flows turned negative for government bonds (to a $0.22bn outflow from a $0.85bn inflow) and for global EM bonds (to a $1.73bn outflow form a $2.30bn inflow). On the other hand flows for munis improved to $1.69bn from $0.84bn. Finally money markets reported a $56.07bn inflow after a $10.48bn outflow in the prior week.

Figure 21: Flows for the broad US asset classes: stocks and bonds



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

Figure 22: High grade fund and ETF flows, $bn



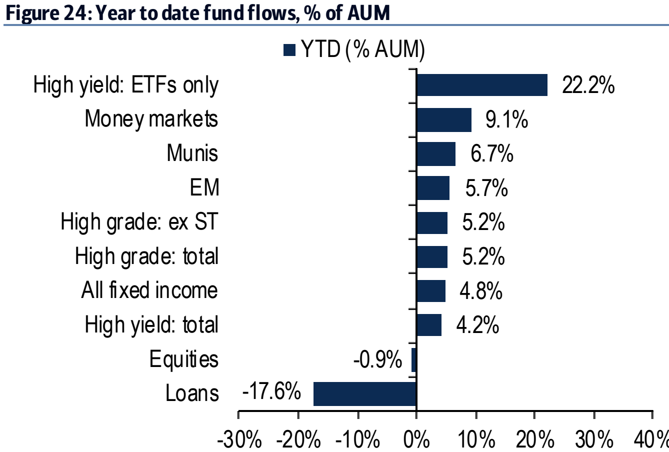
Note: data are for US-domiciled funds only.
Source: EPFR Global.

Figure 23: Fund flows summary

Asset class	Last week (% of AUM for weekly reporting funds/ETFs)	YTD (% of AUM for all funds/ETFs)	YTD ($bn)
High grade: total	0.12%	5.2%	150.1
High grade: ex short-term	-0.11%	5.2%	114.7
High yield: total	-1.72%	4.2%	12.1
High yield: ETFs only	-4.03%	22.2%	8.0
Loans	-0.88%	-17.6%	-25.3
EM	-0.34%	5.7%	32.9
Munis	0.37%	6.7%	51.6
All fixed income	-0.03%	4.8%	227.9
Money markets	1.87%	9.1%	293.7
Equities	-0.31%	-0.9%	-99.6

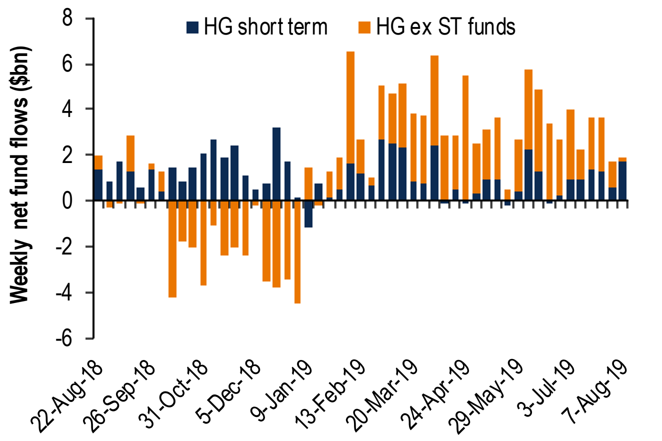
Note: Last week flow as % of AUM is based on AUM for weekly reporting funds / ETFs only. YTD flow as % of AUM is based on AUM for the full fund/ ETF universe as of December 31 2018. Global EM funds, US-domiciled funds only for other fund types.
Source: EPFR Global, BofA Merrill Lynch Global Research

Figure 24: Year to date fund flows, % of AUM



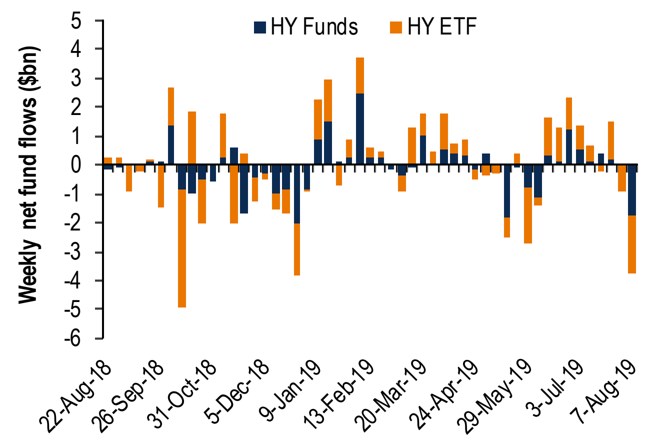
Note: Global EM funds, US-domiciled funds only for other fund types.
Source: EPFR Global, BofA Merrill Lynch Global Research

Figure 25: Weekly high grade fund flows, $bn



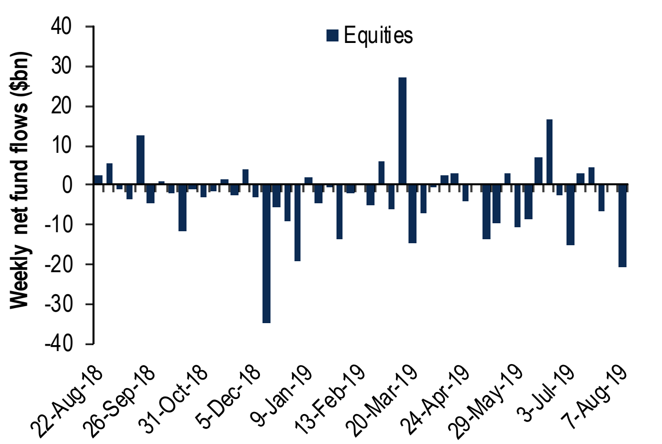
Note: the flows data is for US-domiciled funds and ETFs. The flows include high grade bond funds, high grade corporate bond bunds, and total return bond funds. We exclude two volatile funds from our aggregate data. Short-term refers to duration of 0 to 4 years.
Source: EPFR Global, BofA Merrill Lynch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

Figure 26: Weekly high yield fund flows, $bn



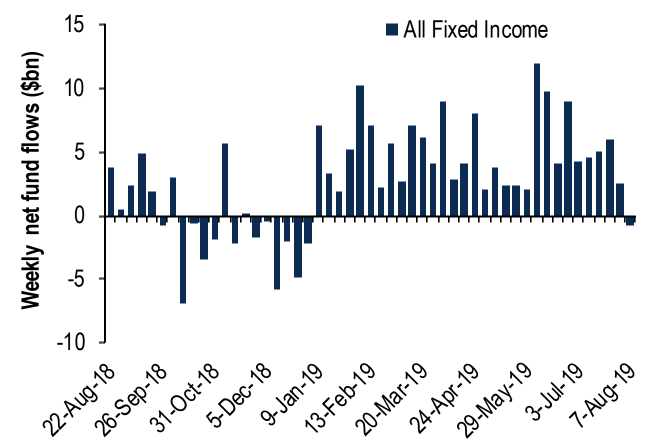
Note: the flows data is for US-domiciled funds and ETFs.
Source: EPFR Global.

Figure 27: Weekly equity fund flows, $bn



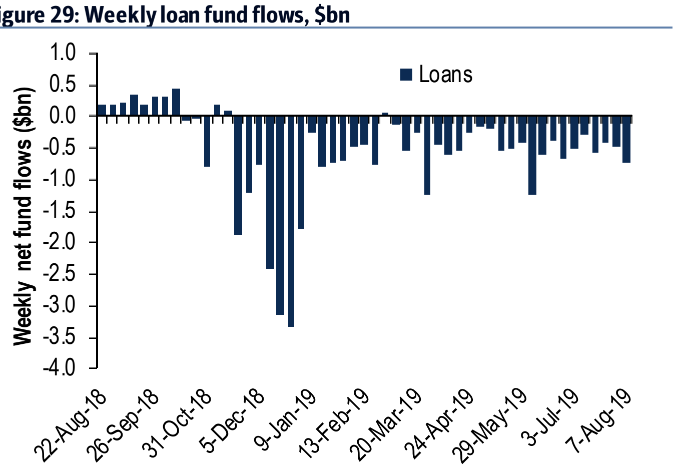
Note: the flows data is for US-domiciled funds and ETFs.
Source: EPFR Global.

Figure 28: Weekly fixed income fund flows, $bn



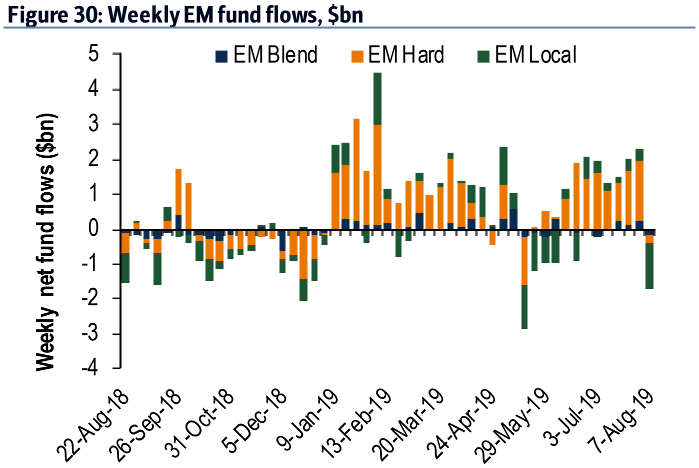
Note: the flows data is for US-domiciled funds and ETFs.. The flows include the following asset classes: high grade (corporate and government), high yield, mortgage backed, floating rate, total return, municipals, inflation protected.
Source: EPFR Global.

Figure 29: Weekly loan fund flows, $bn



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

Figure 30: Weekly EM fund flows, $bn



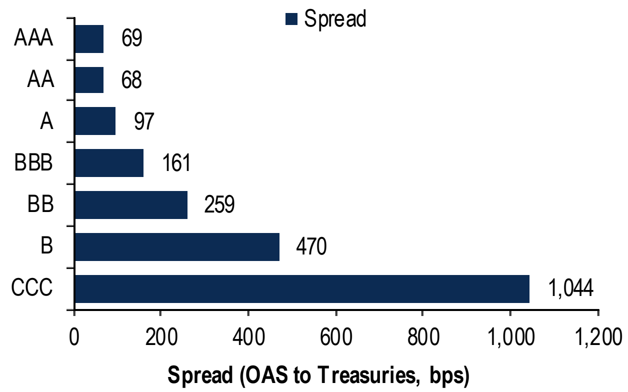
Note: the flows data is for US-domiciled funds and ETFs.
Source: EPFR Global

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.

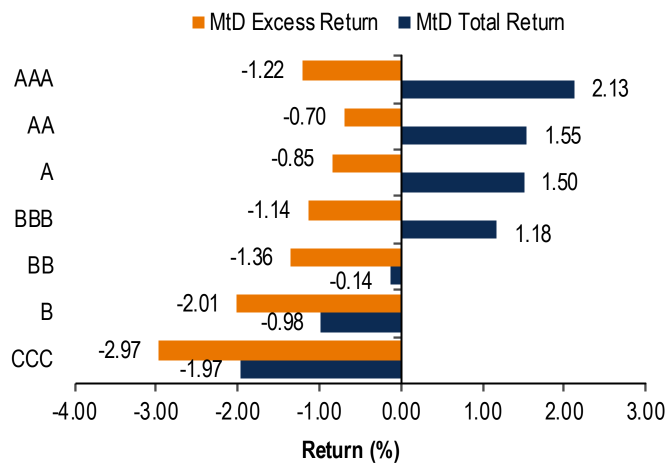
Corporate credit spreads and returns

Figure 31: Corporate spreads by rating



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

Figure 32: Month to date credit returns by rating



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

High Grade

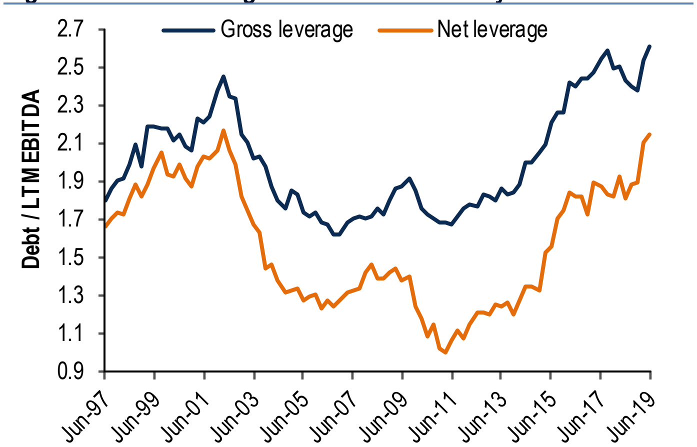
Previously published here
[Situation Room: Duration risk on, duration risk off 07 August 2019]

Preliminary 2Q HG fundamentals

As the 2Q reporting season is winding down we estimate based on preliminary data that gross leverage for US non-Financial non-Utility IG issuers increased to 2.61x in 2Q from 2.54x in 1Q-19. Net leverage was also higher 2.15x, up from 2.11x in 1Q (Figure 33). Note that these values reflect the GAAP accounting rule change specified in FASB Accounting Standards Update 2016-02 Topic 842. The rule requires companies to bring operating leases onto the balance sheet starting this year. We also add operating lease expense to EBITDA. Note, however, that calculating leverage under the new rule remains a work in progress as some data is missing for 2018 while data providers and companies continue to adjust. Hence, under the old accounting rules leverage metrics in 2Q were more stable, with gross leverage increasing to 2.48x from 2.46x and net leverage rising to 2.07x from 2.03x (Figure 34) as IG issuers continued to burn through cash and securities in 2Q (Figure 35).

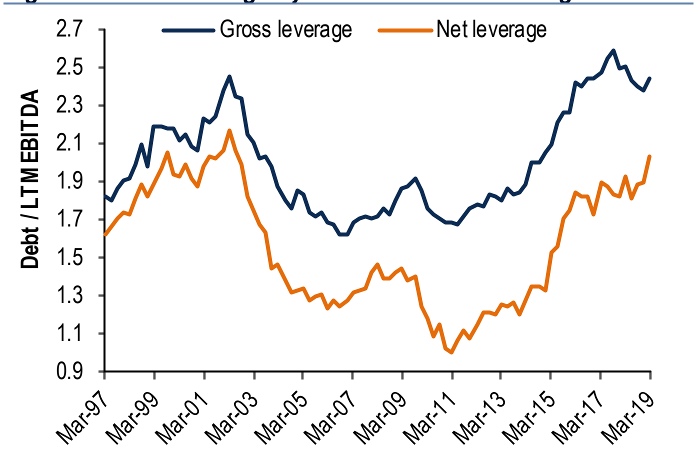
The coverage ratio has remained relatively stable over the last 12 months, although it declined QoQ to 10.34 from 10.52 (Figure 35). Liquidity improved marginally (Figure 38), revenue growth decelerated a bit but EBITDA growth improved (Figure 39, Figure 40), margins were a bit better (Figure 45, Figure 46, Figure 47) while capital spending decelerated (Figure 48, Figure 49).

Figure 33: Median leverage: non-financial non-utility US issuers



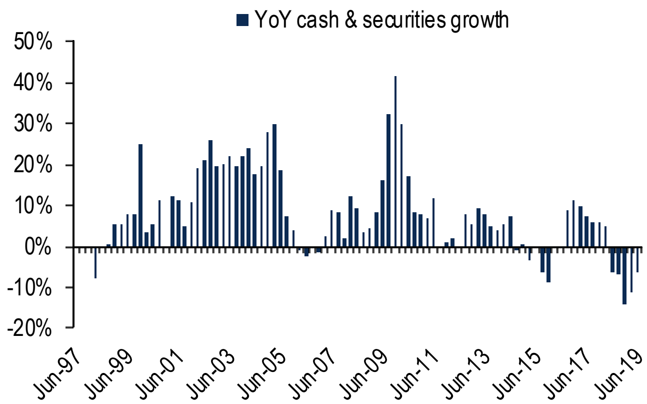
Note: based on US high grade non-financial non-utility issuers. 1Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Figure 34: Median leverage adjusted for ASC 842 rule change



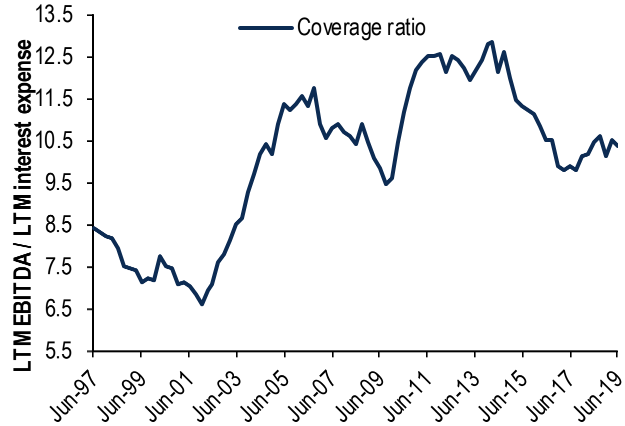
Note: based on US high grade non-financial non-utility issuers. 1Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Figure 35: Companies continued to burn through cash in 1Q



Note: based on US high grade non-financial non-utility issuers. 2Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Figure 36: Median coverage: non-financial non-utility US issuers



Note: based on US high grade non-financial non-utility issuers. 2Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Accounting rule change details

FASB Accounting Standards Update 2016-02 Topic 842 took effect on December 15 2018. As a result companies following calendar quarters reported 1Q-2019 results under the new rule. On the other hand some companies on a non-calendar quarter schedule started reporting under the new rule only later in the year (such as companies with the latest quarter running from December to February). That means the new rule resulted in a big increase in leverage in 1Q and will also cause another smaller increase in 2Q (Figure 37).

Figure 37: The impact of ASU 2016-02 Topic 842 on leverage and debt growth

	Reported metrics			Adjusted for rule change		Rule change impact	
Metric	**4Q-18**	**1Q-19**	**2Q-19**	**1Q-19**	**2Q-19**	**1Q-19**	**2Q-19**
Debt / LTM EBITDA	2.38	2.54	2.61	2.46	2.48	0.08	0.13
Net debt / LTM EBITDA	1.90	2.11	2.15	2.03	2.07	0.08	0.08
YoY gross debt growth	0.1%	8.3%	10.7%	0.2%	1.9%	8.1%	8.8%
YoY net debt growth	9.1%	18.3%	15.8%	6.7%	4.9%	11.6%	11.0%

Note: based on US high grade non-financial non-utility issuers. 2Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Credit analysts and rating agencies traditionally took lease obligations into account (see Retailing: Impact to IG leverage from lease accounting changes 09 January 2019). Hence the results under the new rule should not be a surprise and leverage should now more accurately reflect credit risk. On the other hand companies will not restate historical results, meaning leverage in year 2018 and earlier will not be comparable to leverage going forward. For this reason we plan to calculate leverage both under the updated rule (which is more accurate) and under the old rule (which is comparable historically).

Finally, we make the following assumptions when estimating leverage under the new rule:

- **LTM EBITDA**. Companies did not generally disclose lease costs, as required under the new rule, until this year. We currently add lease expense to EBITDA. For calculating LTM EBITDA we assume 1Q-19 lease costs for all quarters in 2018. This means we assume 4 x [1Q-19 lease expense] as the LTM lease expense in 1Q-19. We assume 3 x [1Q-19 lease expense] + 1 x [2Q-19 lease expense] as the LTM lease expense in 2Q-19.

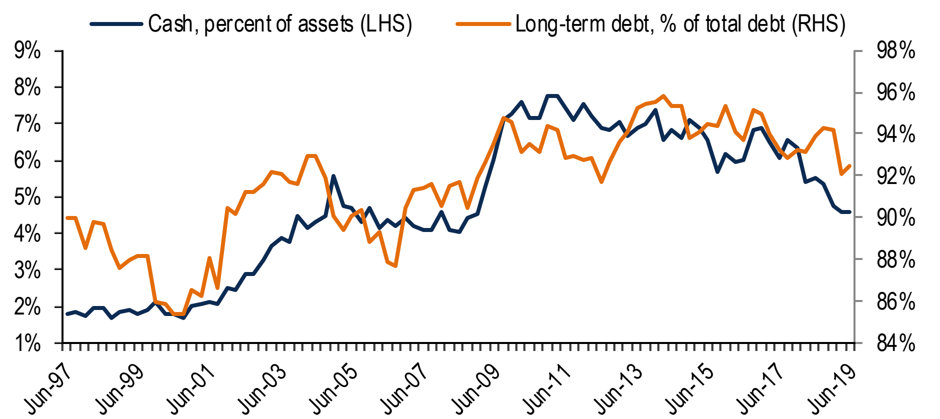
- **Waiting for 10-Qs.** Typically companies disclose debt levels in their earnings release. However, these often omit the data on leases, meaning we now need to wait for the 10-Q to be filed before we get lease amounts and costs. For companies releasing debt but not lease data in earnings, and before 10-Q is filed and processed by our data provider, we assume 1Q values when computing 2Q debt and EBITDA based on preliminary data.

- **EBITDA growth.** For the period 1Q-19 through 4Q-19 we are not including lease expense in EBITDA when computing YoY EBITDA growth.

Liquidity metrics

Liquidity metrics improved marginally in 2Q. Cash & securities as a share of assets remained unchanged at 4.60%, while share of long-term debt increased to 92.4% in 2Q from 92.1% in 2Q (Figure 38).

Figure 38: Liquidity metrics: non-financial non-utility US issuers

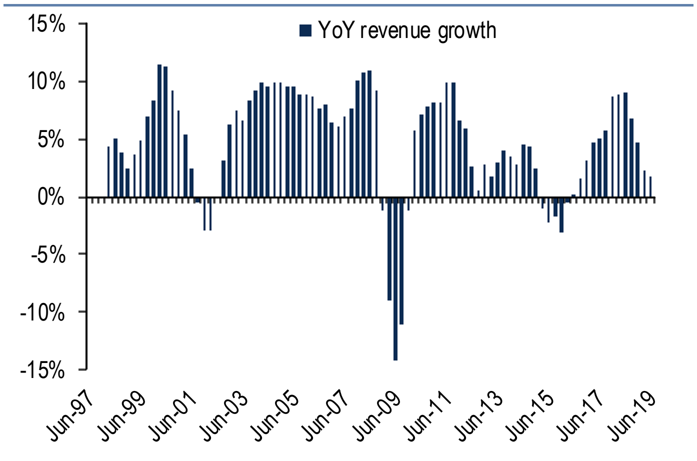


Note: based on US high grade non-financial non-utility issuers. 2Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Revenue and EBITDA growth

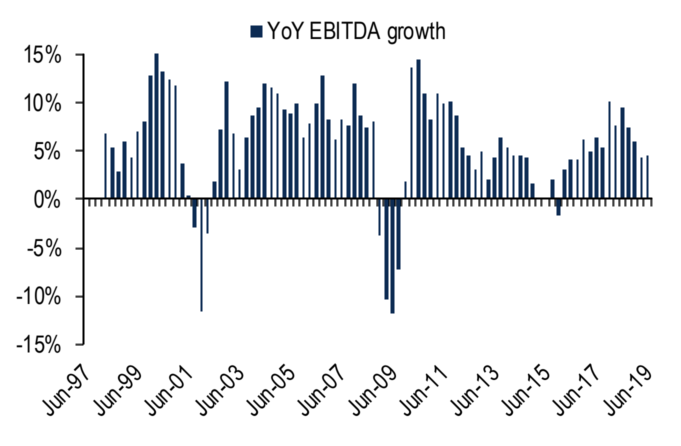
Median YoY revenue growth decelerated to 1.8% in 2Q from 2.2% in 2Q, reaching the lowest level since 3Q-2016. On the other hand median YoY EBITDA growth improved to 4.6% from 4.4% in 2Q (Figure 39, Figure 40).

Figure 39: Median YoY change in revenues: non-financial non-utility US issuers



Note: based on US high grade non-financial non-utility issuers. 2Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Figure 40: Median YoY change in EBITDA: non-financial non-utility US issuers

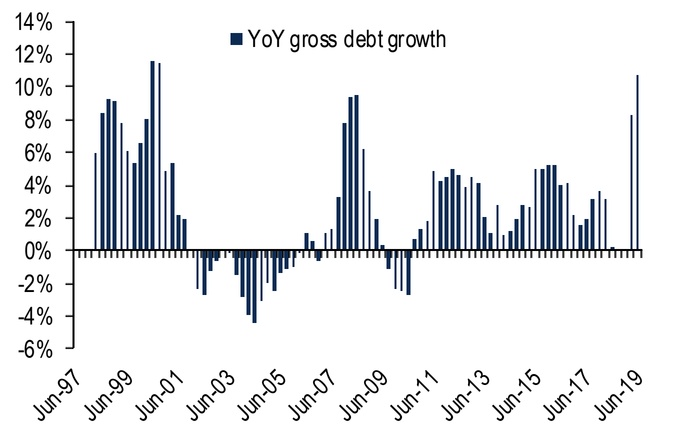


Note: based on US high grade non-financial non-utility issuers. 2Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Debt growth

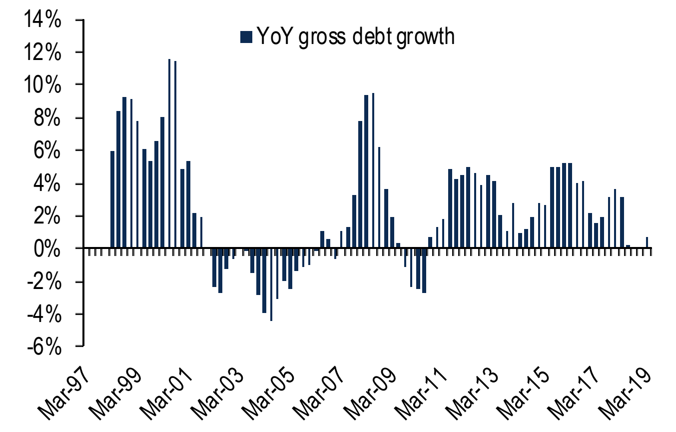
Median YoY gross debt growth accelerated to 10.7% in 2Q from 8.3% in 1Q on the back of operating leases brought onto the balance sheet. Excluding operating leases debt grew 1.9% YoY in 2Q (Figure 41, Figure 42). Similarly YoY net debt growth remained elevated at15.8% in 2Q (4.9% excluding the impact of operating leases) and 18.3% in 1Q (Figure 43, Figure 44).

Figure 41: YoY median change in gross debt: non-financial non-utility US issuers



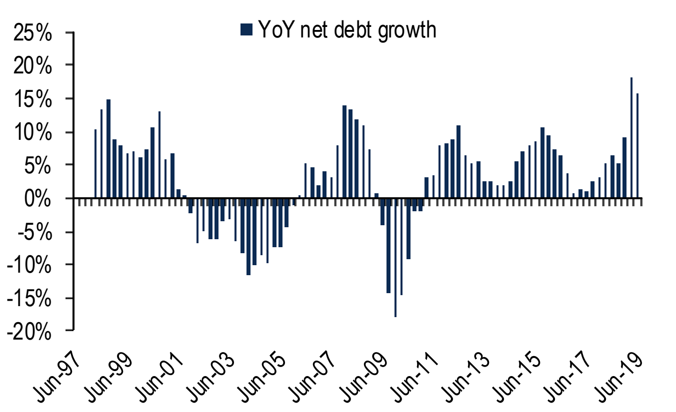
Note: based on US high grade non-financial non-utility issuers. 2Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Figure 42: Adjusted for FASB ASU 2016-02 Topic 842



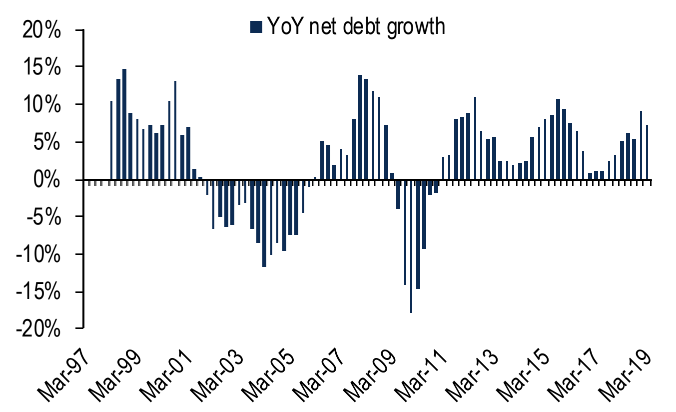
Note: based on US high grade non-financial non-utility issuers. 2Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Figure 43: YoY median change in net debt: non-financial non-utility US issuers



Note: based on US high grade non-financial non-utility issuers. 2Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Figure 44: Adjusted for FASB ASU 2016-02 Topic 842

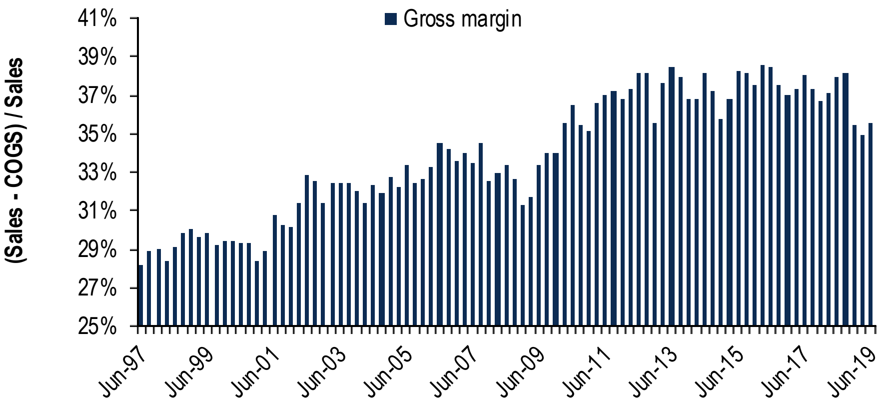


Note: based on US high grade non-financial non-utility issuers. 2Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Profitability

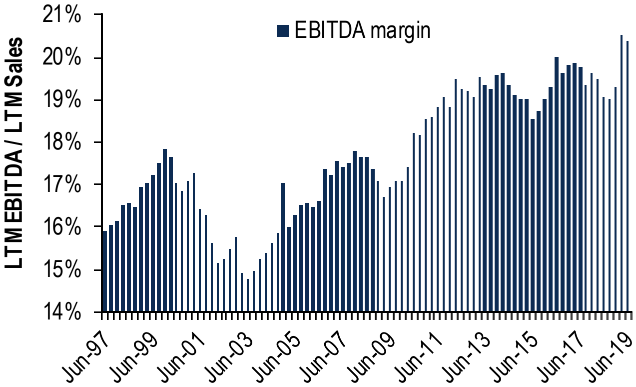
Median gross margin improved a bit to 35.5% in 2Q from 34.9% in 1Q. On the other hand median EBITDA margin was little changed at 20.4% in 2Q and 20.5% in 1Q. Adjusting for leases (lease expense is now added to EBITDA) EBITDA margin was 19.9% in 2Q and 18.98% in 1Q (Figure 45, Figure 46, Figure 47).

Figure 45: Median gross margin: non-financial non-utility US issuers



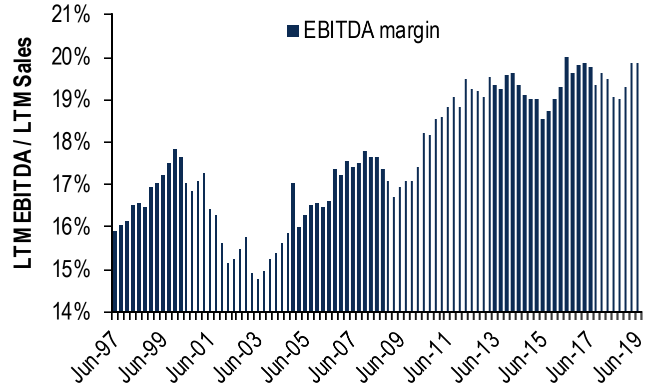
Note: based on US high grade non-financial non-utility issuers. 2Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Figure 46: Median EBITDA margin: non-financial non-utility US issuers



Note: based on US high grade non-financial non-utility issuers. 2Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Figure 47: Adjusted for FASB ASU 2016-02 Topic 842

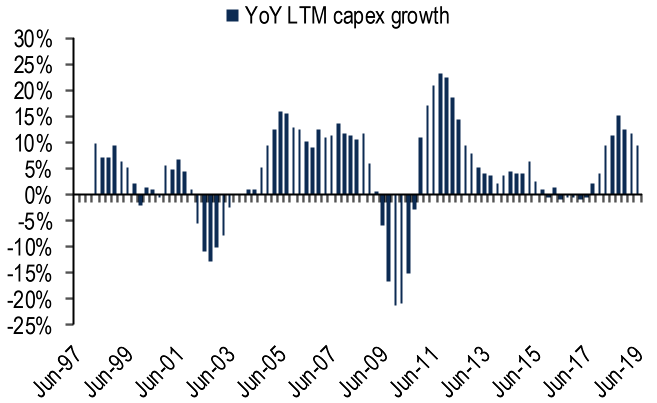


Note: based on US high grade non-financial non-utility issuers. 2Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Capital spending

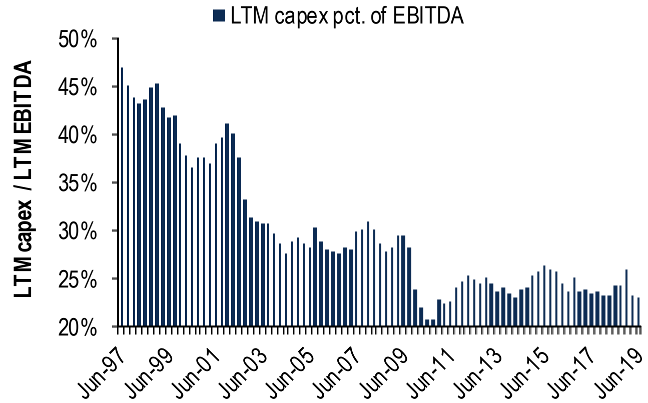
The median YoY growth in LTM capex spending growth decelerated to 9.4% in 2Q from 11.8% in 2Q. As a share of EBITDA LTM capex declined to 23.1% from 23.4% in 1Q (Figure 48, Figure 49).

Figure 48: Median YoY growth in LTM capex: non-financial non-utility US issuers



Note: based on US high grade non-financial non-utility issuers. 1Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Figure 49: Median LTM capex as percent of LTM EBITDA: non-financial non-utility US issuers

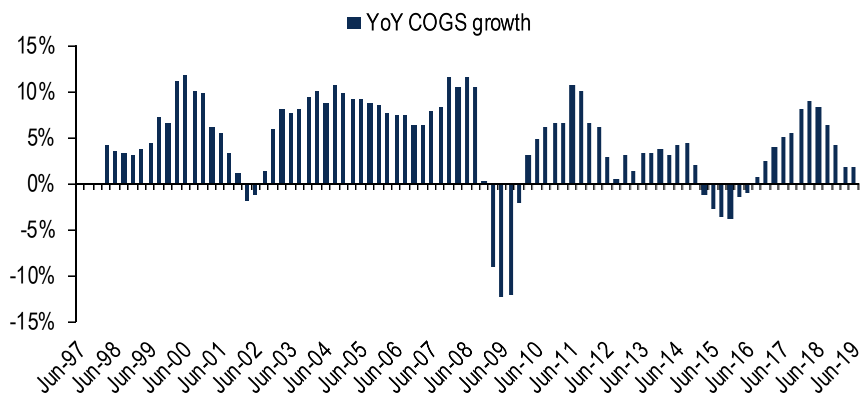


Note: based on US high grade non-financial non-utility issuers. 1Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Costs

The median YoY growth rate in cost of goods sold (COGS) was little changed at 1.9% in 2Q compared to 1.8% in 1Q (Figure 50).

Figure 50: Median YoY GOGS growth: non-financial non-utility US issuers



Note: based on US high grade non-financial non-utility issuers. 1Q -19 data is a preliminary estimate.
Source: BofA Merrill Lynch Global Research

Methodology

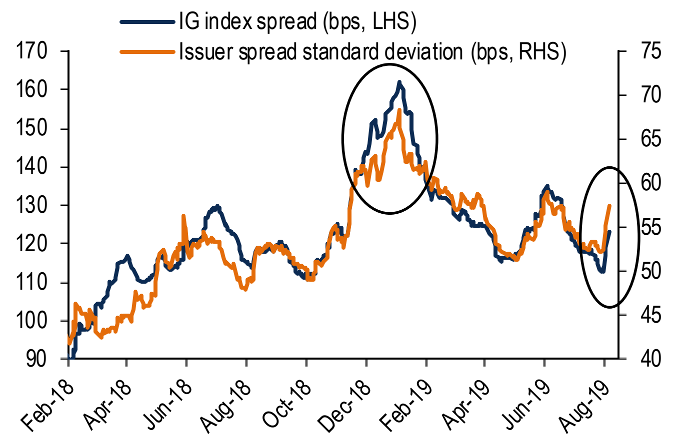
The estimates in this report are for US non-financial issuers in our benchmark USD corporate index C0A0 with balance sheet data available on Bloomberg. We exclude companies with large captive finance subsidiaries: BA, CAT, DE, F, GE, and GM. We further restrict the scope of the analysis in this report to issuers excluding Utilities, which tend to have higher leverage. For these US non-financial non-utility issuers actual results are currently available for 76% of the total 336 issuers. All of the market fundamentals are median values using GAAP measures, based on actual results when available and estimates otherwise (based on the median QoQ change for the companies with available data). We use a dynamic – as opposed to static - universe of companies in our analysis based on the constituents in ICE BofAML HG index (C0A0) at the end of each quarter.

Previously published here
Situation Room: It's different this time 06 August 2019

It's different this time

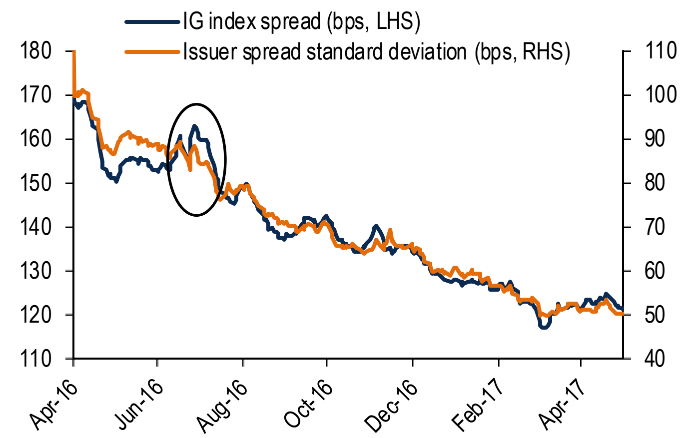
The 10bps of IG index spread widening since Thursday on the back of escalating trade tensions led to an outsized increase in issuer spread dispersion. This contrasts with the macro selloff back in December when issuer spread dispersion instead lagged the move wider in spreads (Figure 51). Although the current widening episode reminds us of the selloff following the Brexit vote in 2016 (see Situation Room: Trade vs. Brexit 05 August 2019), it is also different as the spread move post Brexit was notably more uniform (or was accompanied by a smaller increase in dispersion, Figure 52). More variation in spread reaction now is not surprising, as some issuers have more direct exposed to the trade war than others, such as Retail (see Retailing: Tariff risks to IG Retail 05 August 2019) and Tech. On the flip side others are not very affected by the trade war (Figure 53). As a result certain sectors and issuers are bearing the brunt of the widening in spreads more so now than in the past. Finally, the 2Q earnings reporting season has also likely contributed to more variation in spread performance recently.

Figure 51: A large spread dispersion increase since Thursday



Source: BofA Merrill Lynch Global Research

Figure 52: Small increase in spread dispersion since Brexit



Source: BofA Merrill Lynch Global Research

Figure 53: Sectors by spread widening since Thursday

Sector	Spread on Jul 31 (bps)	Spread on Aug 5 (bps)	Spread change (bps)	Spread change (%)
Technology	92	103	11	11.9%
Telecom	136	150	14	10.5%
Retail	93	102	9	9.7%
Industrial Products	103	112	10	9.3%
Media & Entertainment	130	142	12	9.0%
Banks/Brokers	96	104	9	9.0%
Transportation	119	130	11	8.8%
Basic Materials	153	166	13	8.6%
Insurance	125	136	10	8.4%
Market	**114**	**124**	**10**	**8.2%**
Health Care	102	110	8	8.2%
Food, Bev , & Bottling	109	117	9	8.1%
Tobacco	144	156	11	7.7%
Energy	157	169	12	7.6%
Aerospace/Defense	87	94	7	7.5%
Commercial Services	101	107	6	6.1%
Utilities	116	123	6	5.6%

Figure 53: Sectors by spread widening since Thursday

Sector	Spread on Jul 31 (bps)	Spread on Aug 5 (bps)	Spread change (bps)	Spread change (%)
Consumer Products	85	89	5	5.5%
Automobiles	121	128	7	5.5%
Finance	112	118	6	5.4%
REITs	110	114	4	3.3%

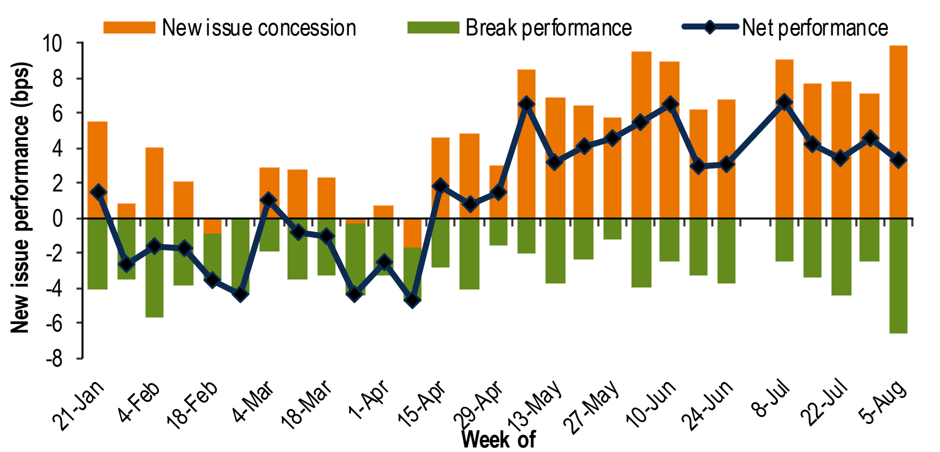
Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

Supply to remain heavy

US IG supply accelerated to $41.3bn this week from $25.1bn in the last week of July. Supporting volumes was a $13bn OXY M&A funding deal priced on Tuesday. The large amount of supply was particularly notable given the primary market was virtually shut down on Monday due to volatility. Hence we look for the elevated volumes to continue into next week as well, totaling $30-40bn. The second week of August is seasonally busy as almost all companies have reported 2Q results. In addition the lack of issuance opportunities on Monday and a large M&A deal on Tuesday of this week potentially pushed some deals into next week. Activity then should slow down sharply in the last two weeks of August due to summer holidays (Figure 55). Assuming $5bn of supply per week during each of the two last weeks of August implies issuance for the month of $87-97bn – similar to $92bn priced in August 2018.

The average new issue concession widened to 9.9bps this week from 7.1bps last week. Offsetting that new issue bonds tightened 6.6bps on the break, up from 2.5bps tighter last week. As a result, the overall new issue performance, which we measure as new issue concession plus break performance, actually improved a bit to 3.3bps this week from 4.6bps last week (Figure 54).

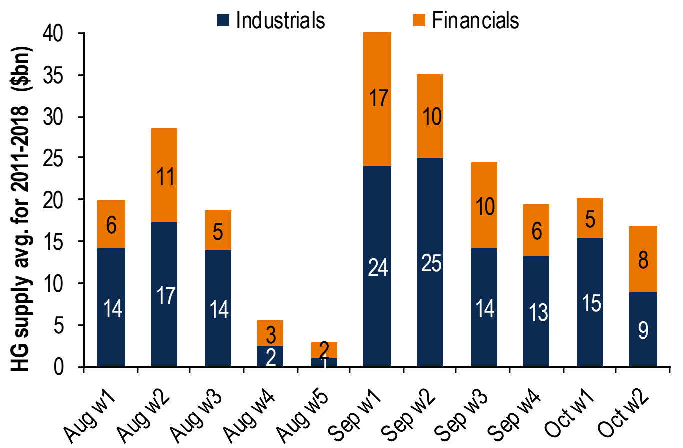
Figure 54: Weekly new issue supply performance



Source: BofA Merrill Lynch Global Research

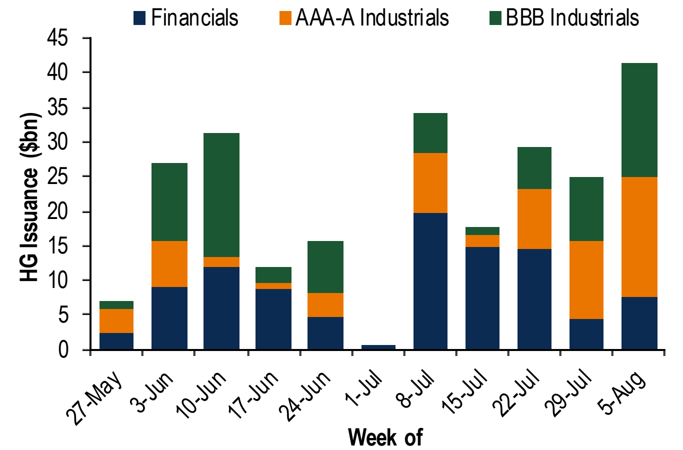
Figure 55: Weekly HG supply seasonality

Note: Sep W1 corresponds to the Labor Day week



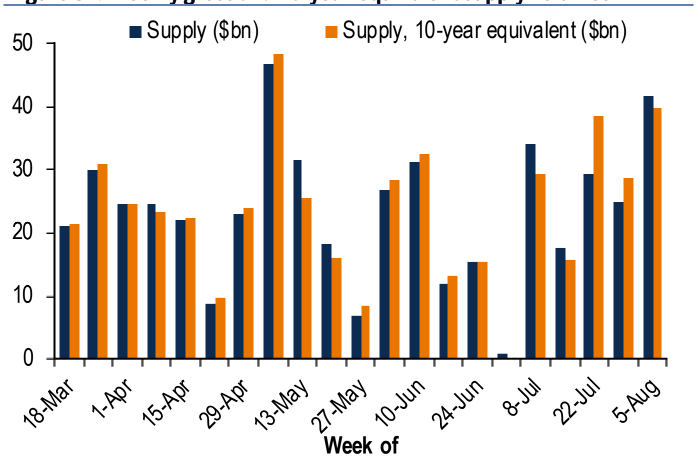
Source: BofA Merrill Lynch Global Research

Figure 56: Weekly high grade supply volumes



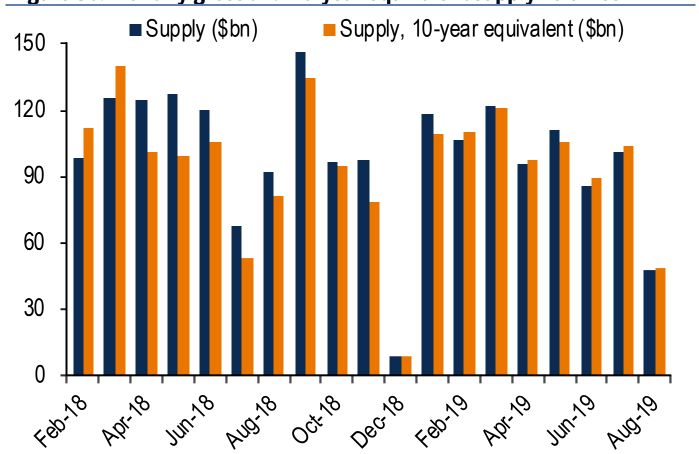
Source: BofA Merrill Lynch Global Research

Figure 57: Weekly gross and 10-year equivalent supply volumes



Source: BofA Merrill Lynch Global Research

Figure 58: Monthly gross and 10-year equivalent supply volumes



Source: BofA Merrill Lynch Global Research

Figure 59: Recent new issue pricing and new issue concessions

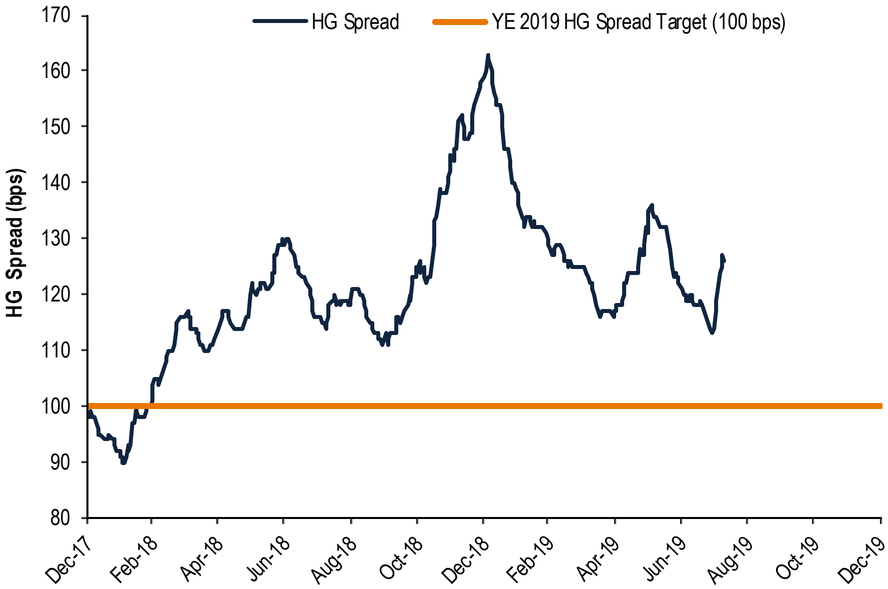
Date	Ticker	Name	Tenor	Size ($mm)	Moody's/S&P Rating	Coupon (%)	Px Spread (bps)	New Issue Conc. (bps)	* Break performance
2019-08-05	MAA	Mid-America Apartments LP	10	$250	Baa1/BBB+	3.95	125	10	n.a.
2019-08-05	NEE	NextEra Energy Capital Holdings Inc	2	$1,500	Baa1/BBB	2.403	70	n.a.	n.a.
2019-08-06	MSI	Motorola Solutions Inc	10	$150	Baa3/BBB-	4.6	215	n.a.	n.a.
2019-08-06	OXY	Occidental Petroleum Corp	18m	$500	Baa3/A	FRN	3mL+95	n.a.	n.a.
2019-08-06	OXY	Occidental Petroleum Corp	2	$500	Baa3/A	FRN	3mL+125	n.a.	n.a.
2019-08-06	OXY	Occidental Petroleum Corp	2	$1,500	Baa3/A	2.6	105	n.a.	-11
2019-08-06	OXY	Occidental Petroleum Corp	3	$1,500	Baa3/A	FRN	3mL+145	n.a.	n.a.
2019-08-06	OXY	Occidental Petroleum Corp	3	$2,000	Baa3/A	2.7	120	n.a.	-9
2019-08-06	OXY	Occidental Petroleum Corp	5	$3,000	Baa3/A	2.9	140	n.a.	-7
2019-08-06	OXY	Occidental Petroleum Corp	7	$1,000	Baa3/A	3.2	160	-0	-7
2019-08-06	OXY	Occidental Petroleum Corp	10	$1,500	Baa3/A	3.5	185	n.a.	-8
2019-08-06	OXY	Occidental Petroleum Corp	20	$750	Baa3/A	4.3	210	n.a.	-9
2019-08-06	OXY	Occidental Petroleum Corp	30	$750	Baa3/A	4.4	225	9	-9
2019-08-06	PPG	PPG Industries Inc	5	$300	A3/A-	2.4	90	n.a.	n.a.
2019-08-06	PPG	PPG Industries Inc	10	$300	A3/A-	2.8	110	16	n.a.
2019-08-06	UBS	UBS Group AG	11NC10	$1,500	NA/A-	3.126	140	n.a.	-6
2019-08-06	UDR	UDR Inc	12	$400	Baa1/BBB+	3	130	22	-5
2019-08-06	XEL	Public Service Co of Colorado	31	$550	A1/A	3.2	100	n.a.	n.a.
2019-08-07	AER	AerCap Ireland Capital DAC / AerCap Global Aviatio	5	$750	NA/BBB-	2.875	147	n.a.	n.a.
2019-08-07	BMW	BMW Finance NV	3	$500	A1/A+	FRN	3mL+79	n.a.	n.a.
2019-08-07	BMW	BMW Finance NV	3	$750	A1/A+	2.25	75	n.a.	n.a.
2019-08-07	BMW	BMW Finance NV	5	$500	A1/A+	2.4	90	n.a.	n.a.
2019-08-07	BMW	BMW Finance NV	10	$500	A1/A+	2.85	115	n.a.	n.a.
2019-08-07	CATMED	CommonSpirit Health	5	$770	NA/BBB+	2.76	127	n.a.	n.a.
2019-08-07	CATMED	CommonSpirit Health	10	$915	NA/BBB+	3.347	167	n.a.	n.a.
2019-08-07	CATMED	CommonSpirit Health	30	$930	NA/BBB+	4.187	200	n.a.	n.a.
2019-08-07	CATMED	CommonSpirit Health	30	$700	NA/BBB+	3.817	163	n.a.	n.a.
2019-08-07	GPN	Global Payments Inc	6	$1,000	Baa3/BBB-	2.65	115	n.a.	-6
2019-08-07	GPN	Global Payments Inc	10	$1,250	Baa3/BBB-	3.2	155	n.a.	-7
2019-08-07	GPN	Global Payments Inc	30	$750	Baa3/BBB-	4.15	195	n.a.	-10
2019-08-07	LLOYDS	Lloyds Bank PLC	3	$1,500	Aa3/A+	2.25	85	n.a.	n.a.
2019-08-07	MCD	McDonalds Corp	10	$1,000	Baa1/BBB+	2.625	100	16	-4
2019-08-07	MCD	McDonalds Corp	30	$1,000	Baa1/BBB+	3.625	150	23	-5
2019-08-07	NI	NiSource Inc	10	$750	Baa2/BBB+	2.95	130	n.a.	n.a.
2019-08-07	WEC	Wisconsin Public Service Corp	30	$300	A2/A-	3.3	112	8	-3
2019-08-08	CVS	CVS Health Corp	5	$1,000	Baa2/NA	2.625	120	7	-5
2019-08-08	CVS	CVS Health Corp	7	$750	Baa2/NA	3	140	6	-6
2019-08-08	CVS	CVS Health Corp	10	$1,750	Baa2/NA	3.25	165	11	-6
2019-08-08	DTE	DTE Energy Co	5	$675	Baa1/BBB-	1.5	100	n.a.	n.a.
2019-08-08	EPR	EPR Properties	10	$500	Baa2/BBB-	3.75	210	n.a.	n.a.
2019-08-08	HIG	Hartford Financial Services Group Inc/The	10	$600	Baa1/BBB+	2.8	112	n.a.	n.a.
2019-08-08	HIG	Hartford Financial Services Group Inc/The	30	$800	Baa1/BBB+	3.6	142	-4	n.a.
2019-08-08	HUM	Humana Inc	10	$500	Baa3/BBB+	3.125	140	7	-6
2019-08-08	HUM	Humana Inc	30	$500	Baa3/BBB+	3.95	170	10	-6
2019-08-08	MMP	Magellan Midstream Partners LP	31	$500	Baa1/BBB+	3.95	172	n.a.	n.a.
2019-08-08	PCAR	PACCAR Financial Corp	5	$300	A1/A+	2.15	67	n.a.	n.a.
2019-08-08	PEG	Public Service Electric & Gas Co	30	$400	Aa3/A	3.2	98	7	n.a.
2019-08-08	WELL	Welltower Inc	5	$450	Baa1/BBB+	3.625	117	n.a.	n.a.
2019-08-08	WELL	Welltower Inc	10	$750	Baa1/BBB+	3.1	140	n.a.	n.a.

* We define the break performance as the difference between the new issue spread and the initial secondary market spread on the first day of trading.

Source: BofA Merrill Lynch Global Research

Spread and supply forecasts

Figure 60: Spread targets for 2019



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

Sector views

Figure 61: BofAML High Grade Sector Views Summary

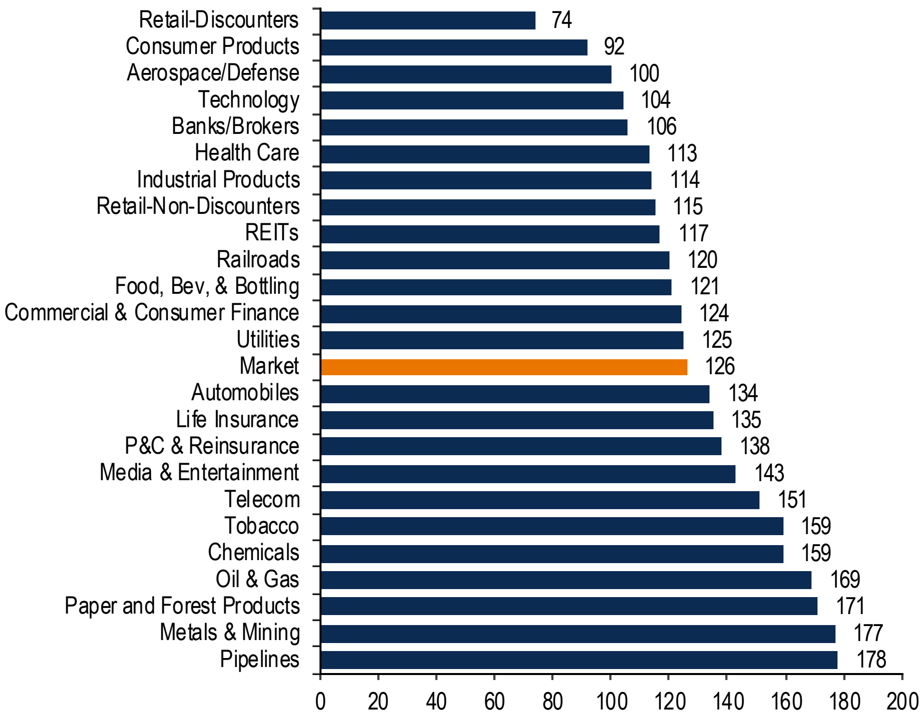
Overweight	View	Market weight	View	Underweight	View
Basic Materials	**Over**	**Food, Bev, & Bottling**	**Market**	**Aerospace & Defense**	**Under**
Chemicals	Over	**Healthcare**	**Market**	**Automobiles**	**Under**
Metals & Mining	Market	**REITS**	**Market**	**Banks/Brokers**	**Under**
Paper and Forest Products	Over	**Tobacco**	**Market**	**Consumer Products**	**Under**
Energy	**Over**	**Utilities**	**Market**	**Industrial Products**	**Under**
Oil & Gas	Market			**Retail**	**Under**
Pipelines	Over			Discounters	Under
Insurance	**Over**			Non-Discounters	Market
Life Insurance	Over			**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 62: High grade spreads by sector (bps)

Sector spreads for BofAML HG U.S. Corporate Master C0A0 as of August 1, 2019. Results include subordinated and hybrid securities



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

High grade sector historical performance

Table 1: High Grade Sector Performance as of August 08, 2019

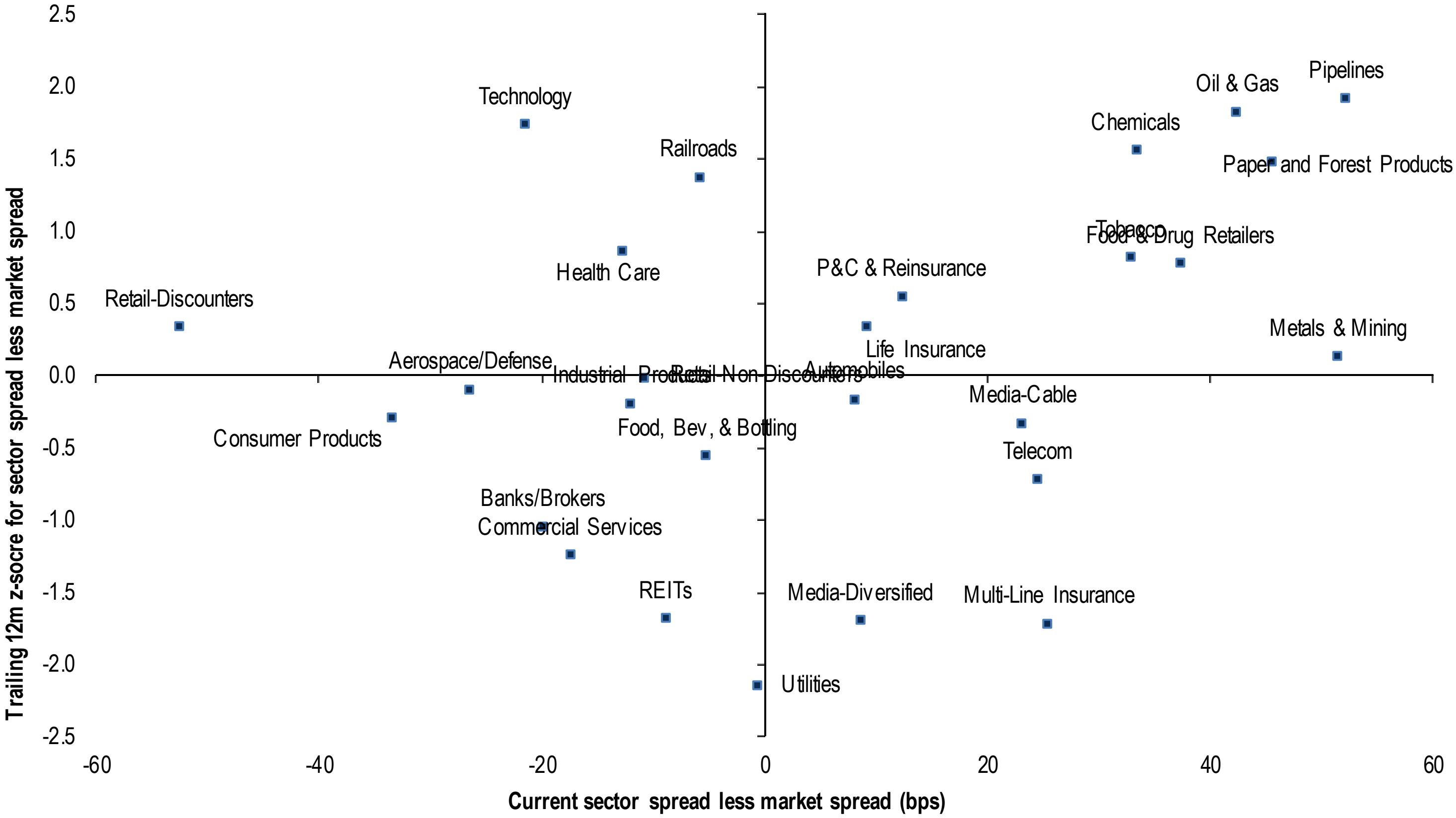
Sector spreads and performance for BofAML HG U.S. Corporate Master C0A0. Results include subordinated and hybrid securities

								Excess Return (bps)				Spread Change (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	100	8.4	2.78	109.4	107.8	1.66	-118	-57	334	63	13	5	-29	9	198
Automobiles	A3	134	4.3	2.99	103.3	175.2	2.54	-72	-13	314	25	13	2	-44	25	108
Banks/Brokers	A3	106	5.2	2.75	106.1	1,516.8	22.55	-64	-15	341	143	10	4	-41	3	134
Basic Materials	BBB2	167	7.6	3.43	109.3	302.0	4.64	-119	-32	365	48	14	4	-32	22	196
Building Materials	BBB2	172	8.2	3.49	105.7	20.8	0.31	-60	74	425	50	7	-6	-33	31	318
Chemicals	BBB2	159	7.3	3.34	106.9	134.7	2.02	-122	-61	326	-4	15	7	-29	29	158
Homebuilders	BBB1	91	4.5	2.53	106.7	3.1	0.05	-25	30	251	137	2	-8	-108	-57	157
Metals & Mining	BBB1	177	8.0	3.57	112.7	100.0	1.59	-133	-27	430	121	16	3	-40	9	217
Paper and Forest Products	BBB2	171	7.3	3.45	110.9	43.5	0.68	-111	-11	328	28	13	2	-21	33	210
Commercial Services	A3	109	9.6	2.90	111.2	74.8	1.17	-66	9	301	156	8	1	-29	-1	299
Consumer Products	A3	92	6.8	2.64	107.3	68.1	1.03	-57	23	195	77	7	-2	-18	4	225
Energy	BBB1	172	7.8	3.50	108.7	724.9	11.08	-131	-59	353	-45	15	6	-29	25	177
Oil & Gas	A3	169	7.6	3.44	108.3	465.4	7.08	-120	-46	337	-46	15	5	-28	25	183
Pipelines	BBB2	178	8.2	3.59	109.5	259.5	4.00	-151	-82	383	-43	16	9	-31	26	168
Finance	A3	122	5.9	2.91	107.2	146.0	2.20	-59	21	297	132	10	-1	-44	-1	192
Commercial & Consumer Finance	BBB1	124	4.1	2.86	104.6	69.0	1.01	-45	21	329	167	11	0	-43	10	133
Finance-Other Services	A2	120	7.5	2.95	109.4	77.0	1.18	-72	21	269	102	9	-2	-46	-10	244
Food, Bev, & Bottling	BBB1	121	8.3	3.00	108.4	275.1	4.18	-115	-16	478	84	12	3	-36	16	236
Health Care	A3	113	8.6	2.93	108.8	607.3	9.27	-103	-33	257	2	11	4	-19	16	226
Industrial Products	A3	114	7.0	2.88	106.7	189.2	2.83	-89	8	357	-54	11	0	-39	21	219
Insurance	A3	136	8.4	3.23	111.8	262.3	4.12	-105	-5	381	124	11	1	-28	9	250
Insurance-Other	BBB1	119	7.7	2.96	110.1	22.7	0.35	-84	44	354	95	8	-5	-39	-1	275
Life Insurance	A2	135	8.0	3.23	110.5	148.2	2.30	-108	-19	341	96	12	2	-30	6	223
Multi-Line Insurance	BBB1	151	8.4	3.34	111.4	24.7	0.39	-116	12	643	134	12	0	-50	3	270
P&C & Reinsurance	A3	138	9.3	3.26	115.3	66.8	1.08	-100	4	375	186	10	0	-11	19	291
Leisure	BBB2	139	4.5	3.01	106.7	25.2	0.38	-68	58	457	193	11	-11	-68	30	184
Media & Entertainment	BBB1	143	9.2	3.25	112.3	205.3	3.24	-127	-50	448	190	13	7	-35	-4	232
Media-Cable	BBB1	149	9.8	3.33	112.4	127.6	2.02	-140	-69	489	219	13	10	-32	-9	233
Media-Diversified	BBB1	135	8.3	3.14	112.4	75.1	1.19	-108	-21	402	153	13	4	-40	-2	233
Media-Publishing	BBB1	94	4.9	2.53	105.1	2.6	0.04	-46	34	236	165	10	-4	-23	8	172
Real Estate Dev & Mgt	A3	136	6.4	3.04	109.6	7.0	0.11	-31	36	294	162	6	-4	-37	0	223
REITs	BBB1	117	6.1	2.84	106.1	156.0	2.32	-53	29	315	185	7	-2	-39	-4	206
Retail	A3	105	8.7	2.85	109.4	212.1	3.25	-119	-45	331	19	12	5	-36	3	220
Food & Drug Retailers	BBB2	163	7.5	3.40	106.4	27.0	0.40	-118	-34	417	88	13	3	-15	34	193
Retail-Discounters	A1	74	8.9	2.53	111.9	80.7	1.27	-110	-53	293	74	12	8	-22	7	218
Retail-Non-Discounters	BBB1	115	8.8	2.96	108.2	104.4	1.58	-126	-40	310	-65	12	3	-30	8	229
Technology	A2	104	7.6	2.79	107.2	492.8	7.41	-112	-46	276	9	12	5	-22	20	181
Telecom	BBB1	151	9.5	3.33	112.4	272.0	4.31	-145	-55	581	312	15	7	-39	-3	238
Tobacco	BBB1	159	7.9	3.36	105.3	72.6	1.08	-134	-16	513	-166	15	6	-38	48	222
Transportation	BBB1	133	9.9	3.18	109.4	156.2	2.40	-161	-95	271	-29	14	8	-19	15	206
Railroads	A3	120	11.5	3.11	112.4	85.7	1.35	-168	-129	252	-59	13	10	-13	15	226
Transportation-Other	BBB1	150	7.7	3.26	105.8	70.5	1.05	-153	-52	294	7	16	5	-26	16	181
Utilities	A3	125	9.8	3.11	112.2	525.2	8.26	-92	47	311	-9	9	-3	-34	4	348
Market	A3	126	7.5	3.02	108.4	6,574.1	100.00	-99	-22	346	67	12	4	-33	11	202

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

Sector performance and relative value

Figure 63: Trailing 12 month spread Z-score vs. current sector spread differential to the market



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

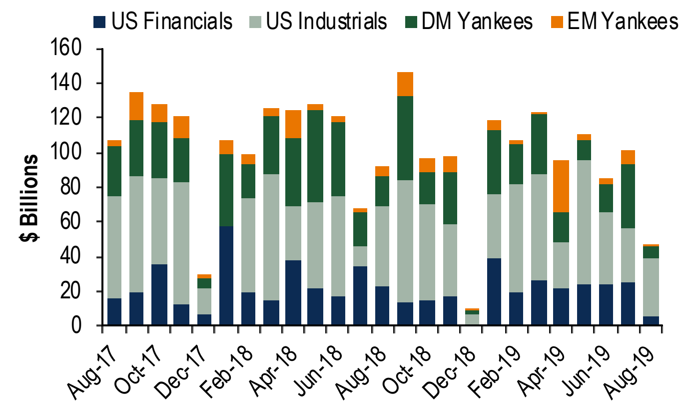
Supply statistics

Figure 64: High grade supply summary, $bn

Sector	WTD	MTD	QTD	YTD
US Financials	3.8	4.9	29.8	182.1
US Industrials	31.5	34.2	65.2	364.4
European Financials	3.8	4.1	7.4	67.2
European Industrials	2.3	2.3	10.3	52.2
EM Yankees	0.0	2.0	9.7	55.8
Non-Euro Non-EM Yankees	0.0	0.0	26.1	65.6
Total	**41.3**	**47.4**	**148.5**	**787.3**

Source: BofA Merrill Lynch Global Research

Figure 65: HG monthly issuance, $bn



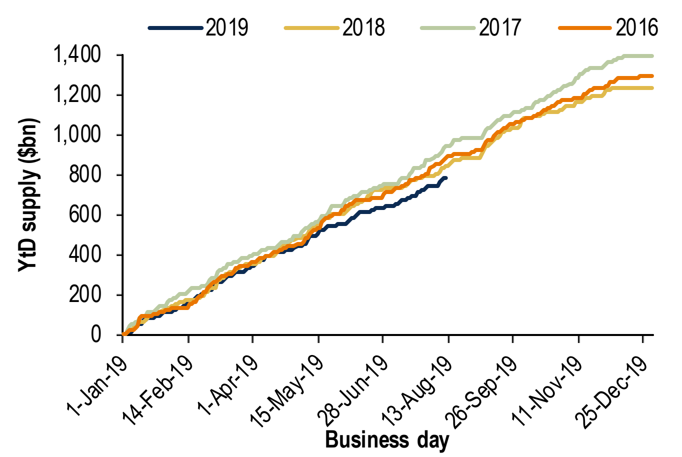
Source: BofA Merrill Lynch Global Research

Figure 66: Cumulative High grade supply YTD, $bn

Sector	YTD 2016	YTD 2017	YTD 2018	YTD 2019
Financials	349.4	414.3	387.7	312.9
AAA-A Industrials	277.2	222.8	161.9	221.1
BBB Industrials	249.0	302.7	293.4	253.2
Total	**875.6**	**939.8**	**843.0**	**787.3**
%-change		**7%**	**-10%**	**-7%**
US	566.9	627.1	537.4	546.5
Europe	161.0	156.3	175.0	119.4
EM	53.8	54.1	48.5	55.8
Other DM	93.9	102.4	82.0	65.6

Source: BofA Merrill Lynch Global Research

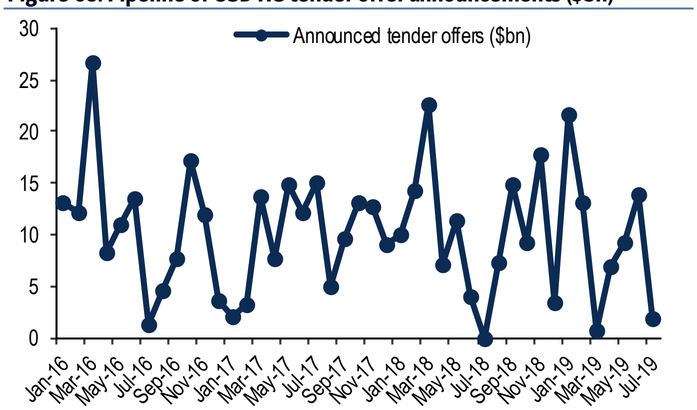
Figure 67: Cumulative High grade supply, $bn



Source: BofA Merrill Lynch Global Research

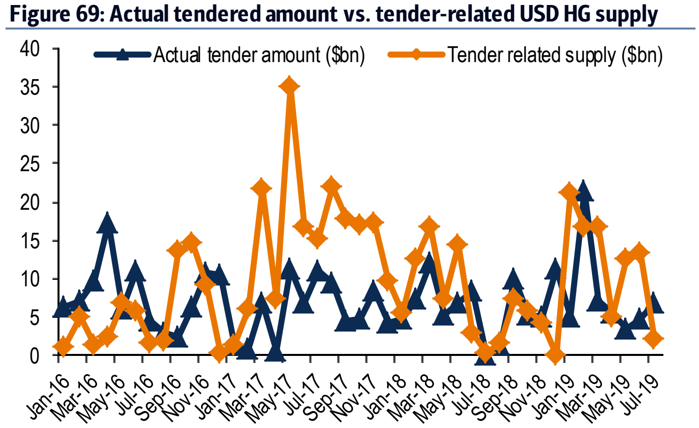
Announced vs actual tenders & related supply

Figure 68: Pipeline of USD HG tender offer announcements ($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

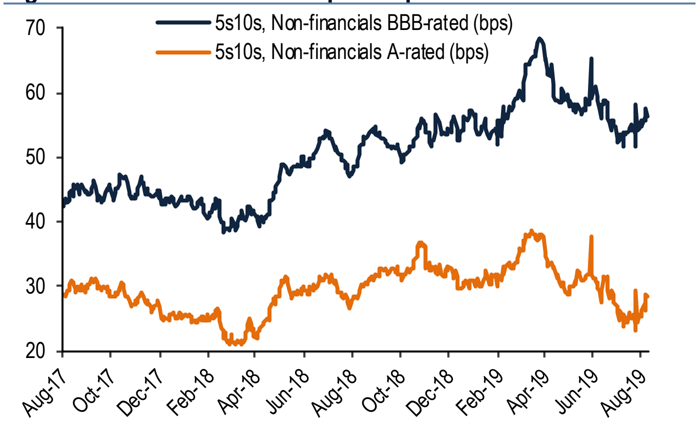
Figure 69: Actual tendered amount vs. tender-related USD HG supply



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" in its use of proceeds language.
Source: BofA Merrill Lynch Global Research, Bloomberg, company reports

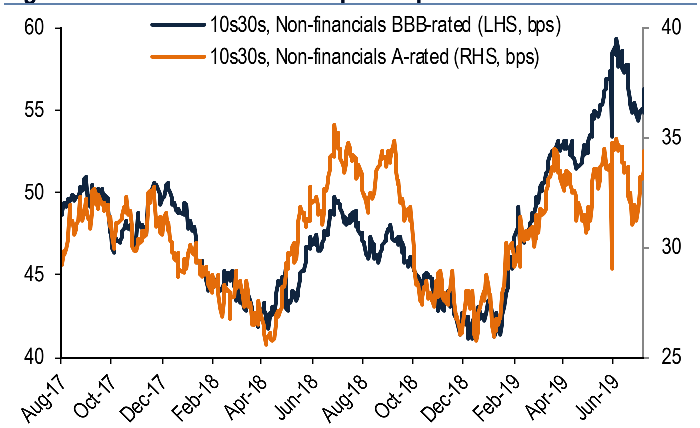
Corporate spread curves

Figure 70: 5s10s non-financial corporate spread curves



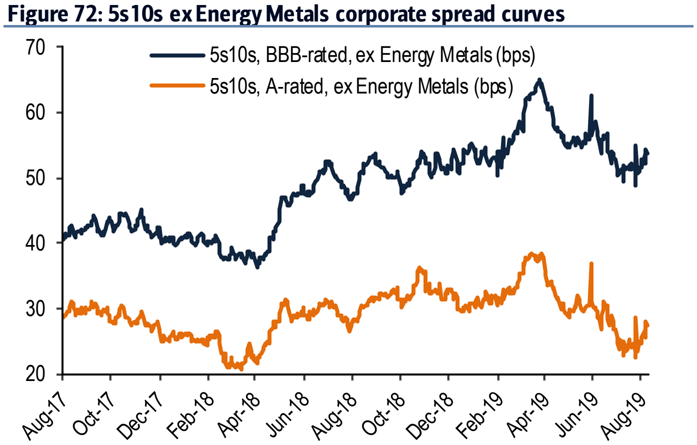
Note: the curve is computed for individual issuers first, and then aggregated to create the average.
Source: BofA Merrill Lynch Global Research

Figure 71: 10s30s non-financial corporate spread curves



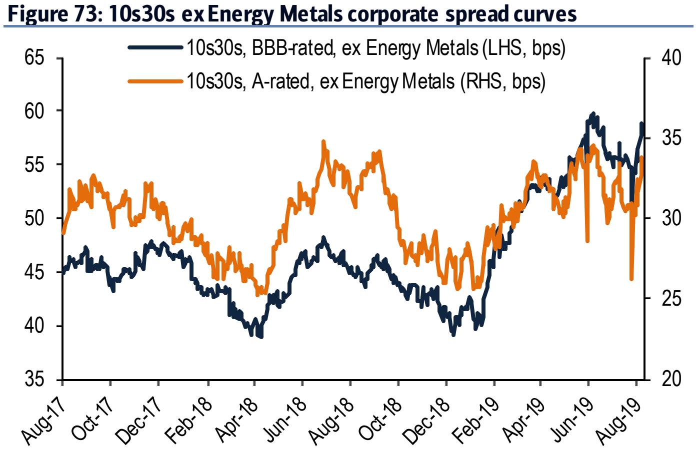
Note: the curve is computed for individual issuers first, and then aggregated to create the average.
Source: BofA Merrill Lynch Global Research

Figure 72: 5s10s ex Energy Metals corporate spread curves



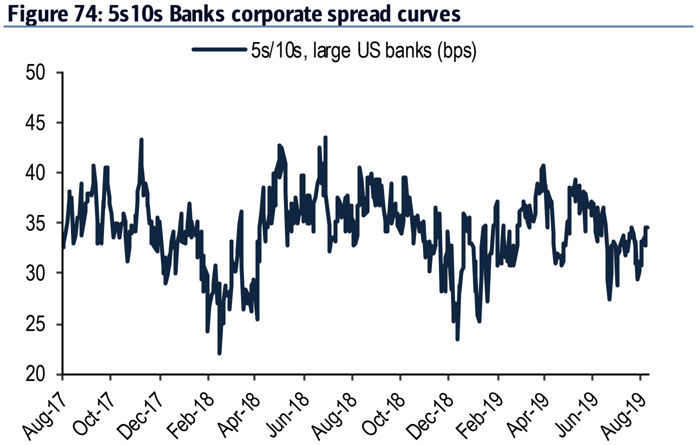
Note: the spread curve calculation is restricted to issuers that have bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual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

Figure 73: 10s30s ex Energy Metals corporate spread curves



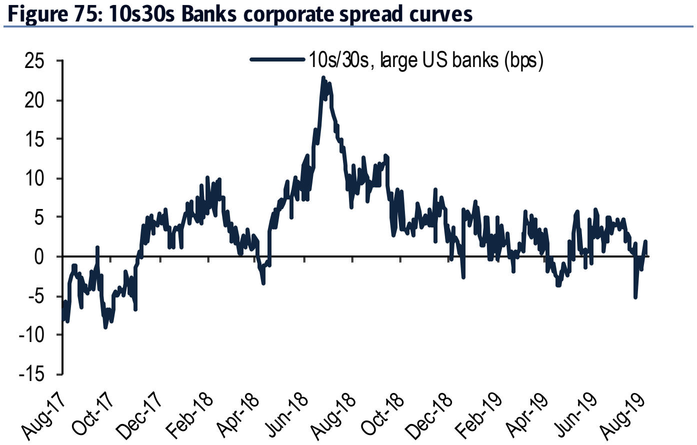
Note: the spread curve calculation is restricted to issuers that have bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual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

Figure 74: 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

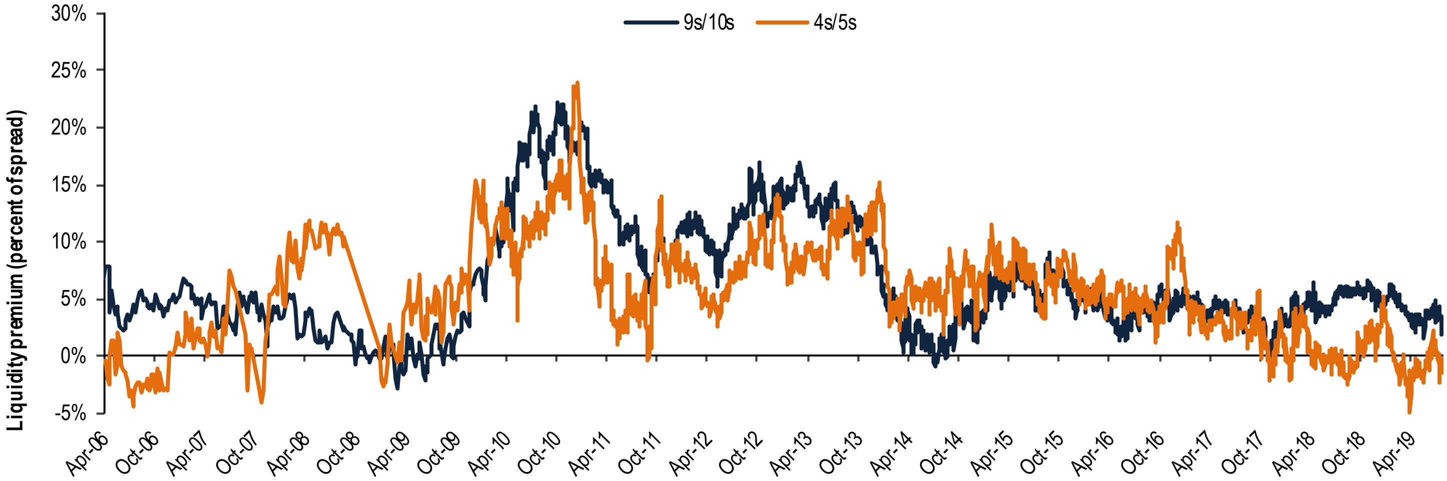
Figure 75: 10s30s Banks corporate spread curves



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 76: Liquidity premium in high grade spreads

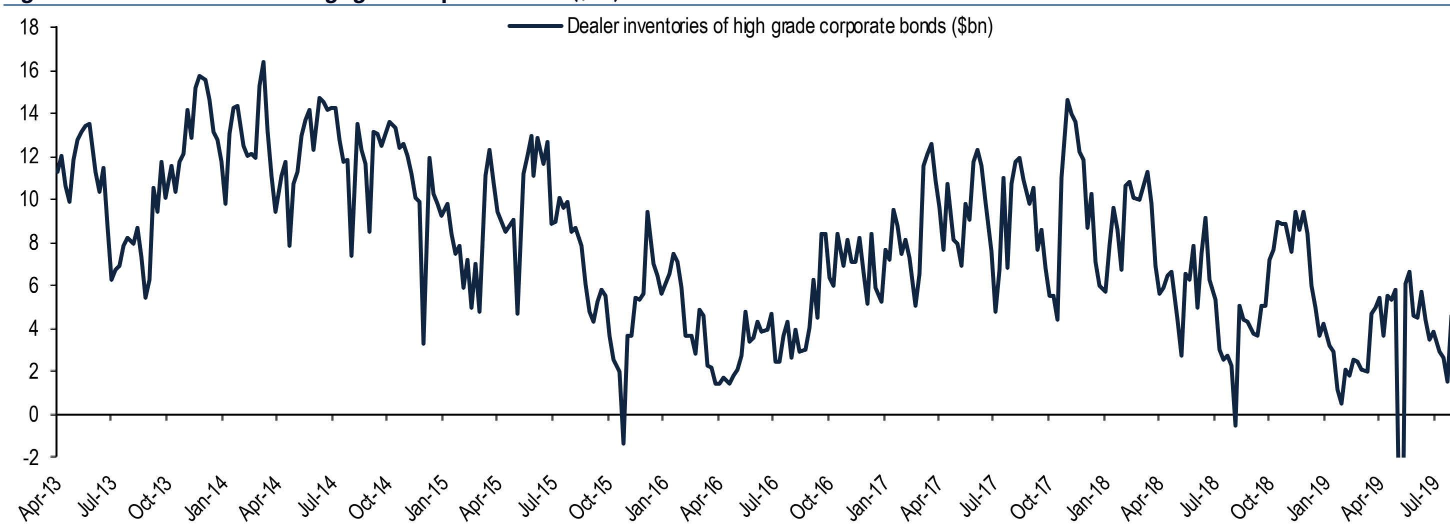


Note: our liquidity premium is the spread difference between old bonds that have rolled down to the 9, 8, 7, 6 and 4-year tenors and on-the-run 10-year and 5-year (for the 4-year tenor) bonds, adjusted for the credit curve.

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

Dealer inventories

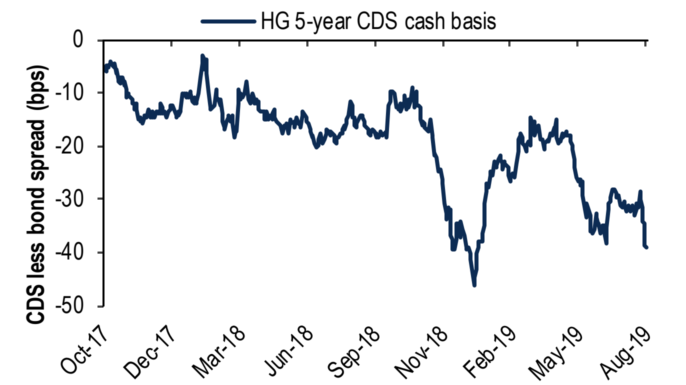
Figure 77: Dealer inventories of high grade corporate bonds ($bn)



Source: BofA Merrill Lynch Global Research, Federal Reserve Bank

CDS cash basis

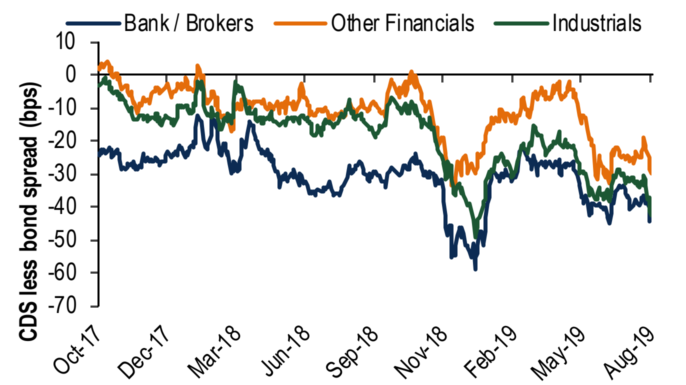
Figure 78: 5-year CDS cash basis



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 79: 5-year CDS cash basis by broad sector

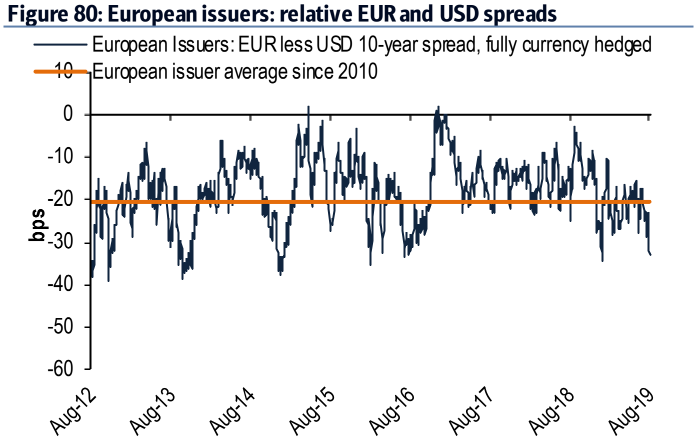


Note: CDS-Cash and based on spreads of the following 30 issuers: AIG, AMGN, AXP, BAC, BRK, C, CAT, CMCSA, COF, CVS, DE, DIS, F, GE, GS, HD, HPQ, IBM, JPM, MET, MO, MS, PFE, PRU, SPG, T, VZ, WFC, WMT, VIA

Source: BofA Merrill Lynch Global Research

USD EUR relative value

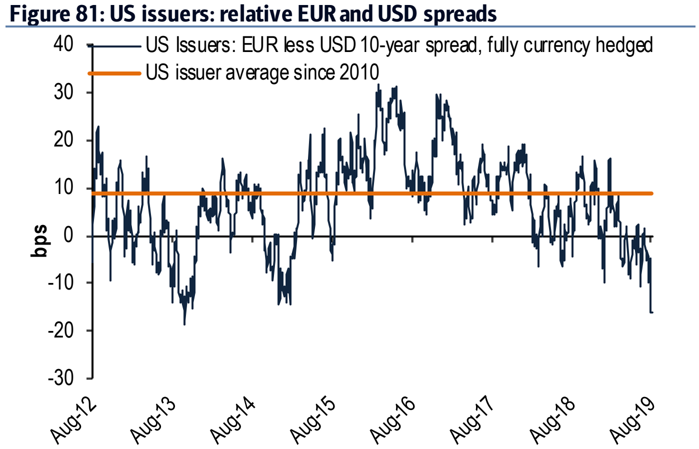
Figure 80: European issuers: relative EUR and USD spreads



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

Figure 81: US issuers: relative EUR and USD spreads

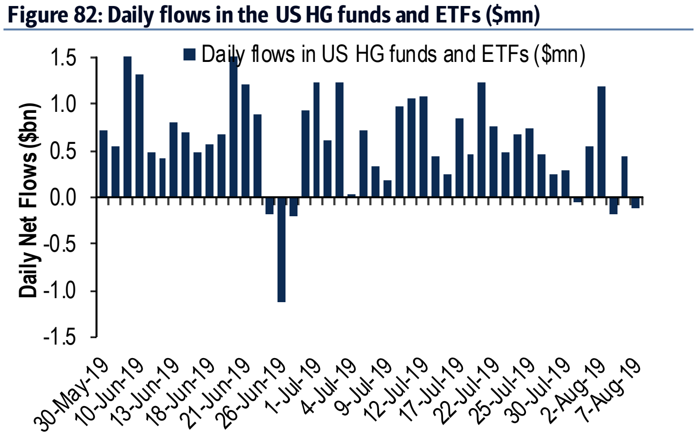


Note: the chart plots issuer-matched spreads on a fully currency hedged basis. We use maturity-matched cross currency basis swaps to fully currency hedge principal and interest rate payments, and forward FX rates to fully hedge the stream of spread payments. We also adjust for the difference in quoting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

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

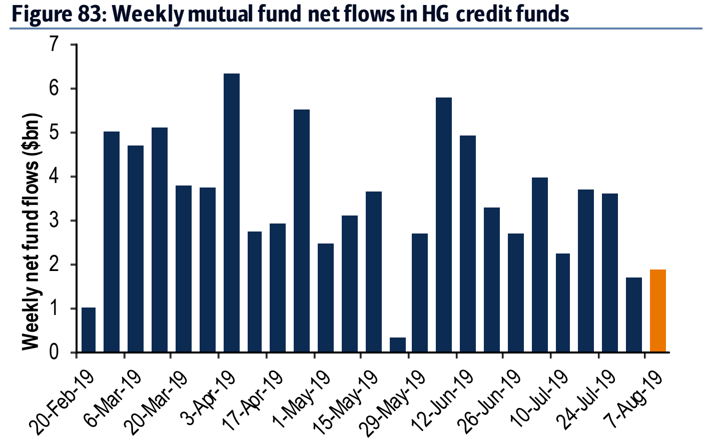
Mutu/al fund flows

Figure 82: Daily flows in the US HG funds and ETFs ($mn)



Source: BofA Merrill Lynch Global Research, EPFR Global

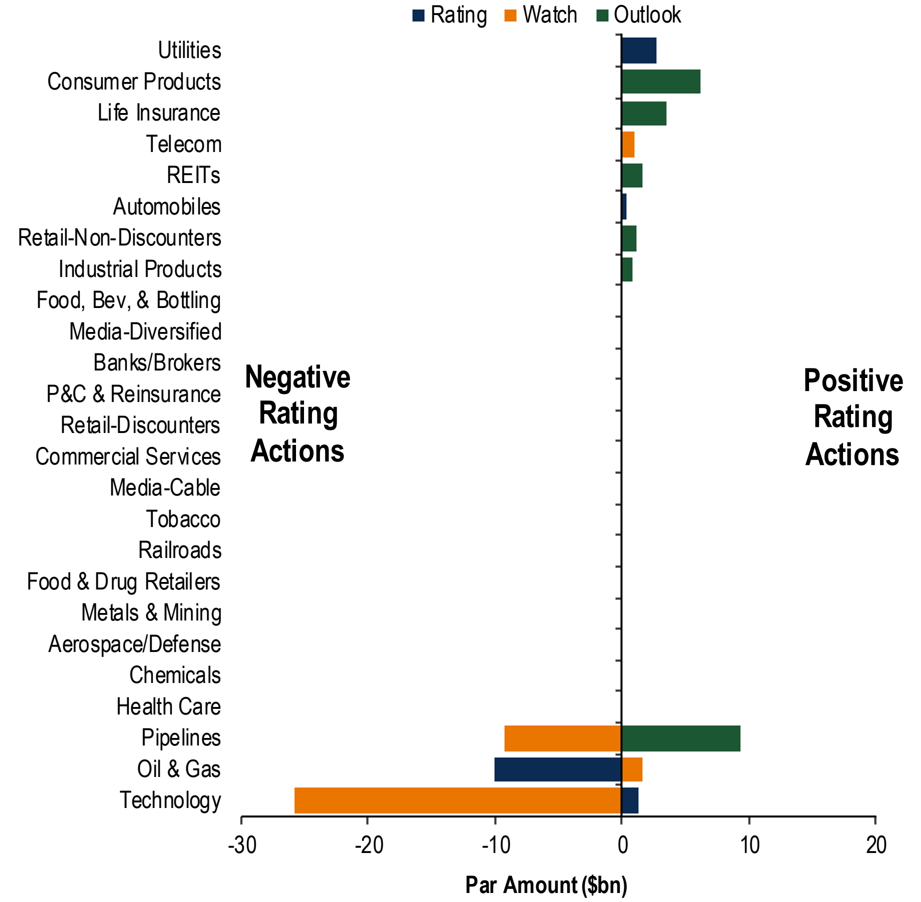
Figure 83: Weekly mutual fund net flows in HG credit funds



Source: BofA Merrill Lynch Global Research, EPFR.

Rating actions summary

Figure 84: Weekly rating actions by sector, notional value in HG Master index

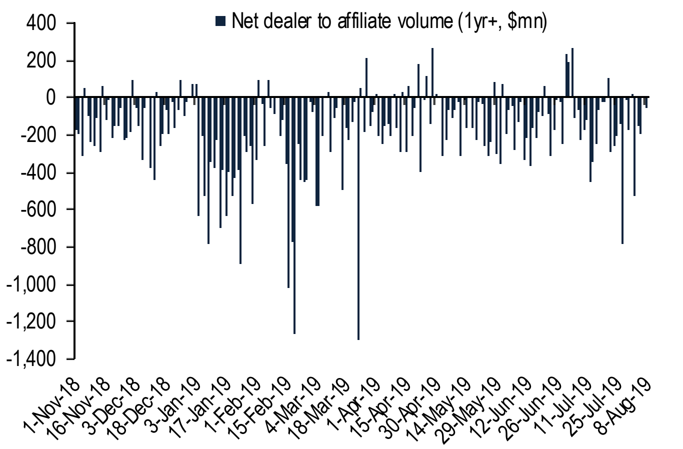


Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

Daily foreign demand tracker

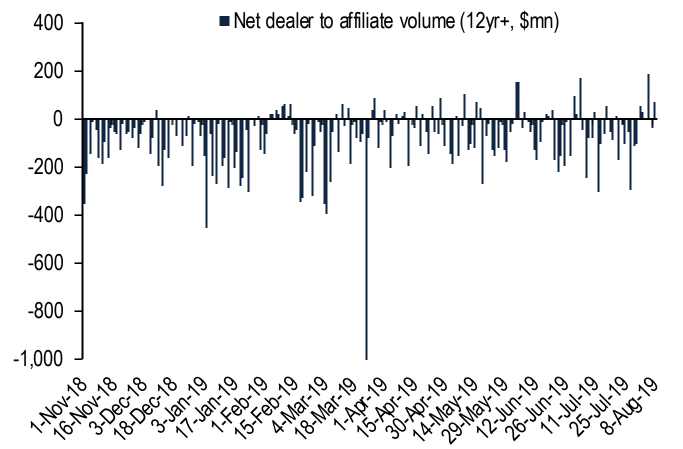
We believe net dealer-to-affiliate volumes from Trace are correlated with foreign buying of US HG corporate bonds - i.e., negative numbers mean foreign investor buying (US dealers taking down inventory in favor of foreign affiliates). For supporting material see our "primer" on tracking foreign inflows (See: [Credit Market Strategist: One year round-trip in spreads 15 July 2016]). Figure 85 shows the overall daily dealer-to-affiliate volumes while Figure 86, Figure 87 and Figure 88 show subsets of this data. In particular Figure 86 shows net dealer-to-affiliate volumes for longer maturity (12+ years) bonds, Figure 87 displays volumes reported to Trace before 8am NY time (biased toward Asian buying) and Figure 88 shows the subset of net trades reported between 8am and noon (biased toward European buying). Figure 85 and Figure 86 include data from today, whereas Figure 87 and Figure 88 run through the previous business day.

Figure 85: Net dealer buying from affiliate (1yr+)



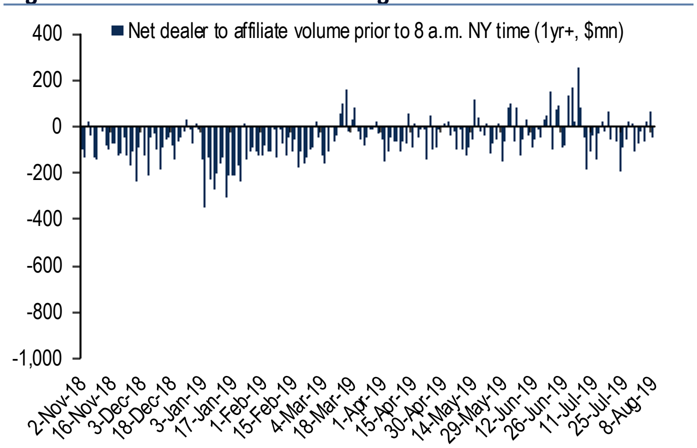
Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.
Source: Bloomberg, TRACE

Figure 86: Net dealer buying from affiliate (12yr+)



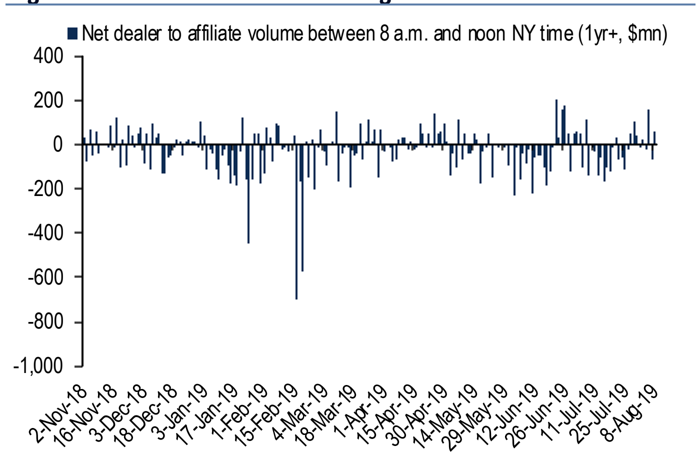
Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.
Source: Bloomberg, TRACE

Figure 87: 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 88: 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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