

- **Quality credit strategy.** Higher earnings growth due tax reform and fiscal stimulus, coupled with reduced reliance on debt, translate into declining corporate leverage as seen in our preliminary 2Q18 fundamentals data. At the same time, the most direct impact of the Fed's move to QT is selling pressure for higher quality debt which, although mainly in Treasuries and MBS, adds widening pressures for higher quality corporate bonds due to the presence of cross-over buyers.
- That means compression along the quality curve. Hence, this year BBBs and BBs have outperformed their A-rated counterparts meaningfully on a risk adjusted basis. This despite much investor concern about the growing size of the BBB-rated segment in our market and associated heightened Fallen Angel risk. We continue to think that discussion is premature and overblown. The next year or two, we expect continued declining corporate leverage and compression along the quality curve.
- **2Q18 preliminary HG fundamentals: lower leverage.** Both net and gross leverage declined relative to the prior quarter while coverage increased.
- **Quality curve compression.** Non-financial BBB and BB rated corporate spreads have outperformed single-As on a beta-adjusted basis so far this year.
- **Banking on a sustained expansion.** The Federal Reserve's Senior Loan Officer Survey (SLOS) estimated that a net 15.9% of banks are actually loosening lending standards for C&I loans to large firms = downgrade cycle is far away.
- **Supply concerns on, supply concerns off.** Recent strong demand is attracting a lot of supply. With resulting sizable dealer inventory build this week, and creating the expectation of a strong calendar next week, it was not surprising that credit spreads widened this week (see: [Situation Room 07 August 2018](#)). However, Turkey aside, we think spreads will stabilize when UTX price next week, then remain relatively flat – although with a slight tightening bias – until September, which will be the big test of the market, where we expect spreads to resume their tightening pace.
- **Concerned about Italy more than Turkey.** The weakness in Turkish markets intensified today, with the Turkish lira falling 13% against the dollar and sovereign 5Y CDS widening 65bps. Our main concern is broader EM contagion, rather than Turkey in isolation. Still it feels like these risks pale next to the Italian sovereign risks. The direct impact on the US corporate markets from Turkey is limited.
- **The return of foreign investors, redux.** Our favorite measure for tracking foreign buying of US high grade corporate bonds YtD is now 3% above last year's pace, a remarkable comeback from the end of 1Q where it was 60% below.
- **Fund flows: Stronger flows.** HG mutual funds/ETFs report \$2.41bn in inflows.
- **Supply: Storm before the calm.** High grade supply totaled \$38.3bn this week, increasing from \$15.0bn last week. We expect \$25-30bn in supply next week.

BofA Merrill Lynch is currently acting as Financial Advisor and Corporate Broker to Comcast Corp in connection with its proposed offer for Sky Plc, which was announced on 25th April 2018, following a possible offer that was announced on 27th February 2018. Sky Plc separately received an independent offer from Twenty-First Century Fox Inc. on 15th December 2016. This transaction is subject to the UK Takeover Code.

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Refer to important disclosures on page 35 to 36.

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## BofA Analytics

— DATA DRIVEN —

Credit Strategy  
United States

### High Grade Strategy

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### Recent credit strategy research

Publication	Name
Situation Room	<a href="#">The return of foreign investors, redux</a>
Situation Room	<a href="#">Tailless dog days of summer</a>
Situation Room	<a href="#">Inverse Sav's law for bonds</a>
Situation Room	<a href="#">Banking on a sustained expansion</a>
Monthly HG Market Review	<a href="#">Jul '18: Excess demand + Macro</a>
Credit Market Strategist	<a href="#">Jul '18 Credit Investor Survey: Outflows</a>
Credit Market Strategist	<a href="#">Summer 2017 snapshot of the HG market</a>

### 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  
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Rating actions summary  
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### Quality credit strategy..... Page 3

Higher earnings growth due tax reform and fiscal stimulus, coupled with reduced reliance on debt, translate into declining corporate leverage as seen in our preliminary 2Q18 fundamentals data (see below). At the same time the most direct impact of the Fed's move to quantitative tightening (QT) is selling pressure for higher quality debt which, although mainly in Treasuries and MBS, adds widening pressures for higher quality corporate bonds due to the presence of cross-over buyers.

### 2Q18 preliminary HG fundamentals: lower leverage..... Page 3

Fundamentals improved in 2Q for US non-financial high grade issuers, based on preliminary estimates. Both net and gross leverage declined relative to the prior quarter while the coverage ratio increased. This was a result of continued strong earnings growth while the pace of borrowing slowed down in the second quarter.

### Quality curve compression..... Page 7

Non-financial BBB corporate spreads (DM ex. Energy, Metals) have outperformed single-A spreads on a beta-adjusted basis so far this year. Notably, this was despite supply volumes that were higher for BBB bonds and lower for high quality bonds relative to last year. While high yield compressed to high grade this year, BBB spreads have performed in line with spreads for double-B rated issuers.

### Banking on a sustained expansion..... Page 9

Amidst extensive discussion of the implications of a flat/inverted yield curve, the Federal Reserve's Senior Loan Officer Survey (SLOS) today estimated that a net 15.9% of banks are actually loosening lending standards for C&I loans to large firms.

### Details from the July senior loan officer survey..... Page 11

The Fed's July senior loan officer survey showed stronger demand for C&I loans across large, medium and small firms, as well as auto loans. On the other hand, demand weakened for CRE, mortgage, and credit card loans. In terms of lending standard, banks reported easing standards for C&I, mortgage, and auto loans, while tightening standards for CRE and credit card loans.

### Concerned about Italy more than Turkey..... Page 12

The weakness in Turkish financial markets intensified today, with the Turkish lira falling 13% against the dollar and sovereign 5Y CDS widening 65bps. The selloff is driven by Turkey specific issues, as well as the broader EM story this year.

### July stripped Treasury volumes..... Page 15

Stripped Treasury bond volumes increased by \$1.58bn in July – down from \$3.41bn in June – to \$288.83bn currently outstanding.

### Stronger flows..... Page 15

Inflows to US funds and ETFs increased this past week for most fixed income asset classes as well as for equities. Flows for stocks turned positive with a \$4.65bn inflow after a \$2.29bn outflow in the prior week. Inflows to fixed income rose to \$4.43bn from \$2.36bn, with flows weakening only for leveraged loans, high grade outside of short-term and global EM bonds.

## High Grade ..... 20

### Supply concerns on, supply concerns off..... Page 20

Say's law in economics posits that supply creates its own demand. The high grade corporate bond market this week clearly saw the opposite - that recent strong demand is attracting a lot of supply.

### The return of foreign investors, redux..... Page 21

Our favorite measure for tracking foreign buying of US high grade corporate bonds YTD is now 3% above last year's pace, a remarkable comeback from the end of 1Q where it was 60% below.

### Storm before the calm..... Page 22

Issuance volume reached \$38.4bn across 36 deals – up significantly from \$15.0bn across 15 deals last week. Given an uptick in M&A and liability management-driven activities, we look for \$25-\$30bn of supply next week.

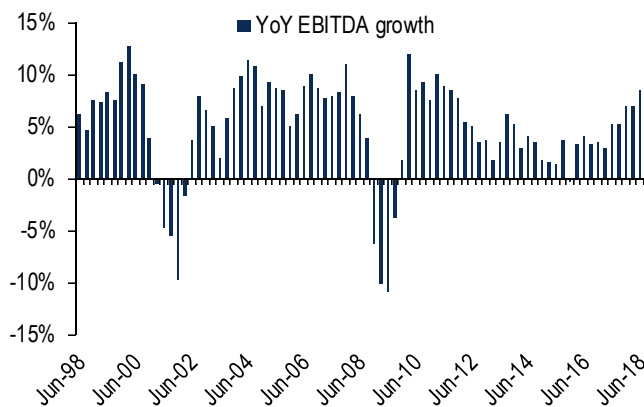
# Macro

## Quality credit strategy

Higher earnings growth due to tax reform and fiscal stimulus (Figure 1), coupled with reduced reliance on debt (Figure 2), translate into declining corporate leverage as seen in our preliminary 2Q18 fundamentals data (see below). At the same time, the most direct impact of the Fed's move to quantitative tightening (QT) is selling pressure for higher quality debt which, although mainly in Treasuries and MBS, adds widening pressures for higher quality corporate bonds due to the presence of cross-over buyers.

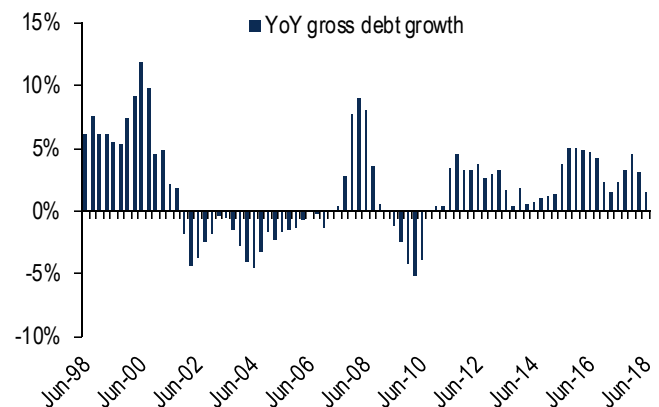
We have discussed these predictions frequently and they translate into compression along the quality curve. Hence, this year BBBs and BBs have outperformed their A-rated and above counterparts meaningfully on a risk adjusted basis (See below). This despite much investor concern about the growing size of the BBB-rated segment in our market and associated heightened Fallen Angel risk. We continue to think that discussion is premature and overblown. The next year or two we expect continued declining corporate leverage and compression along the quality curve – even though we expect wider credit spreads starting next year due to the dominating impact of less foreign monetary policy support.

**Figure 1: YoY EBITDA growth for US HG non-financial issuers ex. Energy, Metals, Utilities**



Source: BofA Merrill Lynch Global Research

**Figure 2: YoY gross debt growth for US HG non-financial issuers ex. Energy, Metals, Utilities**



Source: BofA Merrill Lynch Global Research

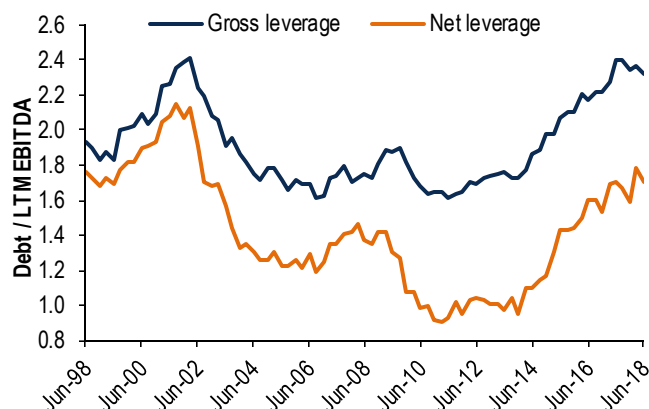
## 2Q18 preliminary HG fundamentals: lower leverage

Fundamentals improved in 2Q for US non-financial high grade issuers, based on preliminary estimates. Both net and gross leverage declined relative to the prior quarter while the coverage ratio increased. This was a result of continued strong earnings growth while the pace of borrowing slowed down in the second quarter. Spending on share buybacks remained high in 2Q as companies are putting to work cash repatriated as a part of the US tax reform. Capex was also elevated on the back of the tax reform as well as the faster economic growth. Earnings growth combined with higher after-tax debt costs due to corporate tax cuts means leverage should stabilize or improve, particularly for lower quality domestic high grade issuers (see [Situation Room: Call 1-900-delever](#)).

Our preliminary estimates show gross leverage declined to 2.32x in 2Q from 2.37x in 1Q (median value for US non-financial issuers excluding Energy, Metals and Utilities). Net leverage also declined to 1.70x in 2Q from 1.79x in 1Q (Figure 3). Coverage improved to 11.12 from 10.81 in 1Q and the recent lows of 10.59 in 3Q-17 (Figure 4). Both revenue and EBITDA growth accelerated in 2Q (Figure 5, Figure 6). On the other hand gross debt growth rate declined to the lowest level in over a year (Figure 7), while net debt grew at

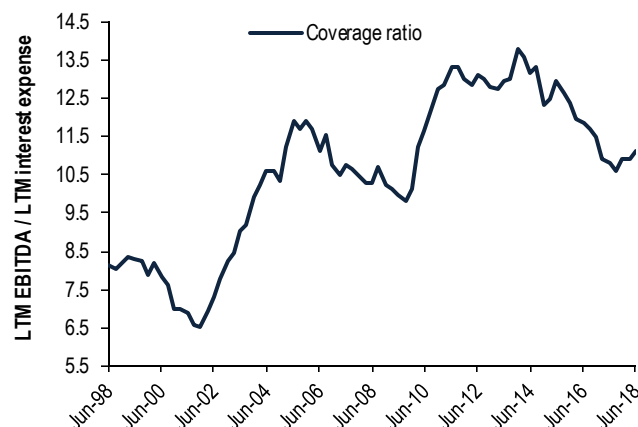
a faster pace (Figure 8) as companies spend balance sheet cash (Figure 11). Margins continued to weaken (Figure 9, Figure 10). Growth in capital spending rose to the highest level since 3Q-2012 (Figure 12), but remained little changed as a share of EBITDA (Figure 13).

**Figure 3: Preliminary data shows higher leverage ...**



Note: based on US high grade non-financial issuers excluding Energy, Metals and Utilities. 2Q -18 data is a preliminary estimate.  
Source: BofA Merrill Lynch Global Research

**Figure 4: ... and somewhat lower coverage in 1Q-2018**

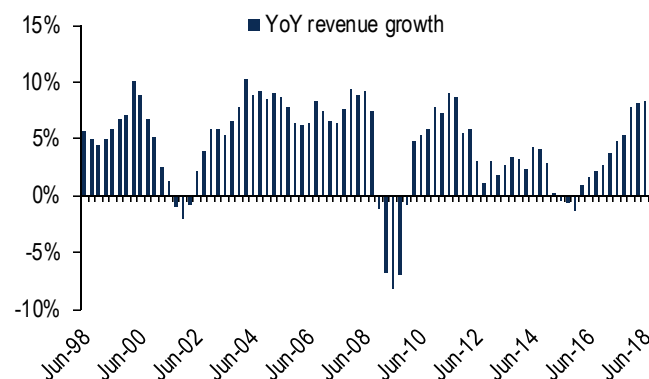


Note: based on US high grade non-financial issuers excluding Energy, Metals and Utilities. 2Q -18 data is a preliminary estimate.  
Source: BofA Merrill Lynch Global Research

## Revenue and EBITDA growth

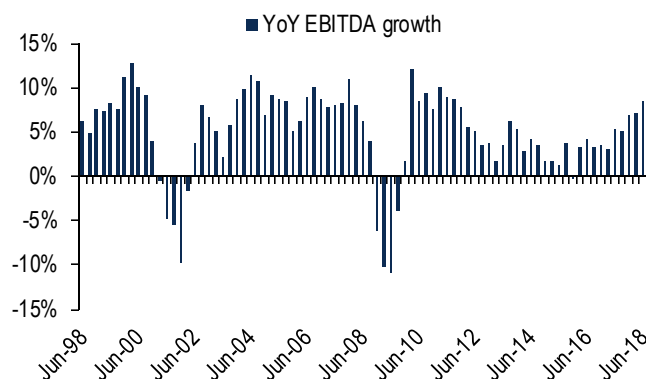
Median revenue growth increased moderately relative to the prior quarter, rising to 8.2% in 2Q from 8.1% in 1Q. The median YoY EBITDA growth accelerated to 8.5% from 7.0% in 2Q (Figure 5, Figure 6).

**Figure 5: Median YoY change in revenues: ex. Energy, Materials, Utilities**



Note: 2Q -18 data is a preliminary estimate  
Source: BofA Merrill Lynch Global Research

**Figure 6: Median YoY change in EBITDA: ex. Energy, Materials, Utilities**

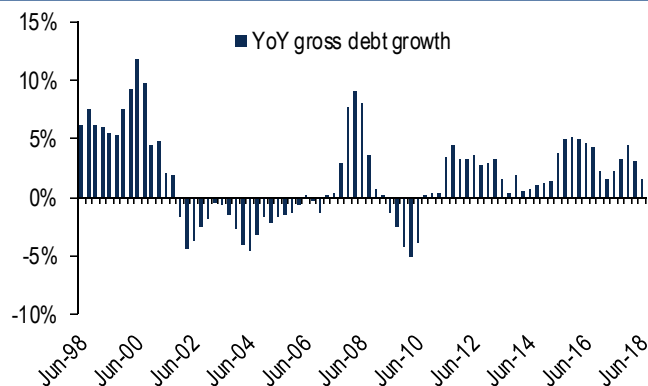


Note: 2Q -18 data is a preliminary estimate  
Source: BofA Merrill Lynch Global Research

## Debt growth

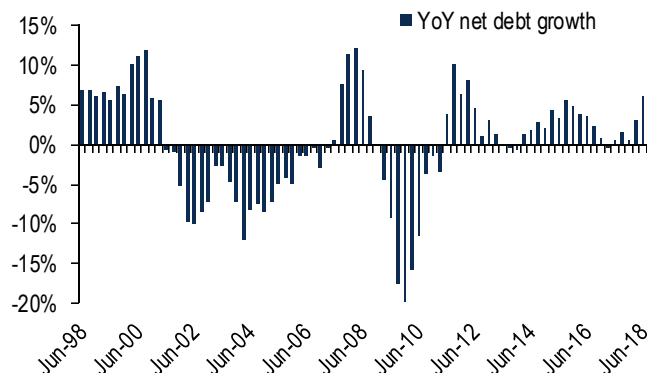
Median gross debt growth on a YoY basis fell to 1.6% in 2Q – the lowest reading since 1Q-2017 – from 3.1% in 2Q and 4.5% in 4Q-17. On the other hand median net debt growth rose to 6.2% in 2Q – the highest level since 1Q-2012 – from 3.1% in 1Q as cash levels decline (Figure 7, Figure 8).

**Figure 7: YoY median change in gross debt: ex. Energy, Materials, Utilities**



Note: 2Q -18 data is a preliminary estimate  
Source: BofA Merrill Lynch Global Research

**Figure 8: YoY median change in net debt: ex. Energy, Materials, Utilities**

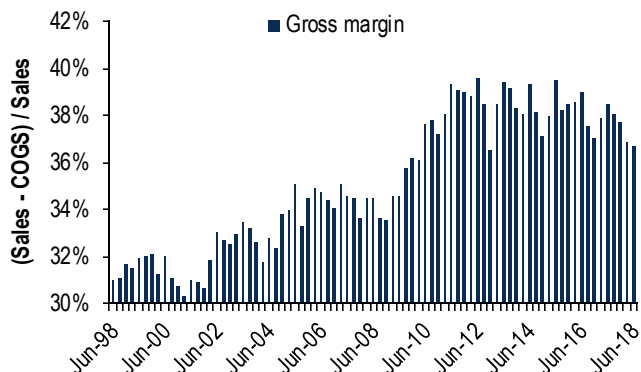


Note: 2Q -18 data is a preliminary estimate  
Source: BofA Merrill Lynch Global Research

## Profitability

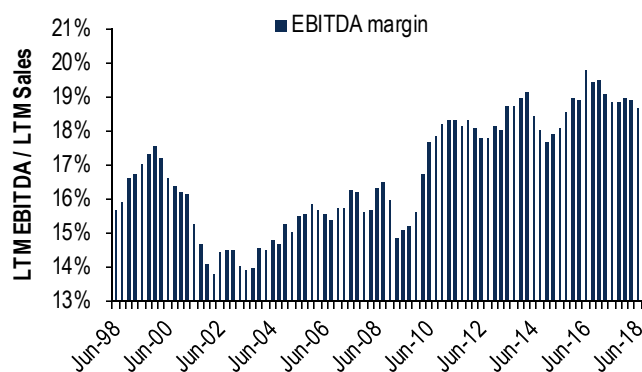
Gross margin declined to 36.7% from 36.9% in 1Q. Similarly EBITDA margin declined to 18.7% in 2Q from 18.9% in 2Q (Figure 9, Figure 10).

**Figure 9: Median gross margin: ex. Energy, Materials, Utilities**



Note: 2Q -18 data is a preliminary estimate  
Source: BofA Merrill Lynch Global Research

**Figure 10: Median EBITDA margin: ex. Energy, Materials, Utilities**

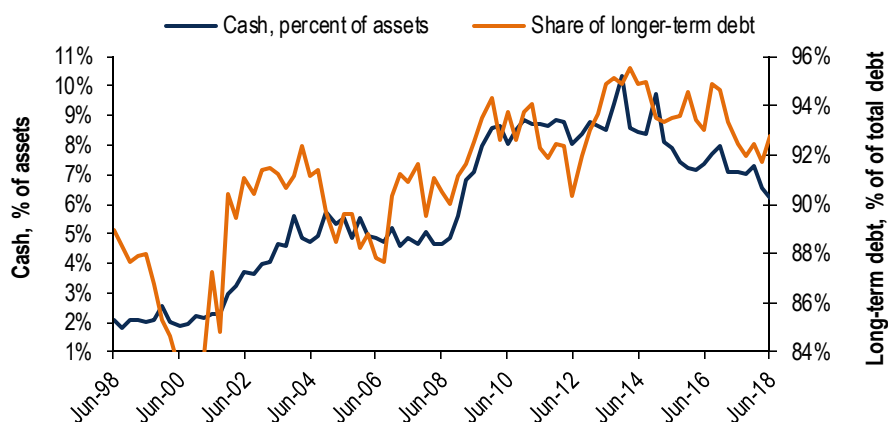


Note: 2Q -18 data is a preliminary estimate  
Source: BofA Merrill Lynch Global Research

## Liquidity metrics

Liquidity metrics were mixed in 2Q. Cash as a share of assets fell to 6.24% in 2Q from 6.52% in 1Q. At the same time the share of long-term debt increased to 92.8% in 2Q from 91.7% in 1Q (Figure 11).

**Figure 11: Balance sheet liquidity metrics: ex. Energy, Materials, Utilities**

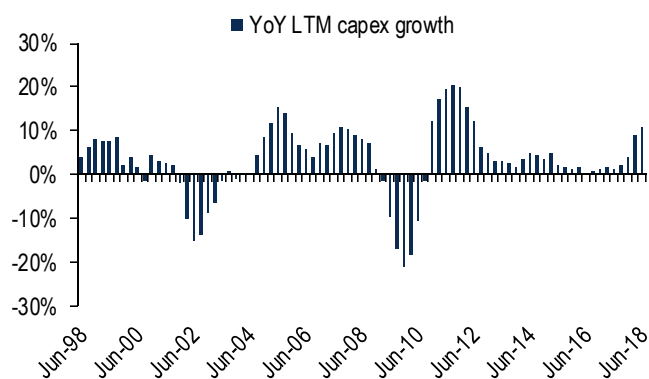


Note: 2Q -18 data is a preliminary estimate  
Source: BofA Merrill Lynch Global Research

### Capital spending

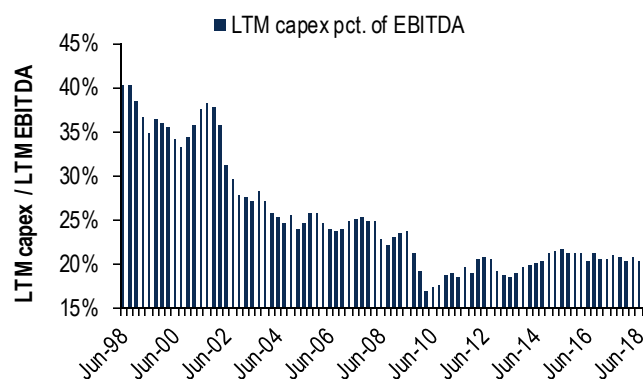
The median YoY growth in LTM capex spending continued to increase, rising to 11.0% in 2Q from an already relatively high 8.8% pace in 1Q. On the other hand capex as a share of EBITDA actually declined a bit to 20.4% from 20.8% in 1Q (Figure 12, Figure 13).

**Figure 12: Median YoY growth in LTM capex: ex. Energy, Materials, Utilities**



Note: 2Q -18 data is a preliminary estimate  
Source: BofA Merrill Lynch Global Research

**Figure 13: Median LTM capex as percent of LTM EBITDA: ex. Energy, Materials, Utilities**

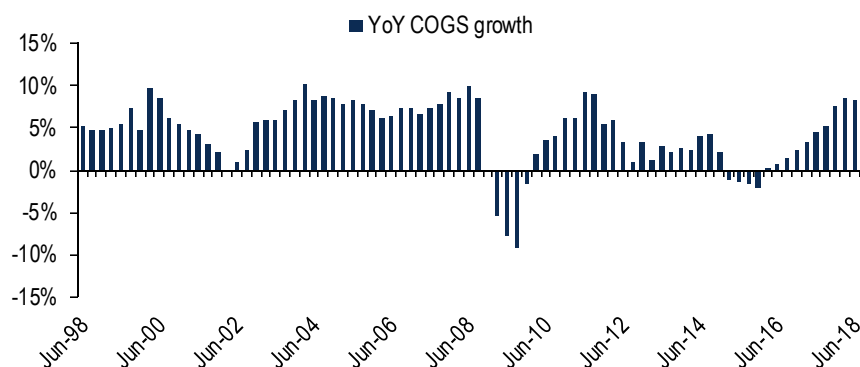


Note: 2Q -18 data is a preliminary estimate  
Source: BofA Merrill Lynch Global Research

### Costs

Cost of goods sold (COGS) increased 8.3% YoY in 2Q, down from 8.5% YoY increase in 1Q (Figure 14).

**Figure 14: Median YoY GOGS growth: ex. Energy, Materials, Utilities**



Note: 2Q -18 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 COAO 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 the “core” sectors excluding Energy, Metals and Utilities. For these core sectors actual results are currently available for 84% of the total 286 issuers. All of the market fundamentals are median values using GAAP measures, based on actual results when available and estimates otherwise. We use a dynamic – as opposed to static - universe of companies in our analysis based on the constituents in ICE BofAML HG index (COAO) at the end of each quarter.

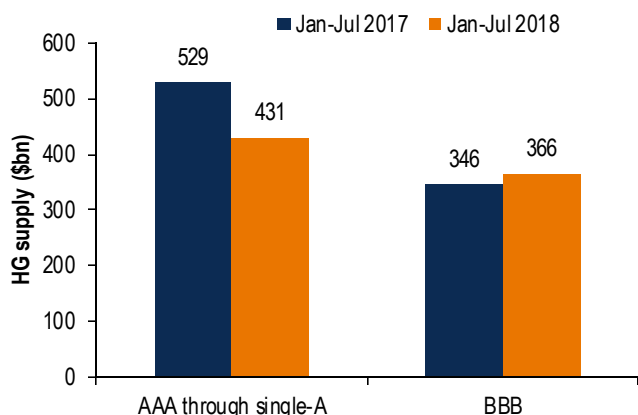
### Quality curve compression

Non-financial BBB corporate spreads (DM ex. Energy, Metals) have outperformed single-A spreads on a beta-adjusted basis so far this year. Notably, this was despite supply volumes that were higher for BBB bonds and lower for high quality bonds relative to last year (Figure 15). While high yield compressed to high grade this year, BBB spreads have performed in line with spreads for double-B rated issuers (Figure 16).

As we argued in our [2018 US High Grade Outlook](#), the outperformance is a result of strong economic growth and earnings growth, higher cost of debt following the US tax reform and increasing supply of high quality paper. Fundamentals for more levered companies have more room to benefit from the stronger earnings. Higher after-tax cost of debt encourages deleveraging for BBB issuers, while they matter less for companies with little debt. Transitioning to QT (quantitative tightening) means increasing supply of high quality fixed income, which competes more directly with single-A corporate bonds. Finally, while investors are concerned about the next downgrade cycle, it is probably a couple of years away (see [Situation Room: Banking on a sustained expansion](#)), hence now is not the time to be underweight BBBs.

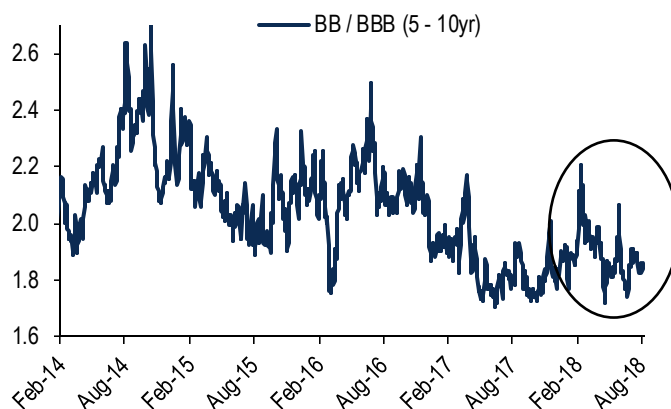
BBBs decompressed by just 3bps vs. single-As despite the overall non-financial (DM ex. Energy, Metals) market spreads widening 14bps year to date (Figure 17). On a beta-adjusted basis, or looking at the ratio of BBB spreads to single-As, spreads have actually compressed. The ratio declined to 1.65 currently from 1.72 at the end of last year (Figure 18).

**Figure 15: HG supply has been heavier in BBBs this year**



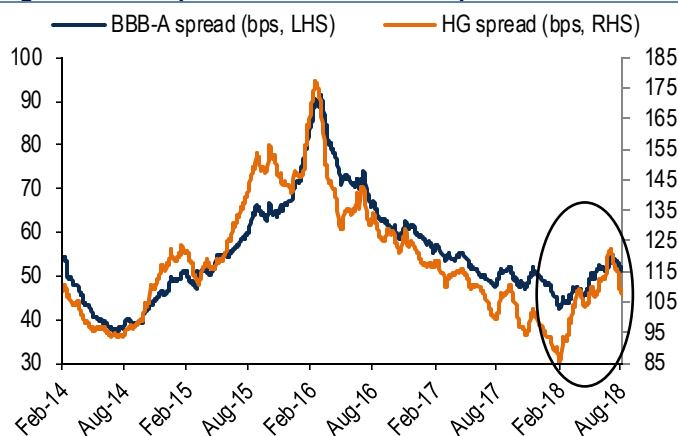
Source: BofA Merrill Lynch Global Research

**Figure 16: Double-Bs have performed in line with BBBs this year**



Note: BB / BBB spread ratio is based on DM issuers excluding Financials, Energy and Metals.  
Source: BofA Merrill Lynch Global Research

**Figure 17: BBB-A spread relative to the market spread**



Note: the spreads are for DM issuers excluding Financials, Energy and Metals. Single-A and BBB spreads are for the same maturity distribution across 1-5yr, 5-10yr and 10 to 35yr buckets.  
Source: BofA Merrill Lynch Global Research

**Figure 18: BBBs have compressed to single-As on a beta-adjusted basis**



Note: BBB / A spread ratio is based on DM issuers excluding Financials, Energy and Metals. Single-A and BBB spreads are for the same maturity distribution across 1-5yr, 5-10yr and 10 to 35yr buckets.  
Source: BofA Merrill Lynch Global Research

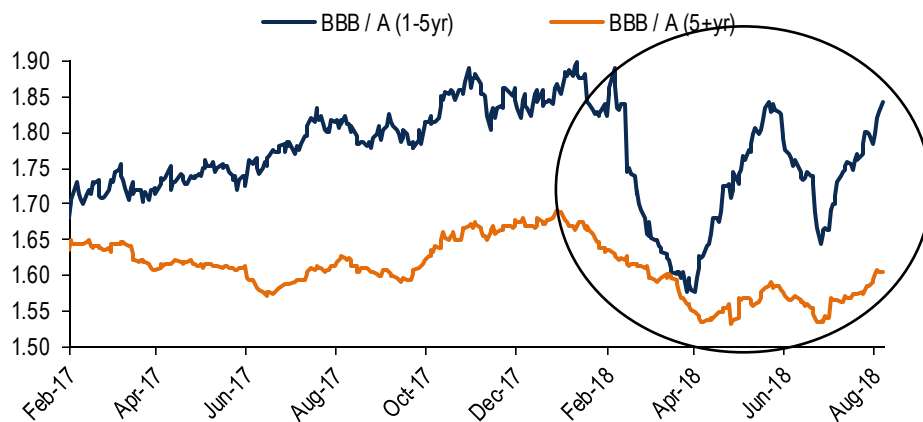
## Volatility in the front-end

Spread compression for bonds longer than 5-years has been fairly orderly, with most of the move happening by the end of April. On the other hand, performance along the quality curve has been much more volatile in the front-end (Figure 19). First, corporate investors sold corporate bonds in February and March as they were putting their repatriated cash to work (see [Credit Market Strategist: Cash is king](#)). That selling was concentrated in the front-end, high quality paper. As a result both quality and maturity curves flattened for bonds 5-year and shorter (Figure 20). Then on the back of heavy supply volume in March investors positioned more defensively by shifting into the now cheaper high quality front-end paper (see "Moving back out the curve" [here](#)). That has reversed the earlier compression by mid May.

BBBs then compressed for the second time in late July, when spreads widened again on the back of supply. This time issuance that exceeded expectations was concentrated among high quality bonds, exemplified by the \$16bn WMT deal priced on June 20<sup>th</sup>, leading to an underperformance of high quality spreads (Figure 21).



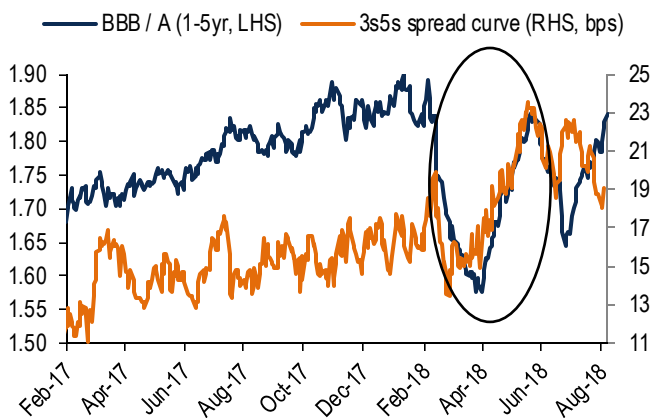
**Figure 19: BBB to A spread ratio: front-end vs. bonds longer than 5 years**



Note: BBB / A spread ratio is based on DM issuers excluding Financials, Energy and Metals. Single-A and BBB spreads are for the same maturity distribution across 1-5yr, 5-10yr and 10 to 35yr buckets.

Source: BofA Merrill Lynch Global Research

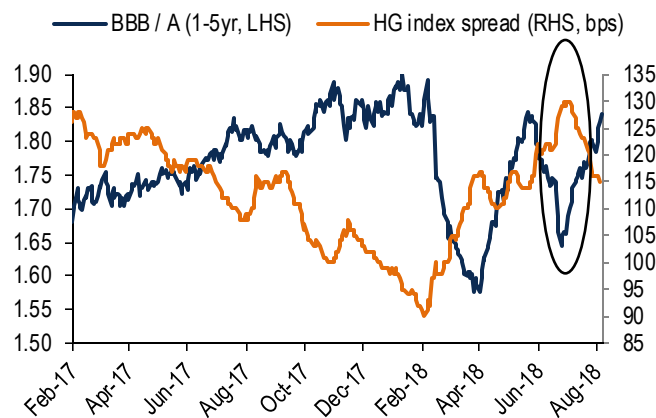
**Figure 20: Both maturity and quality curves flattened in Feb / Mar**



Note: BBB / A spread ratio is based on DM issuers excluding Financials, Energy and Metals.

Source: BofA Merrill Lynch Global Research

**Figure 21: Heavy HQ supply compressed spreads in June**



Note: BBB / A spread ratio is based on DM issuers excluding Financials, Energy and Metals.

Source: BofA Merrill Lynch Global Research

Previously published here

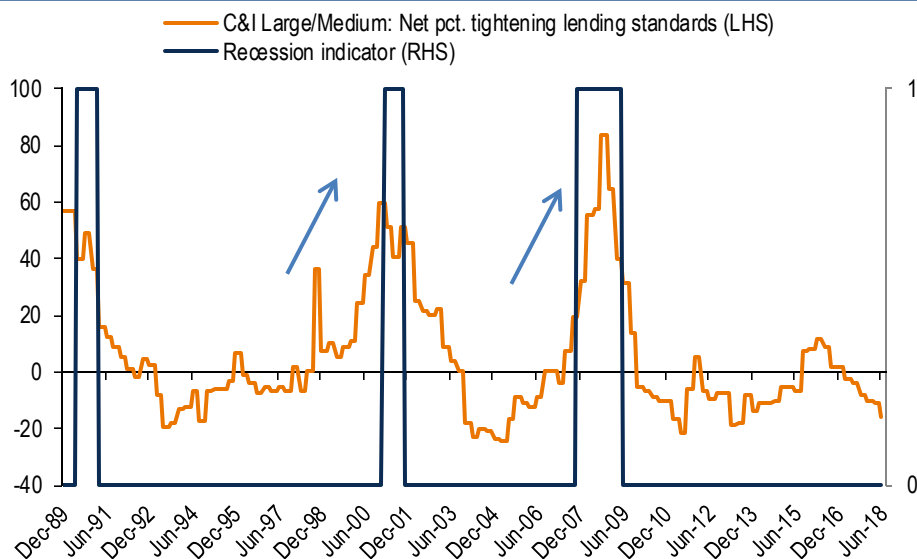
[Situation Room: Banking on a sustained expansion 06 August 2018](#)

## Banking on a sustained expansion

Amidst extensive discussion of the implications of a flat/inverted yield curve, the Federal Reserve's Senior Loan Officer Survey (SLOS) today estimated that a net 15.9% of banks are actually loosening lending standards for C&I loans to large firms. Reflecting directly on the availability of credit, this statistic is a favorite metric among credit investors as a leading indicator of recession/default/downgrade risk (Figure 22). The present reading suggests that banks see a sustained economic expansion – in fact the past two recessions began on average more than four years after such reading of -15.9%. If banks are correct in their assessment, that implies we are within similar timeframe for the next spike in net downgrade to high yield (Fallen Angel) activity

(Figure 23). Note that the SLOS obviously tends not to be a reliable indicator of more idiosyncratic risks – such as the Autos downgrades in 2005, or the rapid deterioration in EM Energy names in early 2015 as oil prices had plummeted.

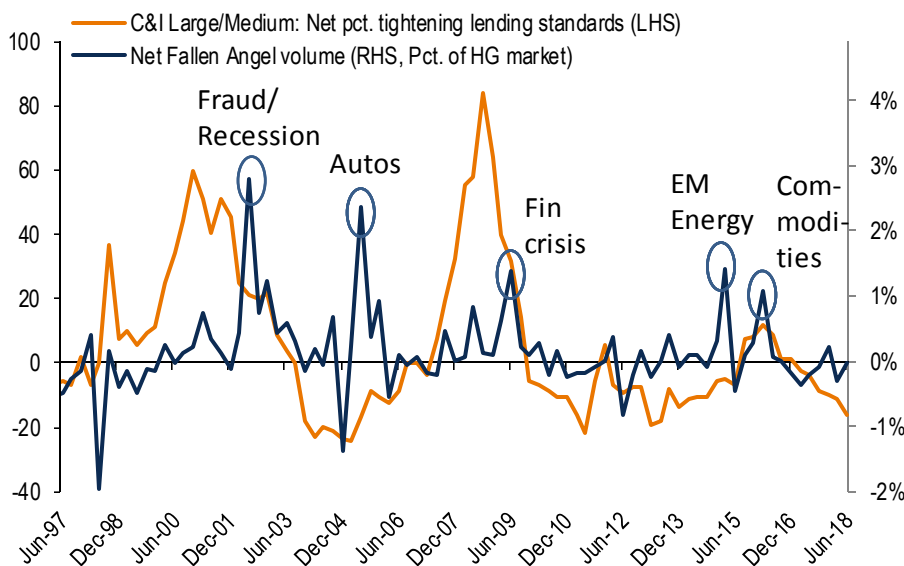
**Figure 22: Tightening lending standards for C&I loans has been a leading indicator of recession**



Note: Monthly data

Source: The National Bureau of Economic Research, Federal Reserve

**Figure 23: Tightening lending standards for C&I loans has predicted downgrade cycles**



Note: Quarterly data

Source: Federal Reserve, BofA Merrill Lynch Global Research

Previously published here

[Situation Room: Banking on a sustained expansion 06 August 2018](#)

## Details from the July senior loan officer survey

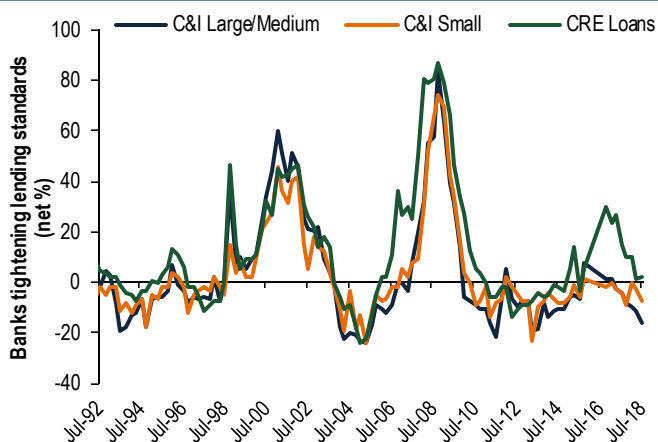
The Fed's fresh July senior loan officer survey that was released today showed stronger demand for C&I loans across large, medium and small firms, as well as auto loans. Interestingly, the survey noted that *"increases in customers' accounts receivable, inventory, and merger or acquisition financing needs, as well as increased customer investment in plant or equipment were important reasons for stronger C&I loan demand."* On the other hand, demand weakened for CRE, mortgage, and credit card loans. In terms of lending standard, banks reported easing standards for C&I, mortgage, and auto loans, while tightening standards for CRE and credit card loans.

### C&I and CRE loans

In the latest July survey a net 15.9% and 7.6% of banks reported easing lending standards over the previous three months for loans to large/medium C&I firms and small C&I firms, respectively, up from 11.3% and 3.0% in the prior April survey. For CRE loans the net share reporting tightening standards increased to 1.9% in July from 0.9% in April. Please 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 (Figure 24).

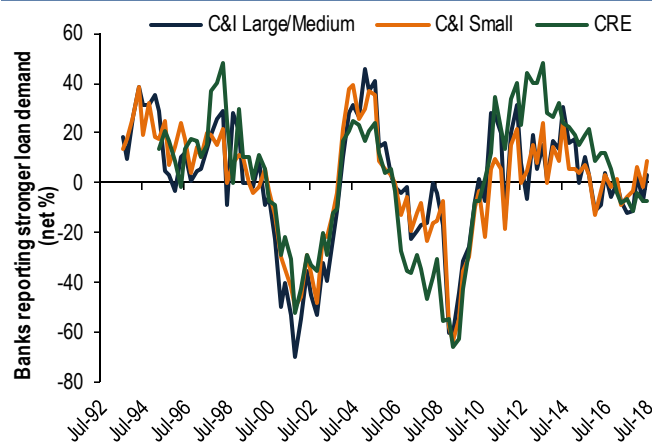
In terms of demand a net 2.9% and 9.1% of banks reported stronger demand for loans to large/medium C&I firms and small C&I firms, respectively, compared to net 7.0% and 1.5% reporting weaker demand in April. For CRE loans the net share reporting weaker demand decreased to 7.2% in July from 7.7% in April (Figure 25).

Figure 24: Lending standards: C&I loans



Source: Federal Reserve

Figure 25: Loan demand: C&I loans



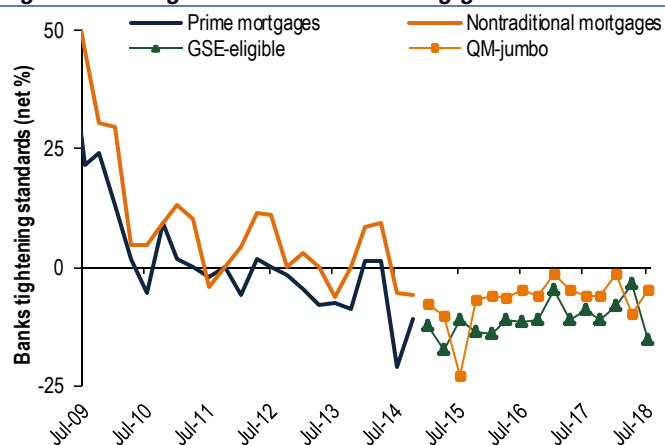
Source: Federal Reserve

### Mortgages

Banks continued to ease lending standards for residential mortgage loans. A net 15.3% and 4.8% of banks reported loosening lending standards for GSE-Eligible and QM-Jumbo mortgages, respectively, compared to a net 3.4% and 9.7%, respectively, in April (Figure 26).

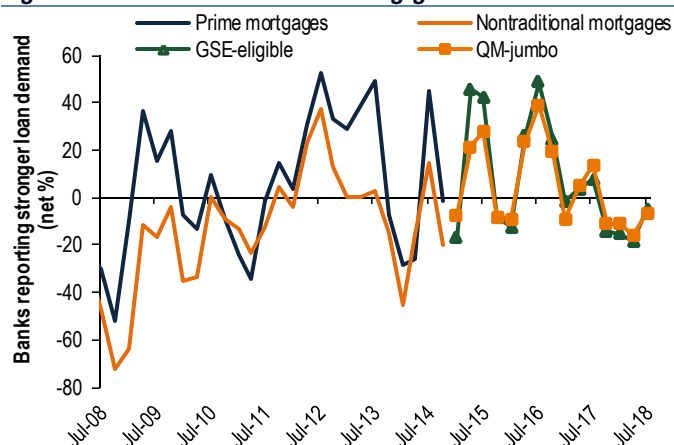
The net share reporting weaker demand for GSE-Eligible and QM-Jumbo mortgages declined to 5.1% and 6.6% in July, respectively, from a net 18.6% and 16.1% reporting weaker demand for GSE-Eligible and QM-Jumbo mortgages in April (Figure 27).

**Figure 26: Lending standards: residential mortgages**



Source: Federal Reserve

**Figure 27: Loan demand: residential mortgages**

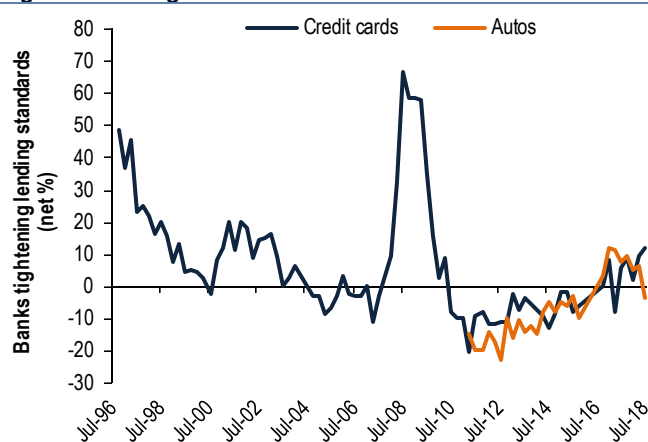


Source: Federal Reserve

## Consumer loans

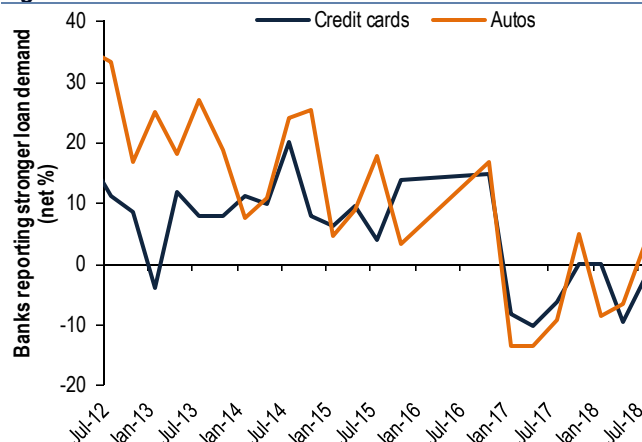
Banks tightened lending standards for credit cards and loosened lending standards for auto loans, according to the fresh July survey (net 12.0% and 3.5% of banks, respectively). This compares to net 9.4% and 6.5% tightening lending standards for credit cards and auto loans in the prior (April) survey (Figure 28). At the same time a net 2.1% of banks reported weaker demand for credit cards while a net 3.5% of banks reported stronger demand for auto loans, compared to a net 9.6% and 6.6% of banks reporting weaker demand for credit cards and auto loans, respectively, in April (Figure 29).

**Figure 28: Lending standards: consumer loans**



Source: Federal Reserve

**Figure 29: Loan demand: consumer loans**



Source: Federal Reserve

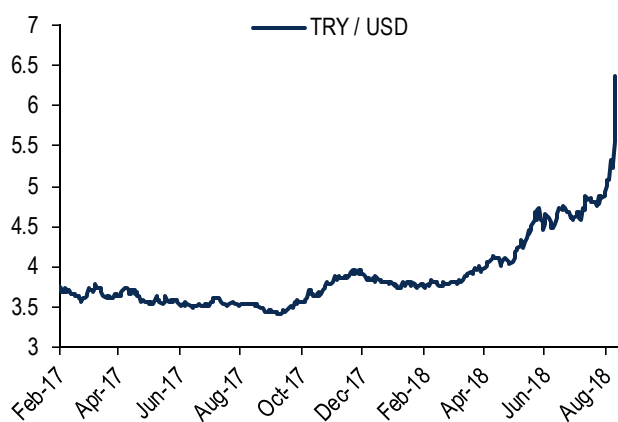
## Concerned about Italy more than Turkey

The weakness in Turkish financial markets intensified today, with the Turkish lira falling 13% against the dollar (Figure 30) and sovereign 5Y CDS widening 65bps (Figure 31). S&P 500 is down 0.78% at the time of writing, 10-year Treasury yield is down 5bps, and 10-year US bank senior spreads 3 to 5bps wider. The selloff is driven by Turkey specific issues (see [Turkey Viewpoint: Unfolding depreciation](#)), as well as the broader EM story this year. In particular the stronger dollar makes external debt burdens more difficult to carry – especially for countries with large deficits such as Turkey (Figure 32).

Our main concern is broader EM contagion, with resulting outflows, rather than Turkey in isolation. Still it feels like these risks are much smaller in scope than during the Asian Crisis about 20 years ago, where imbalances were larger due to fixed exchange rates. However, the present sovereign risk we are more concerned about is Italy, which due to fixed exchange rates, large imbalances and large size appears a much bigger systemic issue.

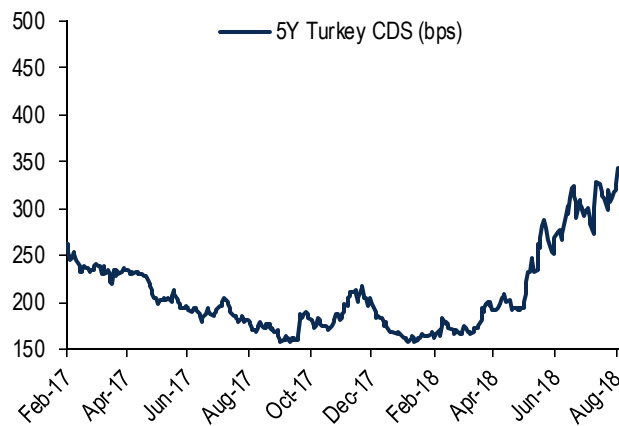
The direct impact on the US corporate bond markets from Turkey is limited. Because the sovereign is rated double-B no Turkish corporate issuers are included in ICE BofAML US high grade corporate index. Also, all EM issuers – like Turkey - are excluded from the benchmark US HY index. Furthermore, US bank exposure to Turkey is small (\$33bn as of 1Q according to BIS). European bank exposure is larger (\$104bn for Spain, \$45bn for France according to BIS, Figure 33). Finally, below we list US issuers with the largest share of revenue deriving from EM (Figure 34) as well as the EEMEA region (Figure 35), although these lists are limited to companies that disclose such geographic sales data.

**Figure 30: Turkey's currency sold off today ...**



Source: Bloomberg.

**Figure 31: ... and sovereign CDS widened**



Source: Bloomberg.

**Figure 32: Emerging market countries economic summary table**

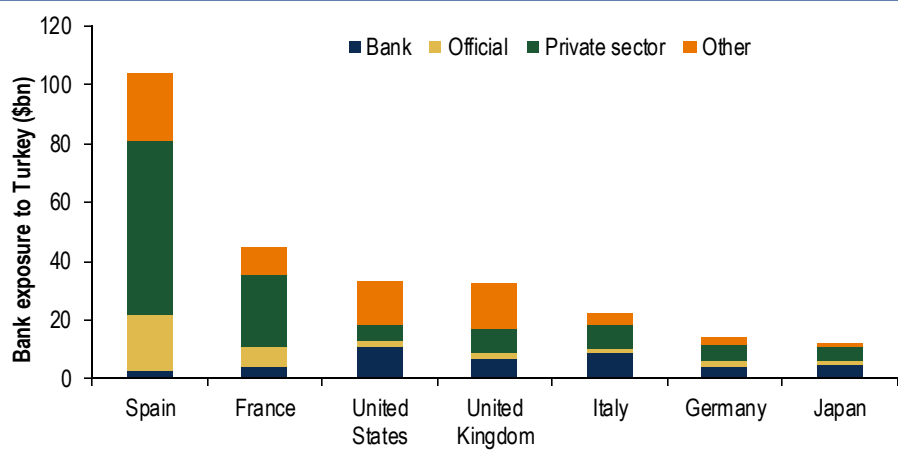
Country	Gross External debt % GDP (w corps)	Balance (% GDP)		Sovereign CDS (bps)		Currency vs. USD YTD depreciation %
		Current account	Budget	Current	YTD change	
Venezuela	125					100.0
Turkey	53	-5.6	-1.5	375	209	40.8
Argentina	34	-4.6	-1.6	485	247	35.7
Russia	37	2.1	-2.1	157	38	14.3
Brazil	24	-0.4	-7.4	225	64	14.0
South Africa	45	-2.5	-4.4	189	32	12.2
Hungary	84	0.6	-2.0	88	2	8.0
India	24	-1.5	-3.5	96	20	7.2
Poland	72	0.0	-1.7	62	11	6.9
Indonesia	34	-2.0		113	27	6.4
Israel	25	2.9		64	6	6.3
Philippines		-0.8	-2.7	74	14	6.2
Chile	66	-1.1		51	2	5.8
South Korea	27	4.5		41	-12	5.5
Czech Republic	95	1.0	1.6	42	4	4.9
China	8	1.0		60	9	4.9
Romania	53	-3.4	-2.9	94	3	4.5
Taiwan	32	14.5				3.2

**Figure 32: Emerging market countries economic summary table**

Country	Gross External debt % GDP (w corps)	Balance (% GDP)		Sovereign CDS (bps)		Currency vs. USD YtD depreciation %
		Current account	Budget	Current	YtD change	
Singapore	444	18.5	-0.3			2.6
Thailand	31	10.5	-2.9	43	-3	2.0
Peru	38	-1.4		78	6	1.0
Malaysia		3.7		83	24	1.0
Egypt	34	-5.7		342	22	0.5
Hong Kong	439	4.2	7.1	32	-2	0.5
Colombia	43	-3.1	-2.9	107	2	-1.6
Ukraine	121	-1.9		425	-9	-2.9
Mexico	27	-1.7	-2.9	118	11	-4.0

Source: BofA Merrill Lynch Global Research, Bloomberg, Markit.

**Figure 33: Foreign bank exposure to Turkey**



Note: "Other" category includes derivative contracts, guarantees extended and credit commitments.

Source: The Bank for International Settlements (BIS).

**Figure 34: US issuers with largest sales EM**

Note: only showing companies that report this sales breakdown

Ticker	Sector	Share sales to EM
NVDA	Technology	70%
QCOM	Technology	69%
AES	Utilities	68%
INTC	Technology	62%
TXN	Technology	60%
MCHP	Technology	57%
AVGO	Technology	56%
AMAT	Technology	55%
STX	Technology	54%
LRCX	Technology	53%
FTI	Energy	53%
CL	Consumer Products	52%
CVX	Energy	52%
ABT	Health Care	50%
KLAC	Technology	50%
SLB	Energy	49%
FMC	Basic Materials	49%
KSU	Transportation	48%
PM	Other	47%
GLW	Technology	45%

Source: BofA Merrill Lynch Global Research, company reports

**Figure 35: US issuers with largest sales in EEMEA**

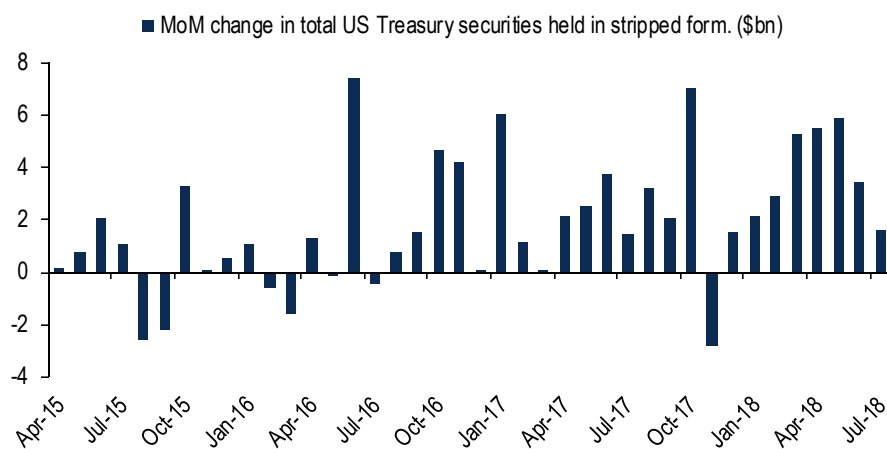
Note: only showing companies that report this sales breakdown

Ticker	Sector	Share of sales to MENA, Eastern Europe, Russia
APA	Energy	38%
NBL	Energy	29%
OXY	Energy	29%
FTI	Energy	27%
CVX	Energy	26%
PM	Other	24%
BA	Aerospace/Defense	16%
WU	Other	16%
RTN	Aerospace/Defense	16%
GE	Energy	14%
APC	Energy	13%
HES	Energy	13%
MDLZ	Food, Bev, & Bottling	10%
GD	Aerospace/Defense	9%
IP	Basic Materials	8%
FLR	Other	8%
NOV	Energy	8%
AMT	Telecom	8%
FLIR	Technology	8%
AVY	Consumer Products	7%

Source: BofA Merrill Lynch Global Research, company reports

## July stripped Treasury volumes

Stripped Treasury bond volumes increased by \$1.58bn in July – down from \$3.41bn in June – to \$288.83bn currently outstanding (Figure 36).

**Figure 36: Monthly change in total US Treasury securities held in stripped form**

Source: US Treasury

Previously published here

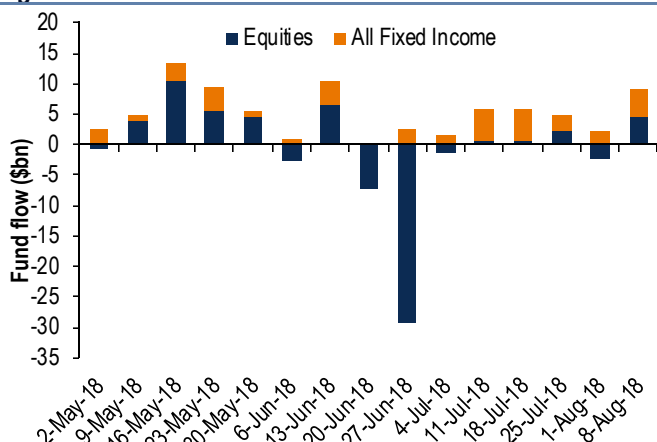
[Situation Room: The return of foreign investors, redux 09 August 2018](#)

## Stronger flows

Inflows to US funds and ETFs increased this past week for most fixed income asset classes as well as for equities. Flows for stocks turned positive with a \$4.65bn inflow after a \$2.29bn outflow in the prior week. Inflows to fixed income rose to \$4.43bn from \$2.36bn (Figure 37), with flows weakening only for leveraged loans, high grade outside of short-term and global EM bonds.

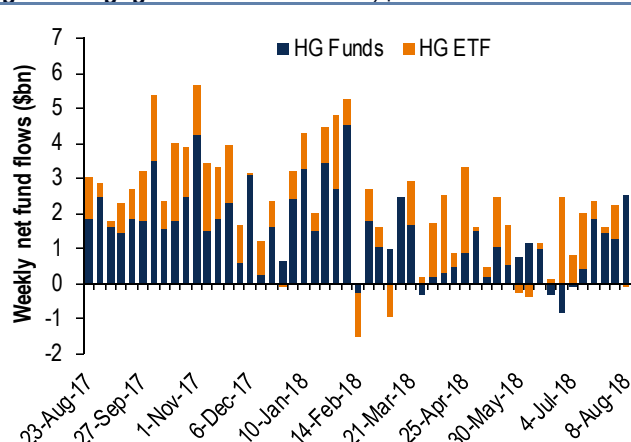
Inflows to high grade (see the appendix for our definition) rose to \$2.41bn from \$2.23bn, as inflows to short-term high grade accelerated to \$1.92bn from \$0.80bn. Outside of short term, on the other hand, inflows declined to \$0.49bn from \$1.43bn. Also flows to ETFs, which are more dominated by institutional investors, turned negative with a \$0.11bn outflow this past week compared to a \$0.96bn inflow a week earlier (Figure 38). In addition high grade flows were also stronger for high yield (to +\$0.66bn from +\$0.21bn), munis (to +\$0.55bn from -\$0.25bn) and government bonds (to +\$0.42bn from -\$0.31bn). On the other hand inflows declined to \$0.12bn from \$0.45bn for leveraged loans and outflows accelerated to \$0.51bn from \$0.31bn for global EM bonds. Finally, money markets had a \$10.52bn inflow this past week and a \$3.29bn inflow in the prior week.

**Figure 37: Flows for the broad US asset classes: stocks and bonds**



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

**Figure 38: High grade fund and ETF flows, \$bn**



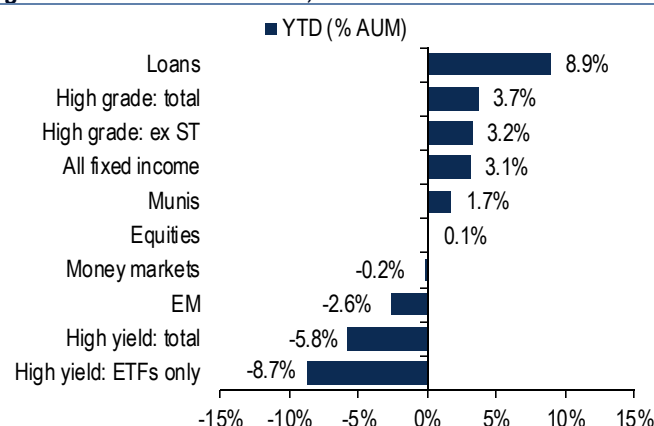
Note: data are for US-domiciled funds only.  
Source: EPFR Global.

**Figure 39: 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	0.17%	3.7%	101.3
High grade: ex short-term	0.03%	3.2%	70.4
High yield: total	0.31%	-5.8%	-20.5
High yield: ETFs only	1.30%	-8.7%	-4.3
Loans	0.11%	8.9%	13.4
EM	-0.11%	-2.6%	-15.9
Munis	0.13%	1.7%	13.1
All fixed income	0.17%	3.1%	142.0
Money markets	0.40%	-0.2%	-6.1
Equities	0.07%	0.1%	14.0

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 2016. Global EM funds, US-domiciled funds only for other fund types.  
Source: EPFR Global, BofA Merrill Lynch Global Research

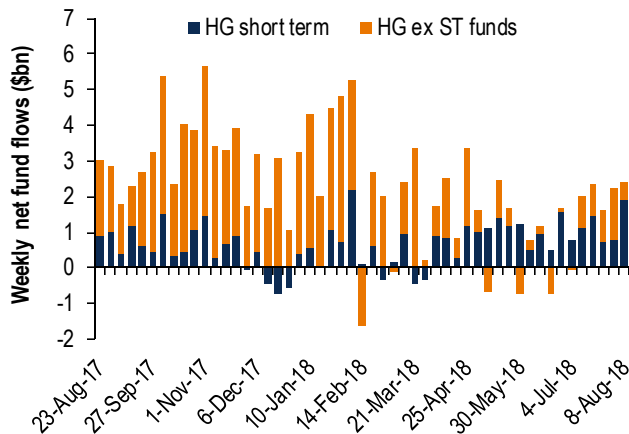
**Figure 40: Year to date fund flows, % of AUM**



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

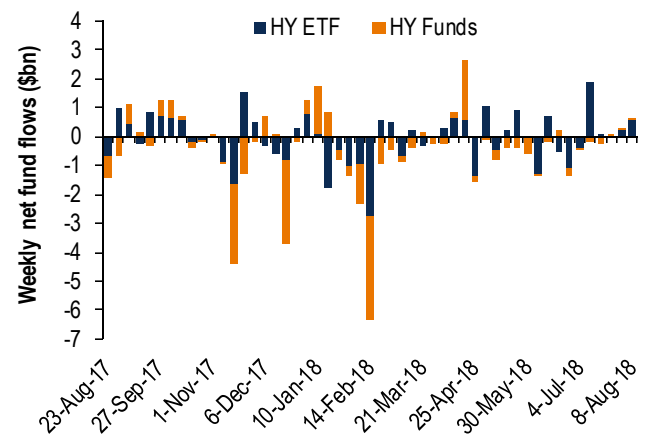


**Figure 41: Weekly high grade fund flows, \$bn**



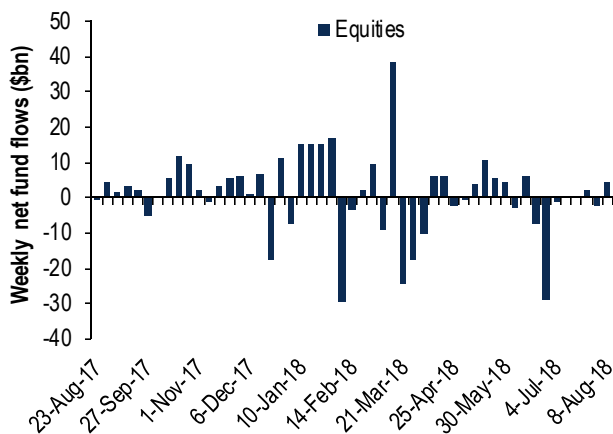
Note: the flows data is for US-domiciled funds and ETFs. The flows include: high grade bond funds, high grade corporate bond funds, and total return bond funds. We exclude two volatile funds from our aggregate data. Short-term refers to duration of 0 to 4 years.  
Source: EPFR Global, BofA Merrill Lynch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

**Figure 42: Weekly high yield fund flows, \$bn**



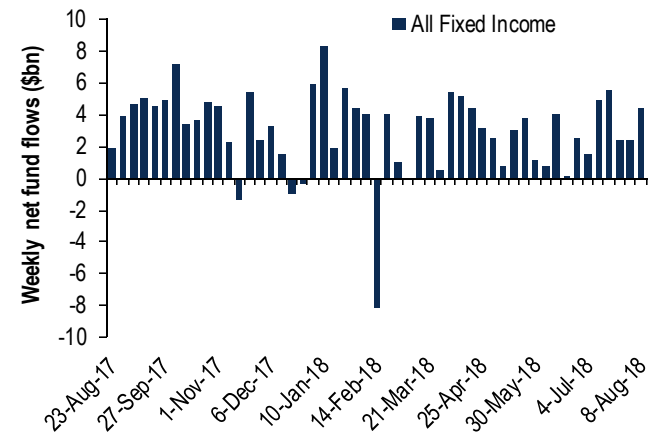
Note: the flows data is for US-domiciled funds and ETFs.  
Source: EPFR Global.

**Figure 43: Weekly equity fund flows, \$bn**



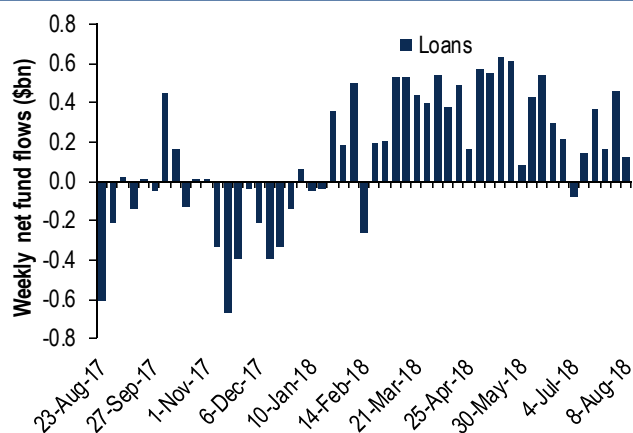
Note: the flows data is for US-domiciled funds and ETFs.  
Source: EPFR Global.

**Figure 44: Weekly fixed income fund flows, \$bn**



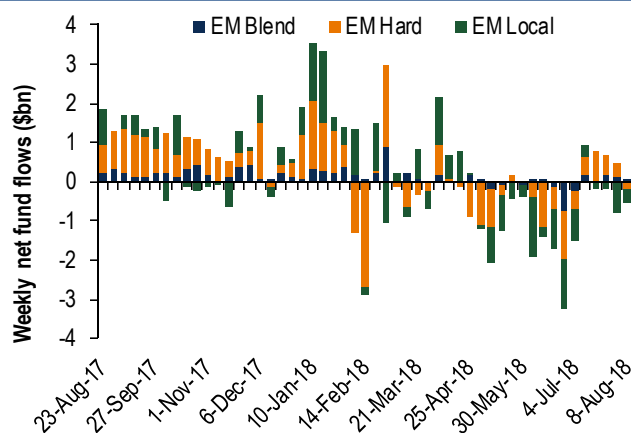
Note: the flows data is for US-domiciled funds and ETFs. The flows include the following asset classes: high grade (corporate and government), high yield, mortgage backed, floating rate, total return, municipals, inflation protected.  
Source: EPFR Global.

**Figure 45: Weekly loan fund flows, \$bn**



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

**Figure 46: Weekly EM fund flows, \$bn**



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

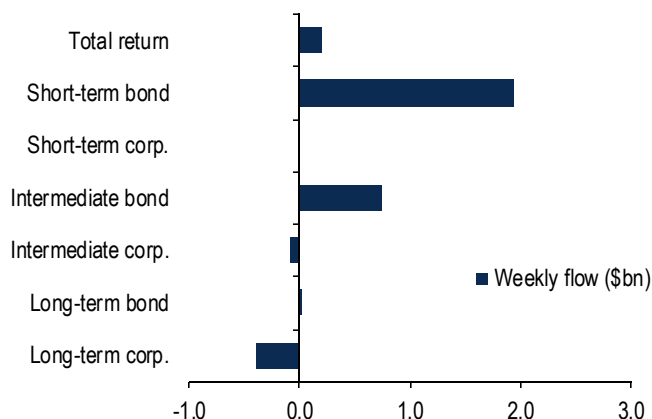
## Appendix: defining high grade

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. Finally, we also include the “total return” bond category in our tracking of high grade flows.

Note that in terms of maturity short-term refers to duration of 0 to 4 years, intermediate refers to duration 4 to 6 years and long-term refers to duration of 6 years and longer.

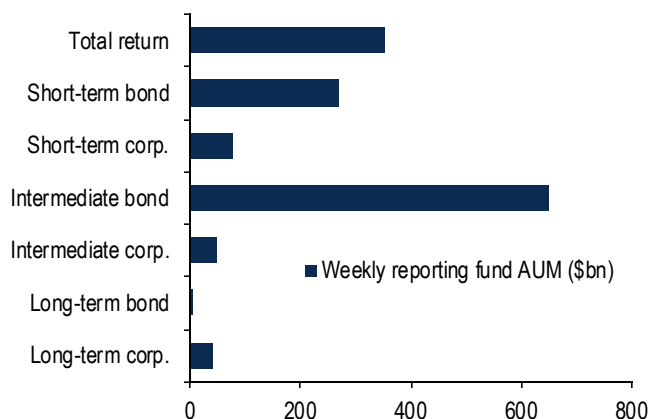
Figure 47 and Figure 48 below summarize flows for this past week and AUM for all fund and ETF categories that make up our weekly tracking of high grade flows.

**Figure 47: The latest weekly high grade flow by fund / ETF category**



Note: short-term refers to duration of 0 to 4 years, intermediate refers to duration 4 to 6 years and long-term refers to duration of 6 years and longer.  
Source: Source: EPFR Global.

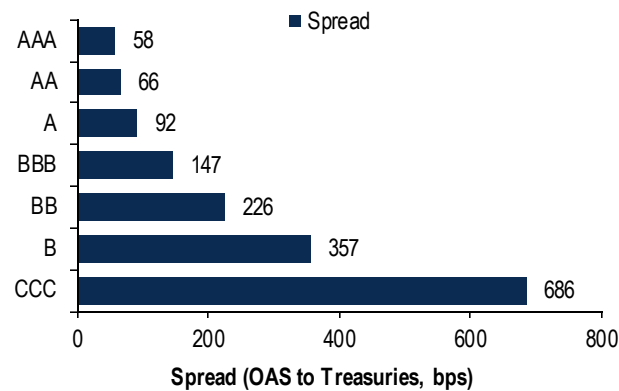
**Figure 48: Weekly reporting fund / ETF AUM**



Note: short-term refers to duration of 0 to 4 years, intermediate refers to duration 4 to 6 years and long-term refers to duration of 6 years and longer.  
Source: Source: EPFR Global.

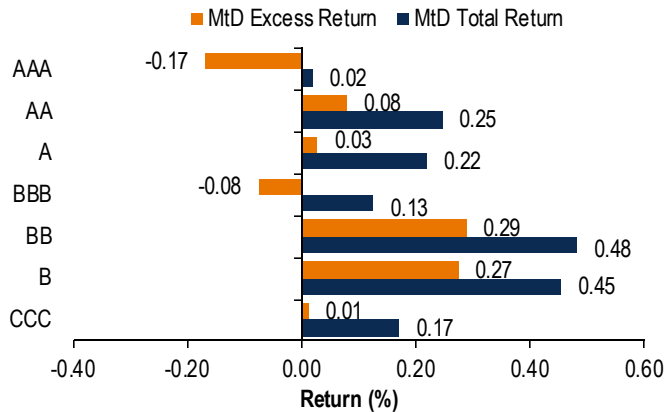
# Corporate credit spreads and returns

Figure 49: Corporate spreads by rating



Source: BofA Merrill Lynch Global Research

Figure 50: Month to date credit returns by rating



Source: BofA Merrill Lynch Global Research

# High Grade

## Supply concerns on, supply concerns off

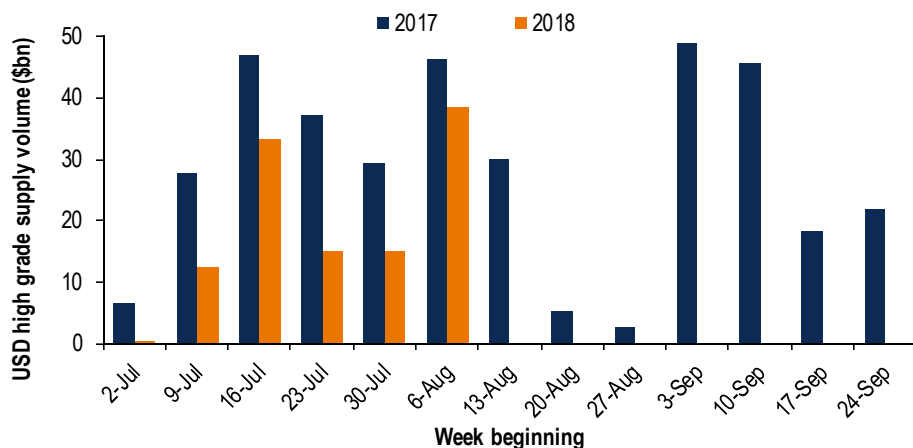
Say's law in economics posits that supply creates its own demand. The high grade corporate bond market this week clearly saw the opposite - that recent strong demand is attracting a lot of supply. With resulting sizable dealer inventory build this week (Figure 51), and creating the expectation of a strong calendar next week, it was not surprising that credit spreads widened this week (see: [Situation Room 07 August 2018](#)). However, since the week included July 4<sup>th</sup>, supply volumes this year are 41% below last year's pace (Figure 52). Even this week with heavy volumes we were 17% below last year's pace. Next week we expect to be on par to a touch below last year's pace. For September we currently expect \$115bn, or 15% below last year's \$135bn number. At the same time demand has rebounded. Hence, Turkey aside, we think spreads will stabilize when UTX price next week, then remain relatively flat – although with a slight tightening bias – until September, which will be the big test of the market, where we expect spreads to resume their tightening pace.

Figure 51: Sizable dealer inventory build this week

Export		Settings		TRACE <sup>TM</sup> Market Flow							
View Maturity		Historical Range		Custom		08/06/18		- 08/10/18			
9) Edit Filters		Corporate Bonds; Investment Grade				Rep Vol		Est Vol		Show Net	
Total Volume		Dealer to Client Volume					Dealer to Affiliate Volume				
Maturity	Volume(M)	Buy(M)	Sells(M)	Net(M)	B/S%	Buy(M)	Sells(M)	Net(M)			
Total	85,134,483	32,413,671	28,400,027	4,013,644		2,796,386	3,734,133	-937,747			
11) 0 -1 yr	6,672,251	2,480,044	2,579,251	-99,207		239,792	206,601	33,191			
12) 1 -3 yr	16,115,849	5,908,812	5,884,548	24,264		436,043	700,233	-264,190			
13) 3 -7 yr	23,502,453	8,652,309	7,235,155	1,417,154		897,467	1,226,513	-329,046			
14) 7 -12 yr	19,300,664	7,607,028	5,982,892	1,624,136		632,082	907,428	-275,346			
15) > 12 yr	19,539,130	7,761,378	6,718,166	1,043,212		590,996	693,358	-102,362			
16) Matured	4,136	4,100	15	4,085		6	0	6			

Source: Trace, Bloomberg

Figure 52: Weekly HG supply volumes this summer are consistently below last year



Source: BofA Merrill Lynch Global Research

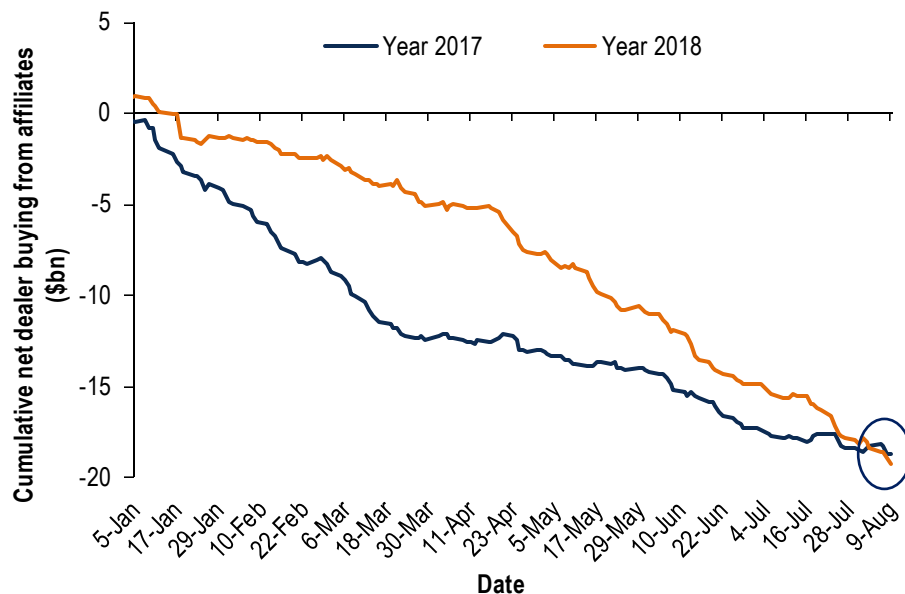
Previously published here

[Situation Room: The return of foreign investors, redux 09 August 2018](#)

## The return of foreign investors, redux

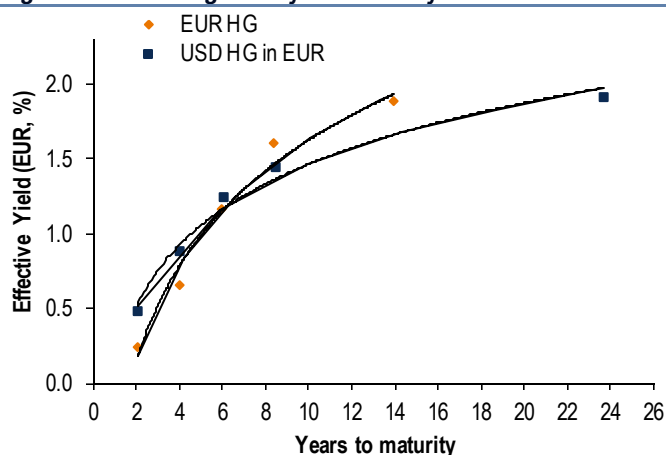
Our favorite measure for tracking foreign buying of US high grade corporate bonds YtD is now 3% above last year's pace, a remarkable comeback from the end of 1Q where it was 60% below (Figure 53). As we have discussed extensively (see: [The return of foreign investors 22 June 2018](#)) this rebound is driven by the rising dollar as well improving relative value to foreign corporate bonds, as US yields have increased whereas the cost of dollar hedging has been relatively flat for the past several months (Figure 54, Figure 55). However, there are clearly other factors at play. With the ECB and BoJ failing to increase long-term interest rates (see: [Hawkishness mitigated by dovishness 03 August 2018](#)) a lot of foreign investors have no choice but to buy foreign bonds. Within this environment we think the US corporate bond market has become a bit of a perceived relative safe haven as European sovereign risks returned to focus (Italy) and EM has been suffering, especially as they appear particularly impacted by the many negative headlines about international trade. This should be one of the drivers of continued spread tightening in 2H (after we can see beyond the peak of issuance next week).

**Figure 53: Foreign buying of US high grade corporate bonds now running 3% above last year's pace**



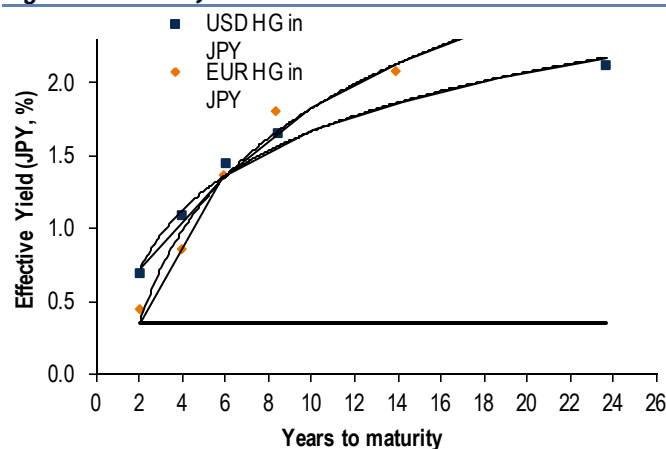
Note: Net dealer to affiliate volumes are correlated with foreign buying. Negative numbers mean foreign buying, positive numbers selling  
Source: TRACE, BofA Merrill Lynch Global Research

**Figure 54: Better hedged USD yields inside 6 years for EUR investors ...**



Note: Hedged to EUR by rolling 3-month forward fx rates  
Source: BofA Merrill Lynch Global Research

**Figure 55: ... and for JPY investors**



Note: Hedged to JPY by rolling 3-month forward fx rates  
Source: BofA Merrill Lynch Global Research

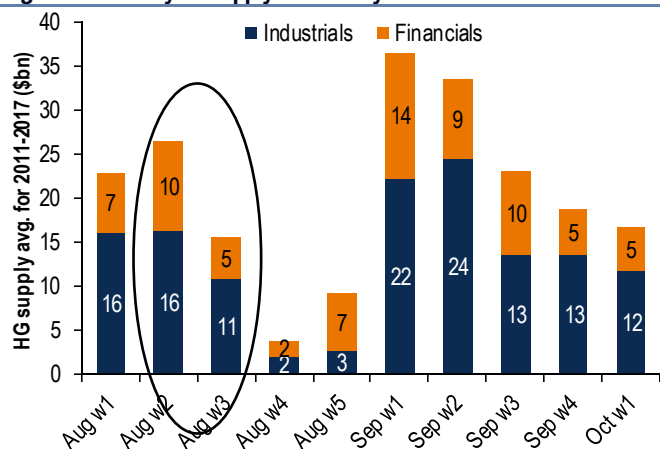
## Storm before the calm

It's been a busy week in the USD high grade primary market with issuance volume reaching \$38.4bn across 36 deals – up significantly from \$15.0bn across 15 deals last week. Looking ahead, United Technologies completed investor meetings today with potential M&A-related issuance to follow next week. At the same time, Apache has announced debt tender offers and concurrent fixed income investor meetings for next week as well. While August is seasonally the second slowest month of the year for supply after December, the pipeline could remain active for another week before many market participants go on summer vacation. Seasonality shows \$16bn of average issuance next week based on data from 2011 to 2017, including \$11bn in industrials and \$5bn in financials (Figure 56). Given the spike in M&A and liability management-driven activities, we look for \$25-\$30bn of supply next week.

While supply was well received by the market to begin the week, new issue performance was showing signs of fatigue by Thursday and Friday. Average new issue concession widened to 5.9bps on Thursday from 0.6bps Monday through Wednesday, and average break performance weakened to 1.1bps tighter on Thursday from 3.0bps tighter earlier in the week. Nonetheless, the weekly overall new issue performance – which we define as new issue concession (to 1.3bps from 2.9bps) plus break performance (little changed at -2.8bps) – still improved to 1.5bps tighter from 0.1bps wider last week. The recent new issues are trading 0.7bps wider on average from their pricing spreads, while some long-end financial and utility bonds have drifted as much as 14.0bps wider as a result of the heavy supply volumes (Figure 62).

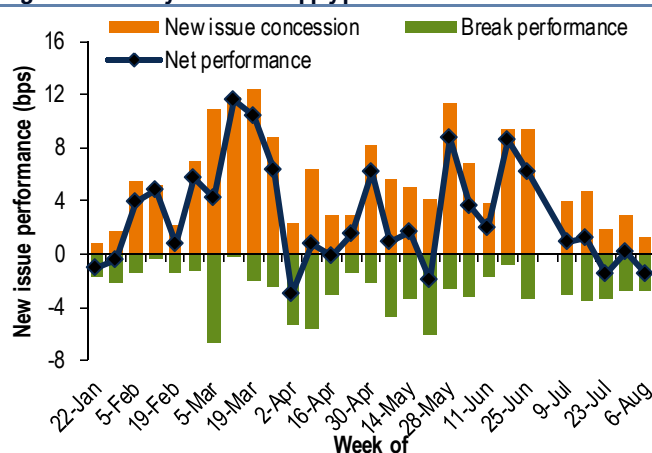
Supply this week consisted of \$20.6bn financials, \$9.9bn of high-quality industrials, and \$7.9bn of BBB-rated industrial bonds. Floating issuance increased to \$2.9bn from \$1.3bn, and Yankee issuance accelerated to \$9.5bn from \$7.2bn last week.

**Figure 56: Weekly HG supply seasonality**



Source: BofA Merrill Lynch Global Research

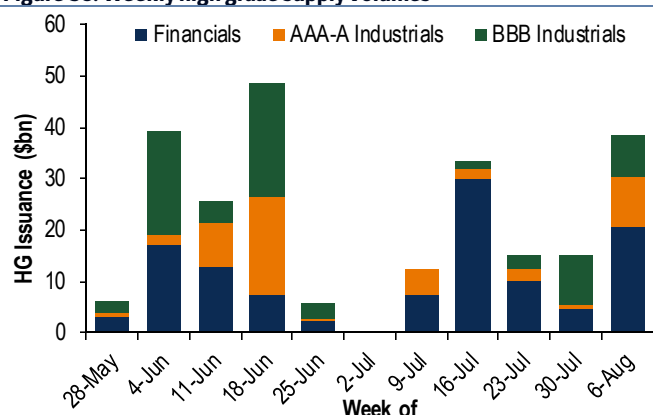
**Figure 57: Weekly new issue supply performance**



\* We removed from this chart the week of August 28 with an unusually large new issue concession of 29.2bps and break performance of 15.0bps due to a very small sample.

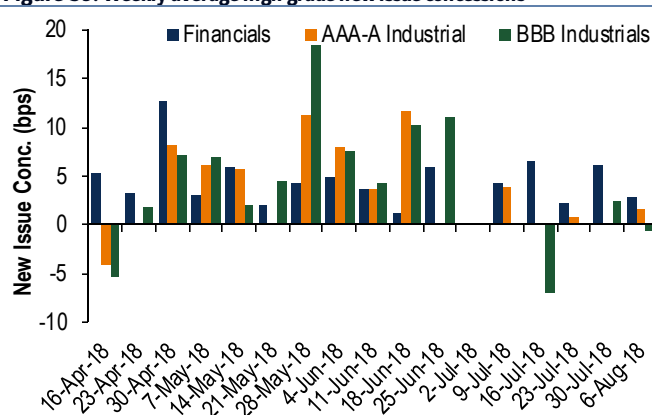
Source: BofA Merrill Lynch Global Research

**Figure 58: Weekly high grade supply volumes**



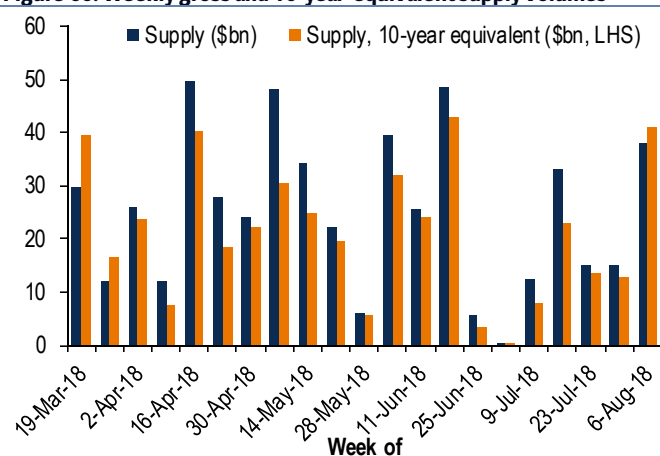
Source: BofA Merrill Lynch Global Research

**Figure 59: Weekly average high grade new issue concessions**



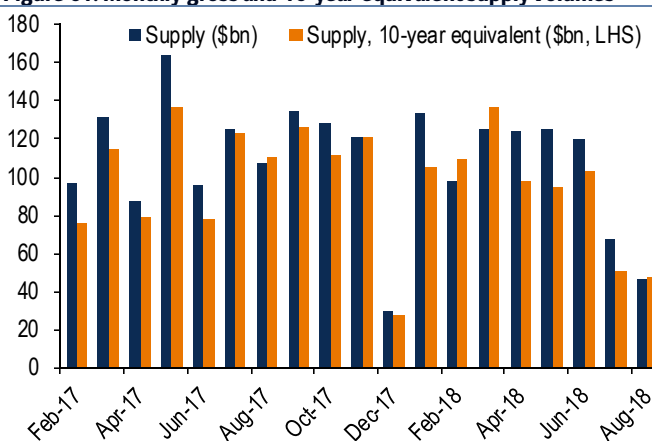
Source: BofA Merrill Lynch Global Research

**Figure 60: Weekly gross and 10-year equivalent supply volumes**



Source: BofA Merrill Lynch Global Research

**Figure 61: Monthly gross and 10-year equivalent supply volumes**



Source: BofA Merrill Lynch Global Research

**Figure 62: 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	Current spread (bps)
8/6/2018	AEP	Indiana Michigan Power Co	30	\$475	A3/A-	4.25	120	4	-3	121
8/6/2018	ASB	Associated Bank NA	3	\$300	Baa1/BBB	3.5	88	n.a.	-3	84
8/6/2018	AWK	American Water Capital Corp	10	\$625	A3/A	3.75	82	8	-2	84
8/6/2018	AWK	American Water Capital Corp	30	\$700	A3/A	4.2	112	8	-2	116
8/6/2018	BASGR	BASF SE	7	\$250	A1/A	0	n.a.	n.a.	n.a.	n.a.
8/6/2018	BK	Bank of New York Mellon Corp/The	5	\$750	A1/A	3.45	65	-1	-2	66
8/6/2018	BK	Bank of New York Mellon Corp/The	10	\$400	A1/A	3.85	75	4	-5	77
8/6/2018	DFS	Discover Bank	10	\$500	Ba1/BBB-	4.682	188	8	-4	189
8/6/2018	DUK	Duke Energy Progress LLC	5	\$300	Aa3/A	3.375	57	4	-3	54
8/6/2018	DUK	Duke Energy Progress LLC	10	\$500	Aa3/A	3.7	77	4	-5	75
8/6/2018	F	Ford Motor Credit Co LLC	3	\$500	Baa2/BBB	FRN	3mL+88	n.a.	n.a.	n.a.
8/6/2018	F	Ford Motor Credit Co LLC	3	\$1,150	Baa2/BBB	3.813	108	2	-4	109
8/6/2018	F	Ford Motor Credit Co LLC	7	\$600	Baa2/BBB	4.687	180	2	-2	187
8/6/2018	ICE	Intercontinental Exchange Inc	5	\$400	A2/A	3.45	65	n.a.	-4	63
8/6/2018	ICE	Intercontinental Exchange Inc	10	\$600	A2/A	3.75	90	n.a.	-6	92
8/6/2018	ICE	Intercontinental Exchange Inc	30	\$1,250	A2/A	4.25	120	n.a.	-6	123
8/6/2018	NEE	NextEra Energy Capital Holdings Inc	2	\$700	Baa1/BBB+	3.342	55	7	-4	52
8/6/2018	PCAR	PACCAR Financial Corp	3	\$350	A1/A+	3.15	43	-3	-3	42
8/6/2018	PCAR	PACCAR Financial Corp	5	\$300	A1/A+	3.4	60	6	-2	60
8/6/2018	PRU	Prudential Financial Inc	40	\$500	Baa2/BBB+	5.625	n.a.	n.a.	n.a.	n.a.
8/6/2018	UBS	UBS AG/London	18m	\$93	Aa3/A+	0	n.a.	n.a.	n.a.	n.a.
8/6/2018	VTR	Ventas Realty LP	10	\$750	Baa1/BBB+	4.4	147	-1	-4	143
8/7/2018	ADVHEA	Advocate Health & Hospitals Corp	10	\$305	Aa3/NA	3.829	85	n.a.	-6	79
8/7/2018	ADVHEA	Advocate Health & Hospitals Corp	30	\$410	Aa3/NA	4.272	115	n.a.	-8	108
8/7/2018	BMW	BMW US Capital LLC	2	\$750	A1/A+	FRN	3mL+37	n.a.	n.a.	n.a.
8/7/2018	BMW	BMW US Capital LLC	2	\$500	A1/A+	3.25	58	-3	-6	49
8/7/2018	BMW	BMW US Capital LLC	3	\$750	A1/A+	FRN	3mL+50	n.a.	n.a.	n.a.
8/7/2018	BMW	BMW US Capital LLC	3	\$500	A1/A+	3.4	68	3	-6	65
8/7/2018	BMW	BMW US Capital LLC	10	\$500	A1/A+	3.95	100	0	-2	98
8/7/2018	BNP	BNP Paribas SA	10	\$2,000	Baa1/A-	4.4	150	n.a.	-3	164
8/7/2018	BRK	Berkshire Hathaway Finance Corp	30	\$2,350	Aa2/AA	4.2	110	-2	-1	115
8/7/2018	EXC	Commonwealth Edison Co	10	\$550	A1/A-	3.7	75	-2	-2	75
8/7/2018	H	Hyatt Hotels Corp	10	\$400	Baa2/BBB	4.375	142	-1	0	145
8/7/2018	ONCCTX	Oncor Electric Delivery Co LLC	10	\$350	A2/A+	3.7	73	-7	-7	72
8/7/2018	ONCCTX	Oncor Electric Delivery Co LLC	30	\$450	A2/A+	4.1	98	-1	-1	100
8/7/2018	PNW	Arizona Public Service Co	30	\$300	A2/A-	4.2	112	2	-2	117
8/7/2018	RL	Ralph Lauren Corp	7	\$400	A2/A-	3.75	90	n.a.	n.a.	90
8/7/2018	USB	US Bancorp	PERP	\$575	A3/BBB	5.5	n.a.	n.a.	n.a.	n.a.
8/7/2018	WES	Western Gas Partners LP	10	\$400	Ba1/BBB-	4.75	180	-7	0	183
8/7/2018	WES	Western Gas Partners LP	30	\$350	Ba1/BBB-	5.5	245	-12	1	246
8/7/2018	WFC	Wells Fargo Bank NA	5	\$2,750	Aa2/A+	3.55	75	n.a.	-2	75
8/8/2018	BNP	BNP Paribas SA	PERP	\$750	Ba1/BBB-	7	n.a.	n.a.	n.a.	n.a.
8/8/2018	ETR	Entergy Louisiana LLC	30	\$600	A2/A	4.2	110	n.a.	1	111
8/8/2018	FNF	Fidelity National Financial Inc	10	\$450	Baa2/BBB	4.5	163	n.a.	-6	160
8/8/2018	NFG	National Fuel Gas Co	10	\$300	Baa3/BBB	4.75	188	3	-4	196
8/8/2018	RF	Regions Bank/Birmingham AL	3	\$500	Baa2/A-	FRN	3mL+50	n.a.	n.a.	n.a.
8/8/2018	RF	Regions Bank/Birmingham AL	3	\$500	Baa2/A-	3.374	70	n.a.	-2	68
8/8/2018	RF	Regions Financial Corp	5	\$500	Baa2/BBB+	3.8	98	-7	-2	96
8/8/2018	SBUX	Starbucks Corp	7	\$1,250	Baa1/BBB+	3.8	90	0	-2	93
8/8/2018	SBUX	Starbucks Corp	10	\$750	Baa1/BBB+	4	105	1	-3	108
8/8/2018	SBUX	Starbucks Corp	30	\$1,000	Baa1/BBB+	4.5	145	-3	-3	149
8/9/2018	BNS	Bank of Nova Scotia/Houston	18m	\$100	A1/A+	FRN	3mL+20	n.a.	n.a.	n.a.
8/9/2018	CM	Canadian Imperial Bank of Commerce/ NY	18m	\$325	A1/A+	FRN	3mL+19	n.a.	n.a.	n.a.
8/9/2018	CNHI	CNH Industrial Capital LLC	5	\$500	Ba1/BBB	4.2	145	n.a.	-7	139
8/9/2018	LLOYDS	Lloyds Banking Group PLC	5	\$1,750	A3/BBB+	4.05	125	13	3	132
8/9/2018	LLOYDS	Lloyds Banking Group PLC	10	\$1,250	A3/BBB+	4.55	165	6	3	174
8/9/2018	WELL	Welltower Inc	5	\$600	Baa1/BBB+	3.95	115	-3	n.a.	114
8/9/2018	WELL	Welltower Inc	10	\$200	Baa1/BBB+	4.25	145	7	n.a.	145
8/9/2018	WELL	Welltower Inc	30	\$500	Baa1/BBB+	4.95	190	7	n.a.	191

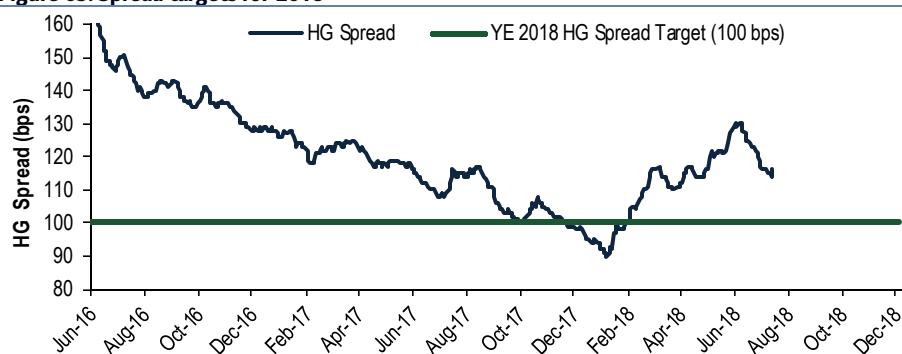
\* We define the break performance as the difference between the new issue spread and the initial secondary market spread on the first day of trading.

Source: BofA Merrill Lynch Global Research



## Spread and supply forecasts

Figure 63: Spread targets for 2018



Source: BofA Merrill Lynch Global Research

## Sector views

Figure 64: BofAML High Grade Sector Views Summary

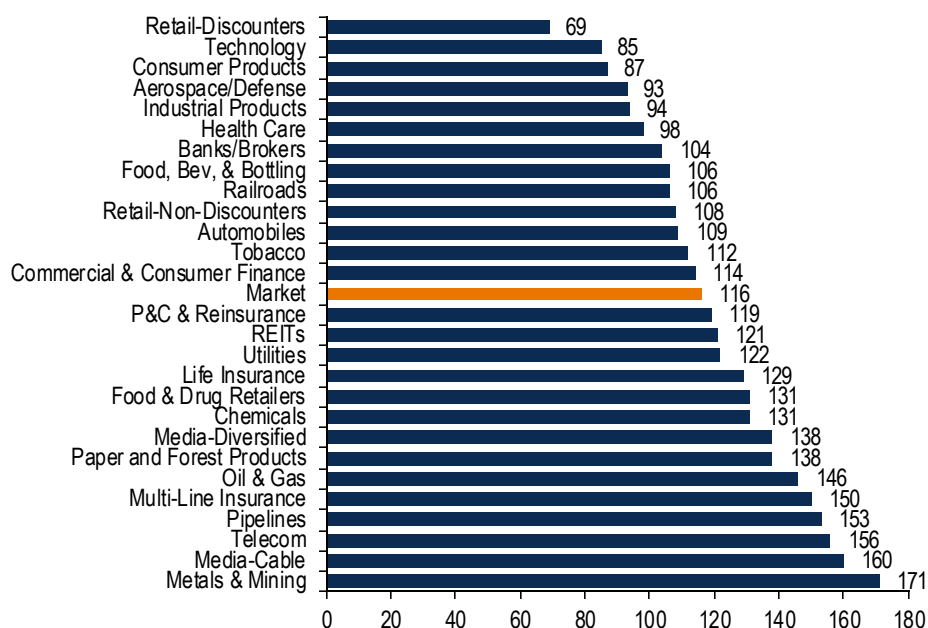
Overweight	View	Market weight	View	Underweight	View
Energy	Over	Basic Materials	Market	Aerospace & Defense	Under
Oil & Gas	Market	Chemicals	Market	Automobiles	Under
Pipelines	Over	Metals & Mining	Market	Banks/Brokers	Under
Insurance	Over	Paper and Forest Products	Over	Consumer Products	Under
Life Insurance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

Source: BofA Merrill Lynch Global Research

## High Grade Spreads by Sector

Figure 65: High grade spreads by sector (bps)

Sector spreads for BofAML HG U.S. Corporate Master COA0 as of August 09, 2018. Results include subordinated and hybrid securities.



Source: BofA Merrill Lynch Global Research

## High grade sector historical performance

Figure 66: High Grade Sector Performance as of August 09, 2018

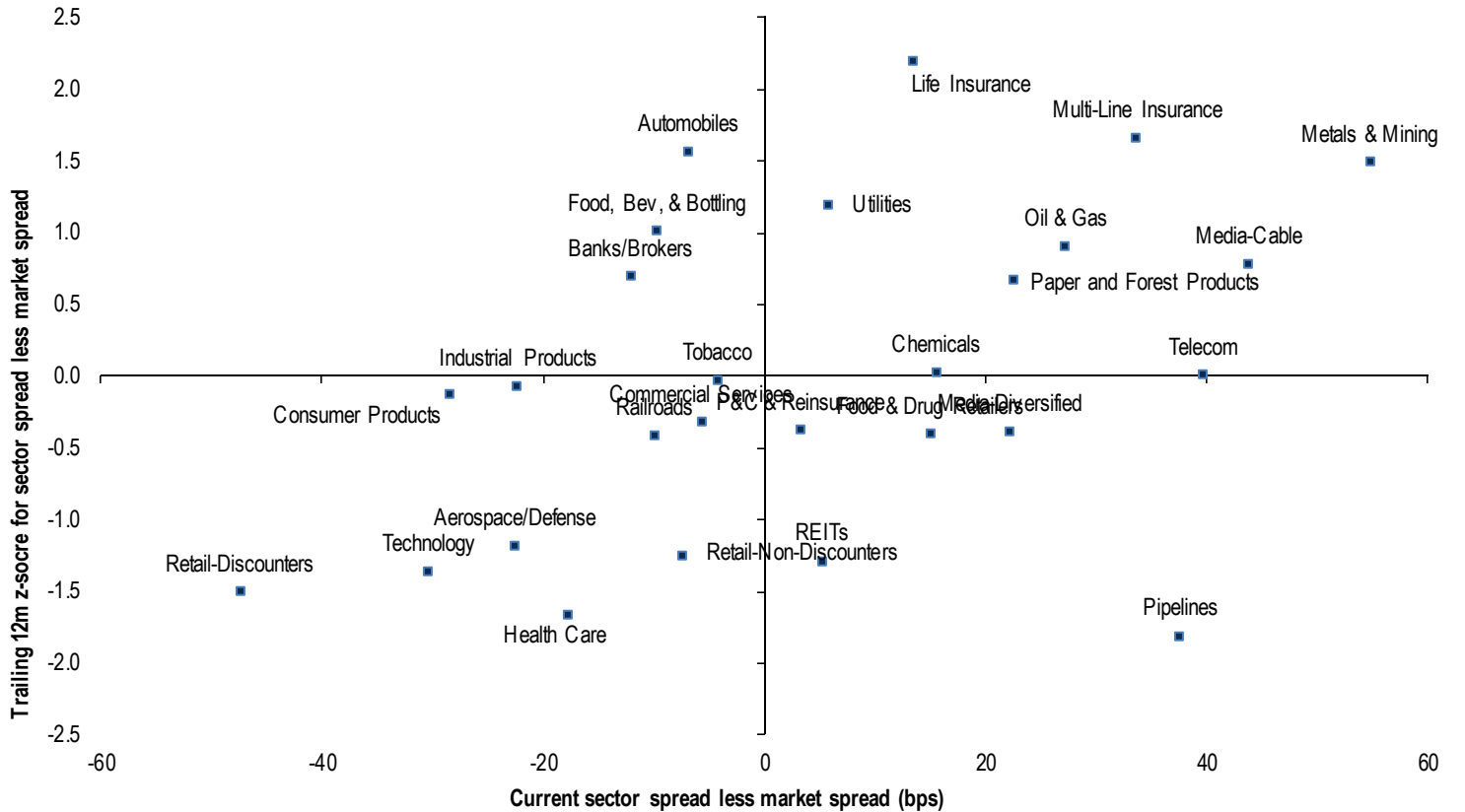
Sector spreads and performance for BofAML HG U.S. Corporate Master COAO. Results include subordinated and hybrid securities

	Sector	Rating	OAS	Yield	Price	Face (\$bn)	% Mkt Value	MTD	QTD	YTD	YOY	Excess Return (bps)		Spread Change (bps)		Total Return	
												MTD	QTD	YTD	YOY	QTD	YTD
Aerospace/Defense		BBB1	93	3.81	100.7	101.2	1.61	-11	121	-73	54	0	-13	12	2	79	
Automobiles		A3	109	3.85	99.1	171.8	2.69	1	43	-75	91	-2	-7	23	8	36	
Banks/Brokers		A3	104	3.83	99.8	1,504.9	23.66	6	104	-49	96	-2	-14	22	5	91	
Basic Materials		BBB2	147	4.35	102.3	279.1	4.51	-6	112	-85	139	2	-13	22	5	75	
Building Materials		BBB2	142	4.31	97.9	30.8	0.48	-5	83	-194	-42	-1	-9	30	17	42	
Chemicals		BBB2	131	4.17	100.6	115.6	1.84	-3	107	-65	87	1	-16	15	3	75	
Homebuilders		BBB2	148	4.29	99.2	3.6	0.06	7	29	-102	-21	-2	-5	34	20	13	
Metals & Mining		BBB1	171	4.61	105.0	90.0	1.50	-17	119	-81	254	5	-10	29	7	76	
Paper and Forest Products		BBB2	138	4.25	104.5	39.2	0.65	6	137	-66	134	-1	-16	21	2	106	
Commercial Services		A3	110	4.00	101.6	65.7	1.05	13	75	12	147	-1	-8	10	2	21	
Consumer Products		A3	87	3.73	99.7	66.3	1.04	17	59	-72	-24	-3	-9	14	9	26	
Energy		BBB1	149	4.37	102.1	702.5	11.35	-12	148	9	238	2	-15	18	-1	109	
Oil & Gas		A3	146	4.34	102.0	449.8	7.25	-26	106	-21	225	4	-10	22	2	69	
Pipelines		BBB2	153	4.43	102.4	252.8	4.10	14	222	60	259	-2	-25	6	-10	180	
Finance		BBB1	123	4.05	100.5	105.5	1.67	10	74	-20	106	-2	-9	19	10	56	
Commercial & Consumer Finance		BBB1	114	3.91	99.2	49.3	0.77	12	69	-11	91	-2	-13	19	10	63	
Finance-Other Services		A3	131	4.17	101.6	56.2	0.90	9	79	-23	125	-1	-6	17	9	51	
Food, Bev, & Bottling		BBB1	106	3.93	99.8	271.4	4.26	-13	119	-94	38	0	-14	22	11	82	
Health Care		A3	98	3.87	100.8	512.8	8.16	-2	134	-49	75	-1	-15	14	1	89	
Industrial Products		A3	94	3.78	100.6	188.2	2.99	-1	78	-92	-14	0	-10	16	12	45	
Insurance		A3	128	4.15	103.2	259.2	4.22	19	127	-62	85	-2	-12	20	11	85	
Insurance-Other		BBB1	120	4.06	101.9	15.6	0.25	27	126	-70	72	-2	-11	17	-1	94	
Life Insurance		A2	129	4.15	102.3	143.8	2.32	16	121	-61	88	-2	-12	22	12	83	
Multi-Line Insurance		BBB1	150	4.40	103.0	27.2	0.44	16	193	-161	35	-2	-14	31	18	146	
P&C & Reinsurance		A3	119	4.08	105.1	72.6	1.21	23	113	-28	97	-3	-12	12	8	65	
Leisure		BBB2	110	3.91	99.9	11.0	0.17	18	70	-3	119	-3	-11	4	-13	60	
Media & Entertainment		BBB1	149	4.39	101.7	198.7	3.20	-19	230	-84	103	1	-22	23	7	185	
Media-Cable		BBB1	160	4.52	101.0	100.9	1.61	-18	257	-161	31	0	-25	32	12	204	
Media-Diversified		BBB1	138	4.27	102.5	96.1	1.56	-20	207	-8	173	1	-20	13	2	168	
Media-Publishing		BBB1	86	3.67	98.5	1.6	0.03	9	40	11	118	-2	-7	7	-42	37	
Real Estate Dev & Mgt		BBB1	136	4.21	100.8	4.9	0.08	6	75	46	201	-1	-10	13	-9	63	
REITs		BBB1	121	4.06	98.9	142.7	2.23	24	98	9	155	-4	-13	11	-3	79	
Retail		A3	103	3.92	100.7	265.1	4.22	-14	147	-34	138	0	-17	12	-3	102	
Food & Drug Retailers		BBB2	131	4.19	99.9	87.7	1.39	-32	144	-41	32	1	-18	13	12	105	
Retail-Discounters		A1	69	3.58	102.1	82.4	1.33	-14	137	-54	178	1	-14	9	-7	88	
Retail-Non-Discounters		BBB1	108	3.99	100.2	95.0	1.50	2	159	-17	161	-1	-17	8	-8	111	
Technology		A1	85	3.71	99.8	470.4	7.40	-9	122	2	158	-1	-15	6	-6	86	
Telecom		BBB1	156	4.47	100.9	268.7	4.30	-33	231	59	275	2	-21	13	3	181	
Tobacco		BBB1	112	3.97	99.6	65.5	1.03	-21	153	-114	63	1	-19	20	8	116	
Transportation		BBB1	119	4.10	100.7	142.9	2.27	-2	177	-88	64	0	-15	18	8	122	
Railroads		A3	106	4.01	102.4	77.0	1.25	-2	217	-106	69	0	-17	17	2	145	
Transportation-Other		BBB1	134	4.20	98.7	65.9	1.03	-3	129	-69	57	-1	-13	20	13	93	
Utilities		A3	122	4.14	102.6	486.3	7.88	10	118	-75	58	0	-11	17	9	61	
Market		A3	116	4.02	100.8	6,284.6	100.00	-2	126	-41	118	0	-14	17	4	92	

Source: BofA Merrill Lynch Global Research

# Sector performance and relative value

Figure 67: Trailing 12 month spread Z-score vs. current sector spread differential to the market



Source: BofA Merrill Lynch Global Research

## Supply statistics

Figure 68: High grade supply summary, \$bn

Sector	WTD	MTD	QTD	YTD
US Financials	14.4	15.5	49.8	214.1
US Industrials	14.5	15.9	27.2	323.5
European Financials	5.8	5.8	9.3	93.1
European Industrials	3.3	3.3	3.9	81.9
EM Yankees	0.0	6.5	9.0	49.5
Non-Euro Non-EM Yankees	0.4	0.4	15.0	82.0
<b>Total</b>	<b>38.3</b>	<b>47.3</b>	<b>114.1</b>	<b>844.1</b>

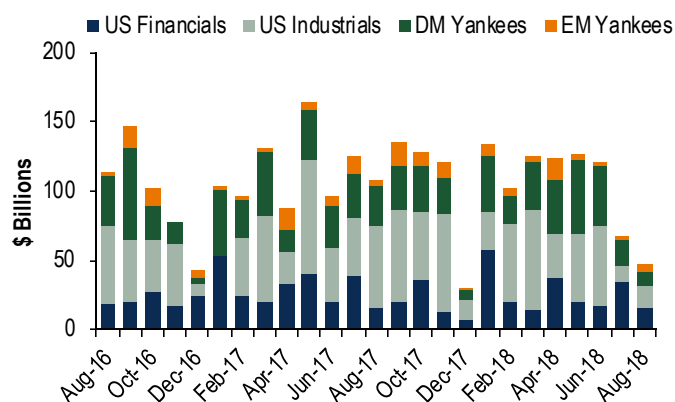
Source: BofA Merrill Lynch Global Research

Figure 70: Cumulative High grade supply YTD, \$bn

Sector	YTD 2015	YTD 2016	YTD 2017	YTD 2018
Financials	325.8	349.5	415.3	385.1
AAA-A Industrials	276.4	277.2	222.8	164.3
BBB Industrials	280.9	255.8	306.0	294.7
<b>Total</b>	<b>883.0</b>	<b>882.4</b>	<b>944.1</b>	<b>844.1</b>
<b>%-change</b>		<b>0%</b>	<b>7%</b>	<b>-11%</b>
US	613.3	573.7	631.3	537.6
Europe	139.0	161.0	156.3	174.9
EM	60.4	53.8	54.1	49.5
Other DM	70.3	93.9	102.4	82.0

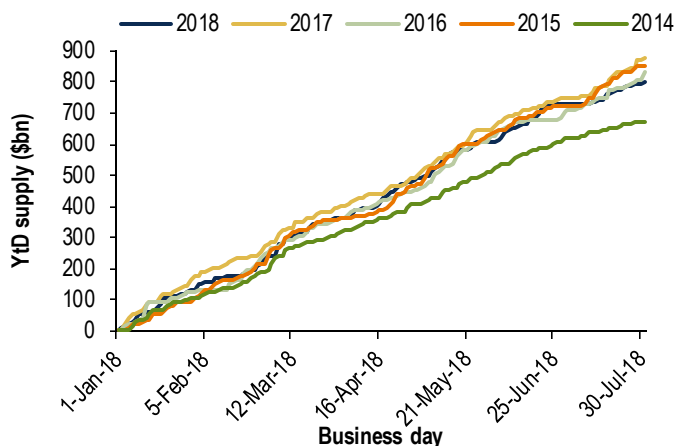
Source: BofA Merrill Lynch Global Research

Figure 69: HG monthly issuance, \$bn



Source: BofA Merrill Lynch Global Research

Figure 71: Cumulative High grade supply, \$bn



Source: BofA Merrill Lynch Global Research

## Announced vs actual tenders & related supply

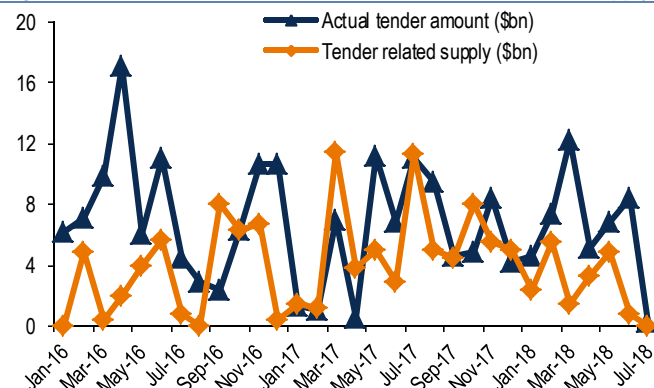
Figure 72: Pipeline of USD HG tender offer announcements (\$bn)



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

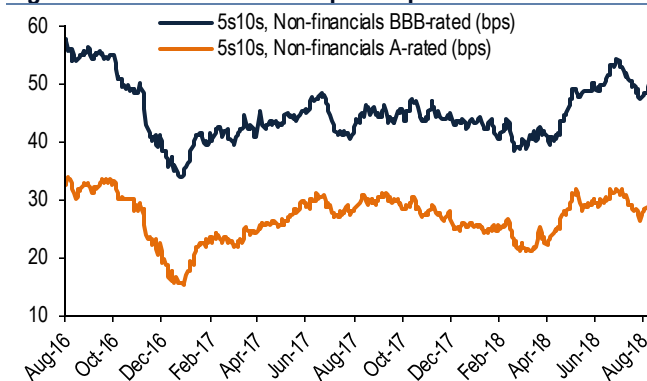


Note: Tender related supply refers to USD bonds with at least one HG rating from Moody's, S&P and Fitch that contains specific reference to "tender" in its use of proceeds language.

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

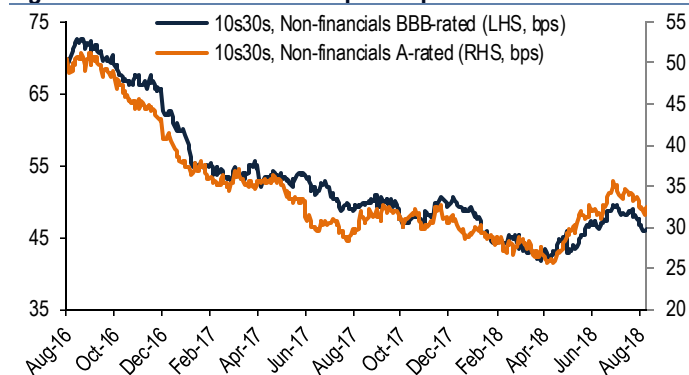
## Corporate spread curves

**Figure 74: 5s10s non-financial corporate spread curves**



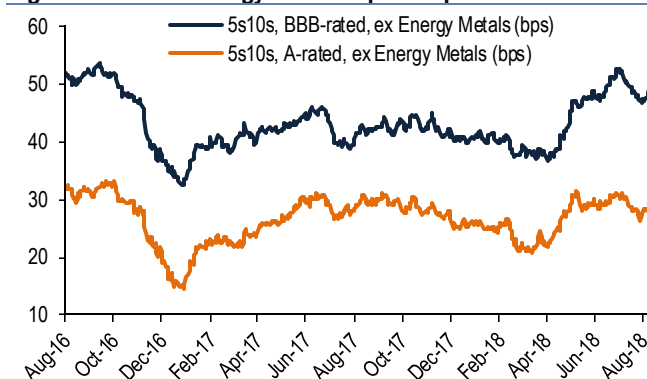
Note: the curve is computed for individual issuers first, and then aggregated to create the average.  
Source: BofA Merrill Lynch Global Research

**Figure 75: 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

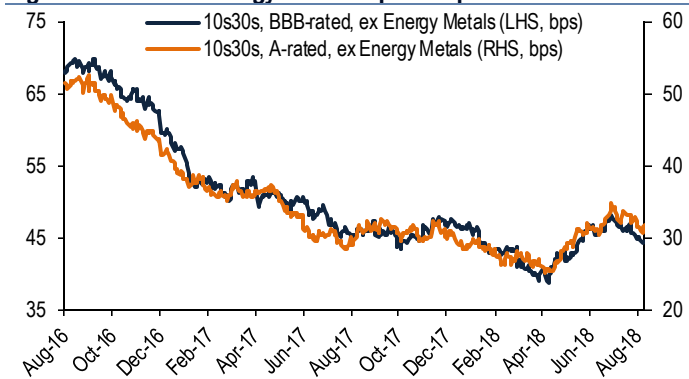
**Figure 76: 5s10s ex Energy Metals corporate spread curves**



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

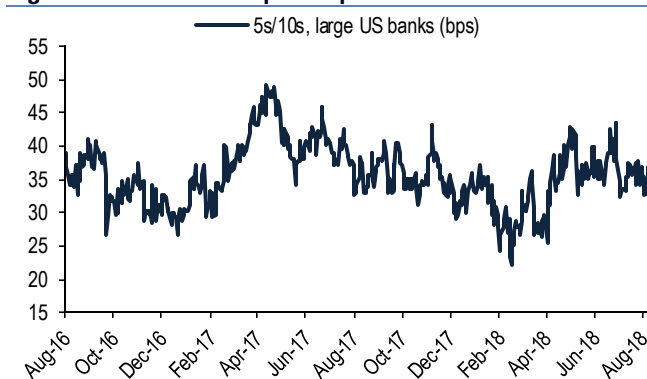
**Figure 77: 10s30s ex Energy Metals corporate spread curves**



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

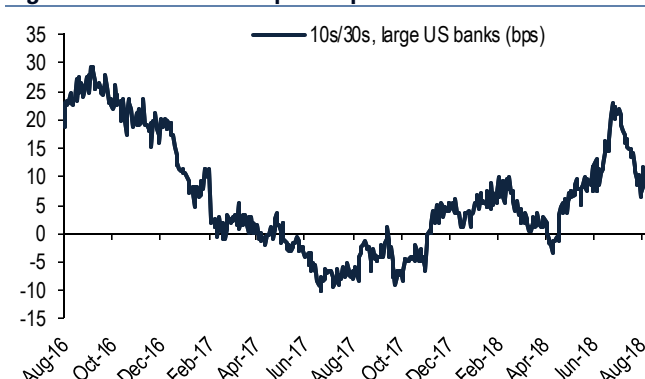
**Figure 78: 5s10s Banks corporate spread curves**



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 79: 10s30s Banks corporate spread curves**

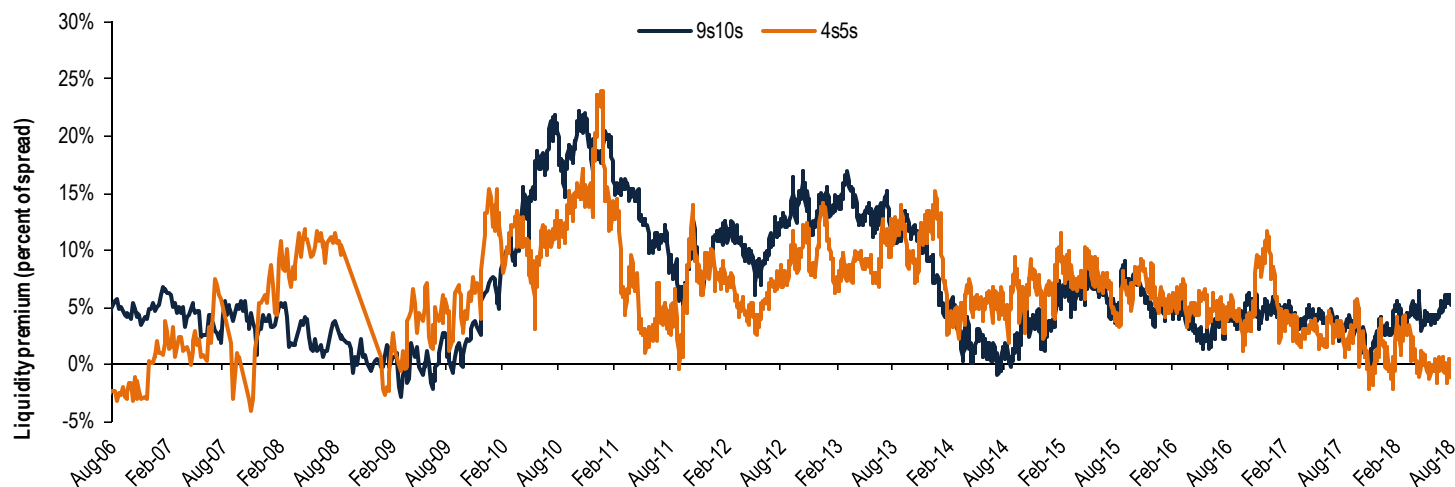


Note: the spread curve calculation is restricted to BAC, JPM, C and WFC that have senior bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average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

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

## Liquidity premium in high grade spreads

**Figure 80: Liquidity premium in high grade spreads**

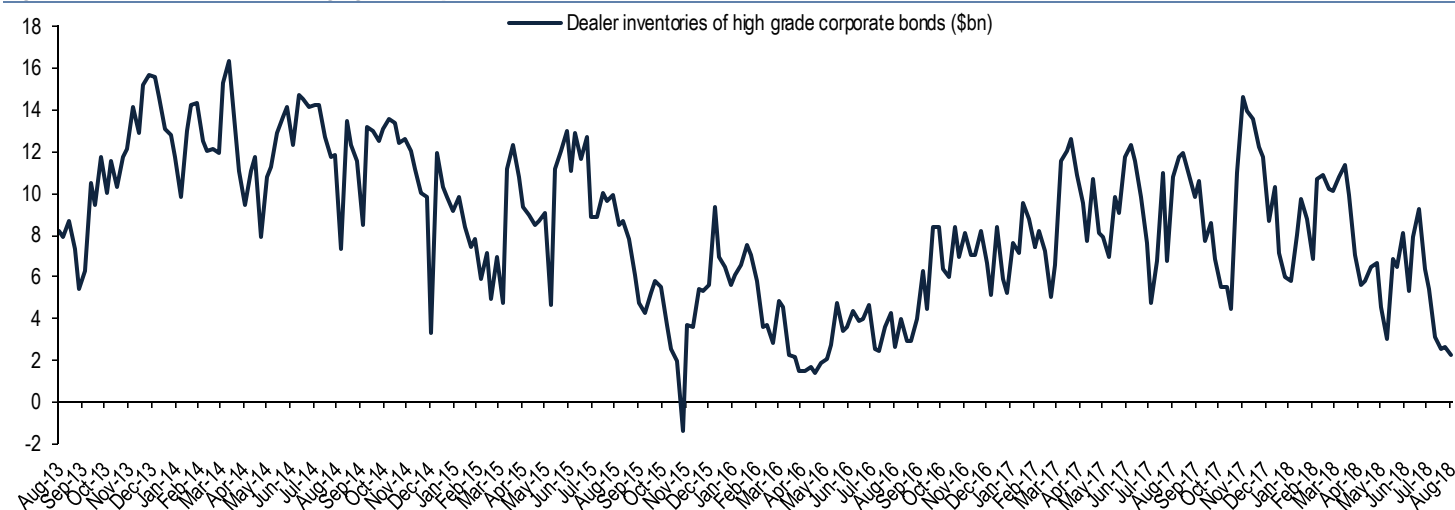


Note: our liquidity premium is the spread difference between old bonds that have rolled down to the 9, 8, 7, 6 and 4-year tenors and on-the-run 10-year and 5-year (for the 4-year tenor) bonds, adjusted for the credit curve.

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

## Dealer inventories

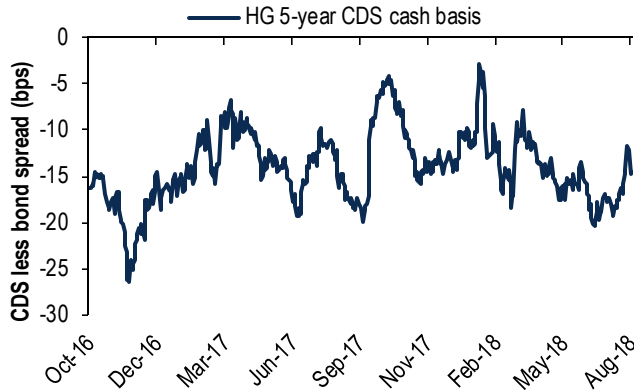
**Figure 81: Dealer inventories of high grade corporate bonds (\$bn)**



Source: BofA Merrill Lynch Global Research, Federal Reserve Bank

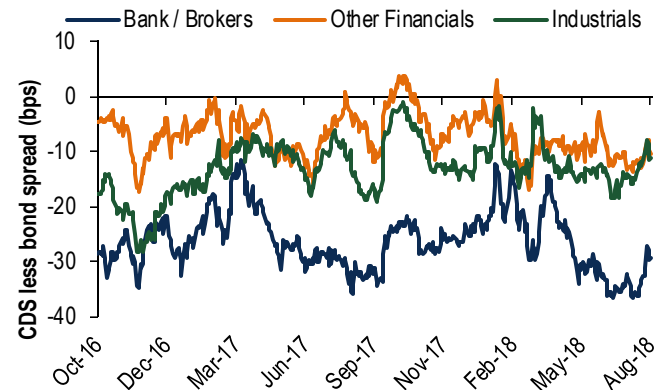
## CDS cash basis

Figure 82: 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

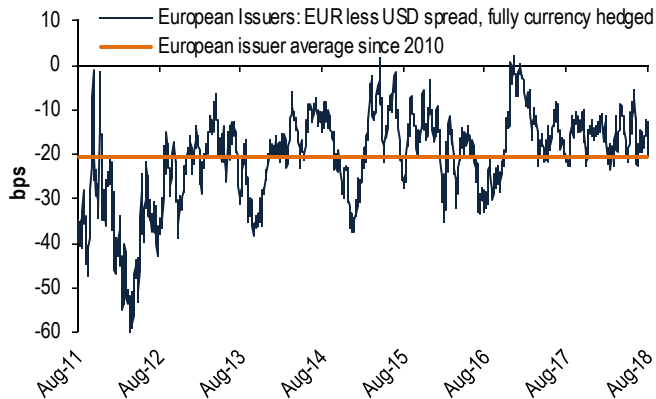
Figure 83: 5-year CDS cash basis by broad sector



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

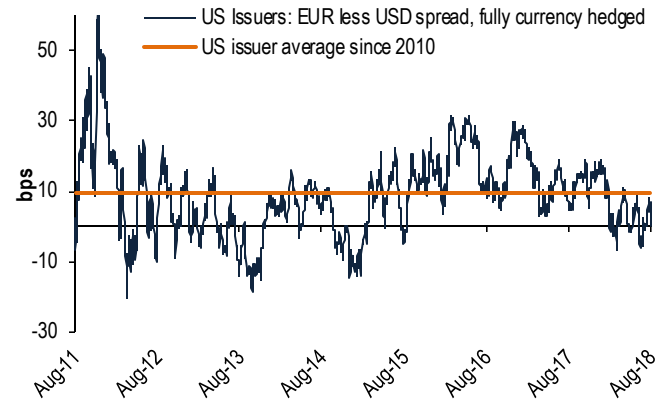
## USD EUR relative value

Figure 84: European issuers: relative EUR and USD spreads



Note: 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

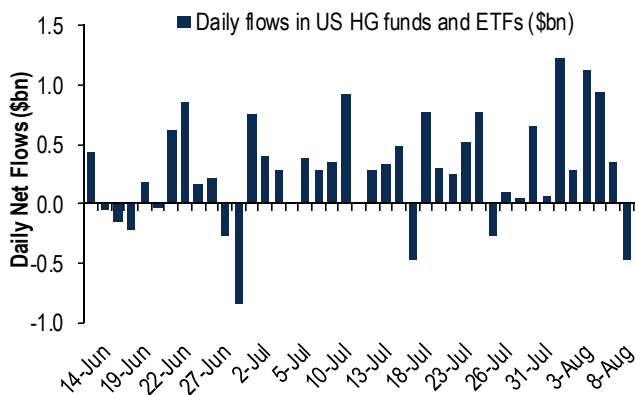
Figure 85: US issuers: relative EUR and USD spreads



Note: 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

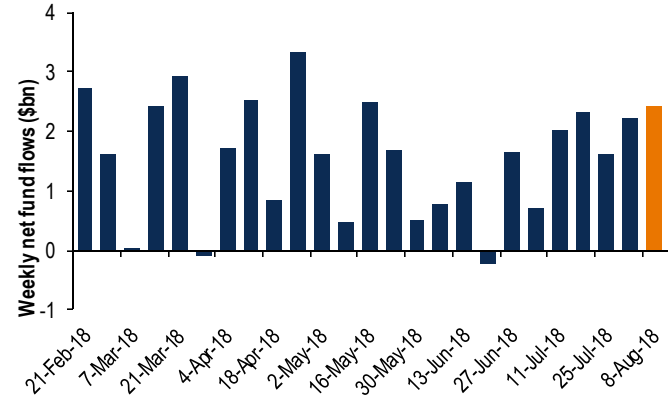
## Mutual fund flows

Figure 86: Daily flows in the US HG funds and ETFs (\$mn)



Source: BofA Merrill Lynch Global Research, EPFR Global

Figure 87: Weekly mutual fund net flows in HG credit funds

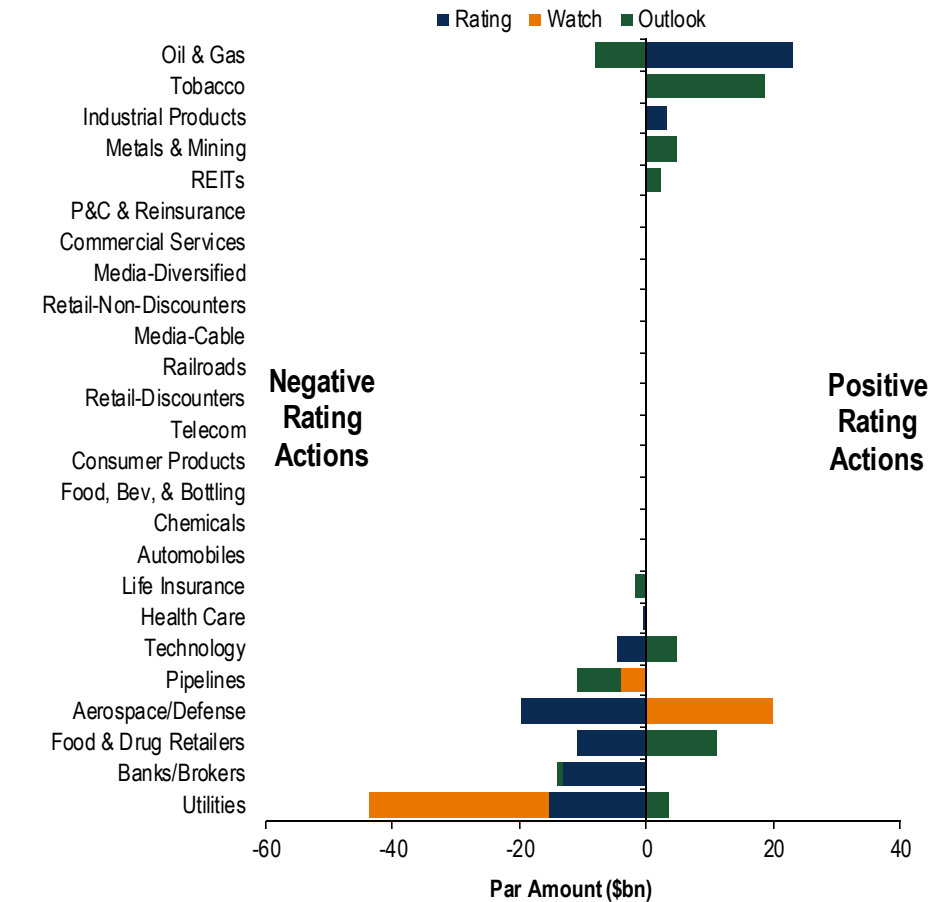


Source: BofA Merrill Lynch Global Research, EPFR

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# Rating actions summary

Figure 88: Weekly rating actions by sector, notional value in HG Master index



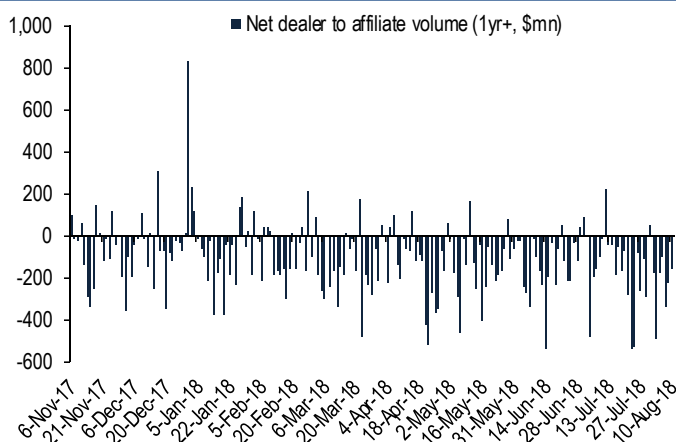
Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC



## Daily foreign demand tracker

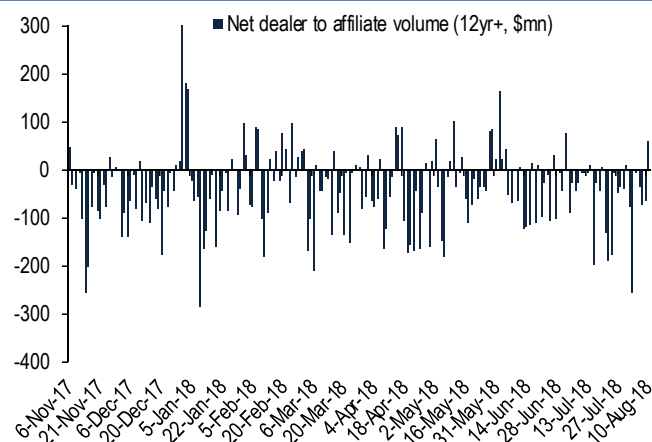
We believe net dealer-to-affiliate volumes from Trace are correlated with foreign buying of US HG corporate bonds - i.e., negative numbers mean foreign investor buying (US dealers taking down inventory in favor of foreign affiliates). For supporting material see our “primer” on tracking foreign inflows (See: [Credit Market Strategist: One year round-trip in spreads 15 July 2016](#)). Figure 89 shows the overall daily dealer-to-affiliate volumes while Figure 90, Figure 91 and Figure 92 show subsets of this data. In particular Figure 90 shows net dealer-to-affiliate volumes for longer maturity (12+ years) bonds, Figure 91 displays volumes reported to Trace before 8am NY time (biased toward Asian buying) and Figure 92 shows the subset of net trades reported between 8am and noon (biased toward European buying). Figure 89 and Figure 90 include data from today, whereas Figure 91 and Figure 92 run through the previous business day.

**Figure 89: Net dealer buying from affiliate (1yr+)**



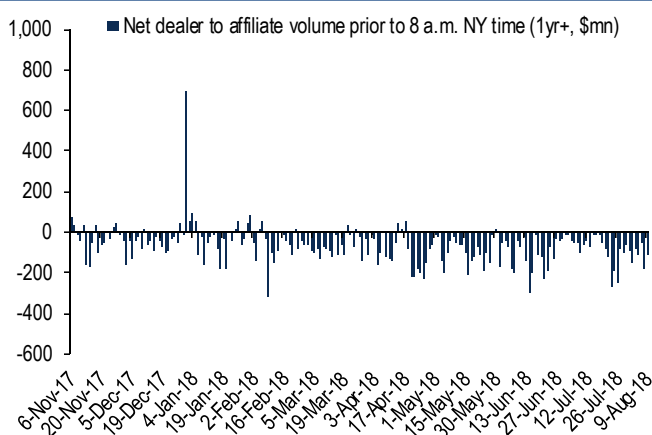
Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.  
Source: Bloomberg, TRACE

**Figure 90: Net dealer buying from affiliate (12yr+)**



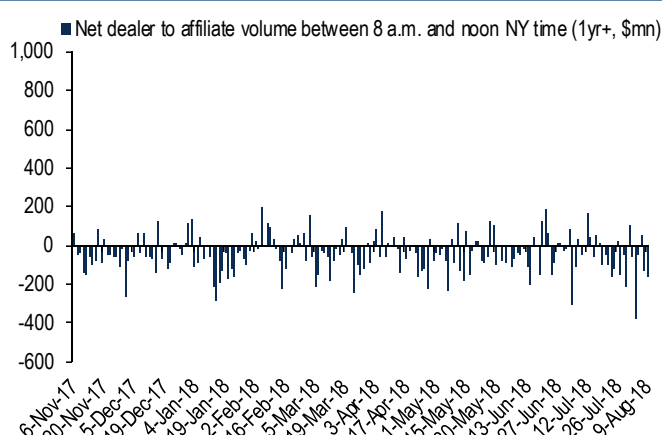
Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.  
Source: Bloomberg, TRACE

**Figure 91: 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 92: 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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