Credit Market Strategist

4Q19 = -4Q18

Credit Analysis

11 October 2019

- **4Q19 = -4Q18.** A trade truce between the US and China and apparent progress on Brexit led to a major rally in risk assets today and yesterday. While the precise details are unclear as of this writing we think the mere de-escalation of US-China tensions would be the catalyst for a 25bps rally in IG credit spreads into year-end. That leaves little reason to hedge credit exposure and we expect both domestic and foreign buying to pick up. The rally should be led by BBBs – especially in the 30-year sector – as tail risks fade.
- **Slow and steady.** After barely avoiding negative earnings growth the first two quarters of the year, consensus 3Q of -4.7% for IG companies sets a high hurdle for earnings beats required to avoid ending the quarter in red. However, note that part of this year's weakness in corporate earnings is temporary - due to foreign weakness and the big move higher in the dollar - and that we are likely to return to small positive numbers next year.
- **IG companies have become conservative.** As we have pointed out, remarkably the median IG non-financial company has not added debt for six consecutive quarters. At first sight this is counterintuitive given we are late cycle and thus normally would expect companies to use financial engineering to mitigate margin pressures and earnings declines. However, the main - but not only - reason IG companies have become conservative is that there is little additional debt capacity. Hence we expect IG credit fundamentals to be resilient despite low earnings growth. That makes IG a relative safe haven as a world screaming for dollar yield puts upward pressure on leverage in various US fixed income asset classes.
- **Optimal capital structure theory.** A fact receiving considerable attention is that US corporate debt is now at a record 47% share of GDP. Obviously it is important to analyze implications - especially for certain segments of the corporate debt market, and on the investor side in light of the risk of outflows. However, as we have argued, GDP is not an appropriate scale for corporate debt. Debt levels in optimal capital structures just happen to be at record levels relative to GDP, given the secular decline in interest rates. But there is no further implication of that as comparing corporate debt to GDP is like comparing apples to oranges.
- **Bang for the buck.** As our Japanese colleagues discuss recent data from the Japan Ministry of Finance through August showed a sharp increase in Japanese purchases of US Treasuries over the summer as global interest rates collapsed. The reason we bring this up is that with dollar hedging costs at the time around 2.5% there was no value in US Treasuries to Japanese investors on a currency hedged basis. Hence obviously they have chosen to take much more currency risk.
- **3Q-19 earnings preview.** For public US IG issuers bottom up analyst consensus is currently calling for earnings to decline 4.7% YoY while revenues are to grow 3.3%.
- **Flow: Bonds over stocks**. \$3.8bn US IG fund/ETF inflow.
- **Supply: Another light short week**. \$10.4bn this week. \$10-15bn next week.

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Recent credit strategy research

Publication	Name
Situation Room	Flows: bonds over stocks
Situation Room	3Q-19 earnings preview
Situation Room	Bang for the buck
Situation Room	Optimal capital structure theory
Monthly HG Market Review	Sep '19: Retracement
Credit Market Strategist	Sep '19 US Credit Investor Survey: Rising recession risk
Credit Market Strategist	Summer 2019 snapshot of the US HG market

Data and charts:

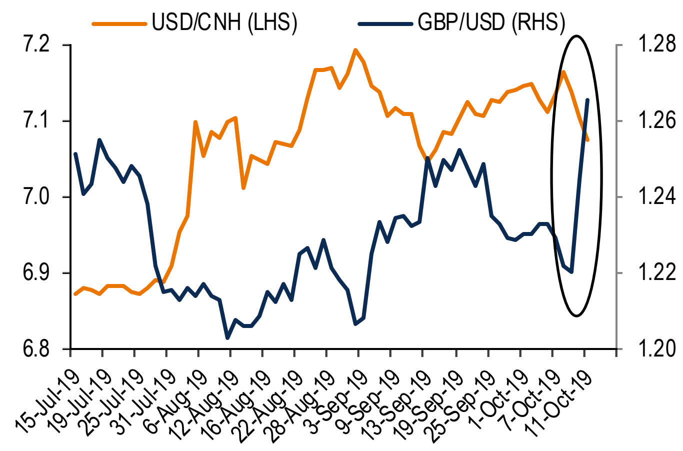
Timestamp: 11 October 2019 06:51PM EDT

Macro

4Q19 = -4Q18

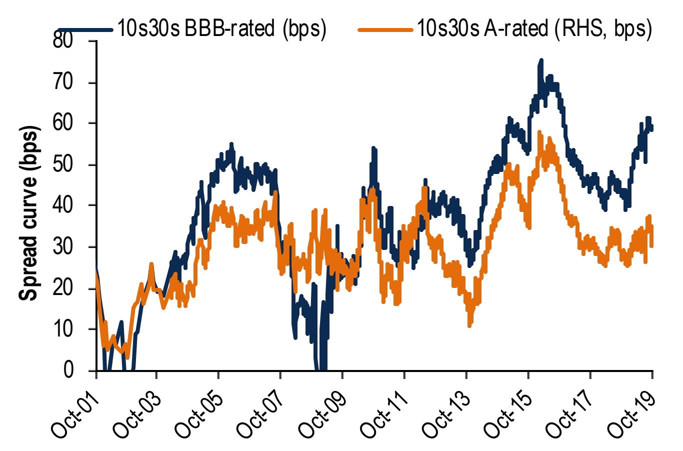
A trade truce between the US and China and apparent progress on Brexit (Figure 1) led to a major rally in risk assets today and yesterday. While the precise details are unclear as of this writing we think the mere de-escalation of US-China tensions would be the catalyst for a 25bps rally in IG credit spreads into year-end. That leaves little reason to hedge credit exposure and we expect both domestic and foreign buying to pick up. The rally should be led by BBBs on a risk-adjusted basis – especially in the 30-year sector (Figure 2) – as tail risks fade.

Figure 1: Positive news on US-China deal and Brexit



Source: Bloomberg

Figure 2: 10s/30s BBB spread curve should flatten

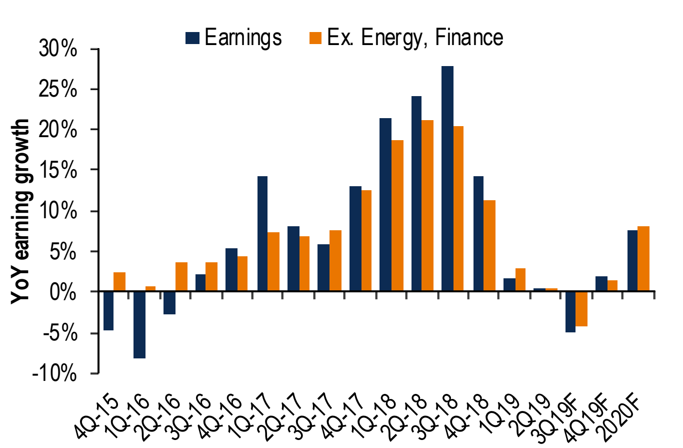


Source: BofA Merrill Lynch Global Research

Slow and steady

After barely avoiding negative earnings growth the first two quarters of the year, consensus 3Q of -4.7% for IG companies (Figure 3) sets a high hurdle for earnings beats required to avoid ending the quarter in red. However, note that part of this year's weakness in corporate earnings is temporary - due to foreign weakness and the big move higher in the dollar - and that we are likely to return to small positive numbers next year. In either case what this means is that there is little room for IG companies to increase debt levels without further erosion of credit fundamentals.

Figure 3: US IG issuer earnings growth

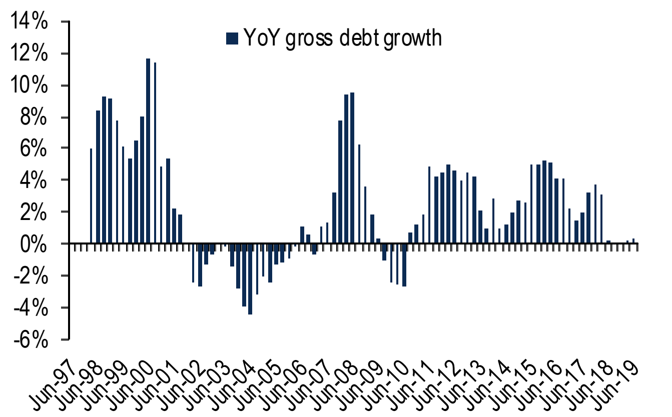


Source: BofA Merrill Lynch Global Research

IG companies have become conservative

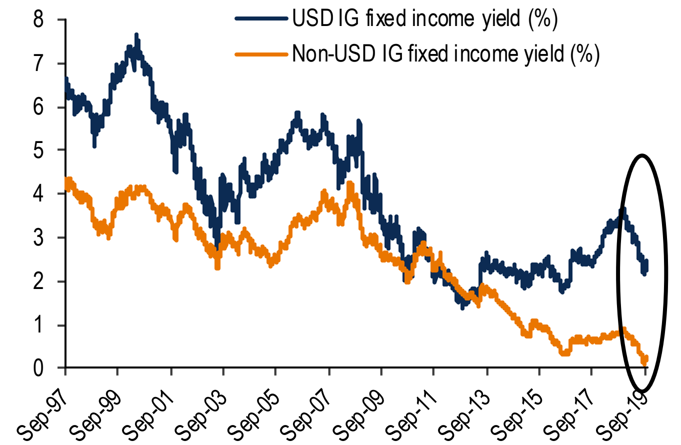
However, as we have pointed out, remarkably the median IG non-financial company has not added debt for six consecutive quarters (Figure 4). At first sight this is counterintuitive given we are late cycle and thus normally would expect companies to use financial engineering to mitigate margin pressures and earnings declines. However, the main - but not only - reason IG companies have become conservative is that there is little additional debt capacity. Hence we expect IG credit fundamentals to be resilient despite low earnings growth. That makes IG a relative safe haven in an environment of a world screaming for dollar yield (Figure 5) puts upward pressure on leverage in various US fixed income asset classes. The combination of a high share of foreign inflows and stable fundamentals makes US IG an attractive place for global fixed income investors.

Figure 4: Gross US IG issuer debt: ex. Financial & Utilities



Note: Medians based on the US HG universe (ex. Fins and Utilities). Universe is rebalanced each quarter. Adjusted for ASC 842 lease accounting rule change.
Source: BofA Merrill Lynch Global Research

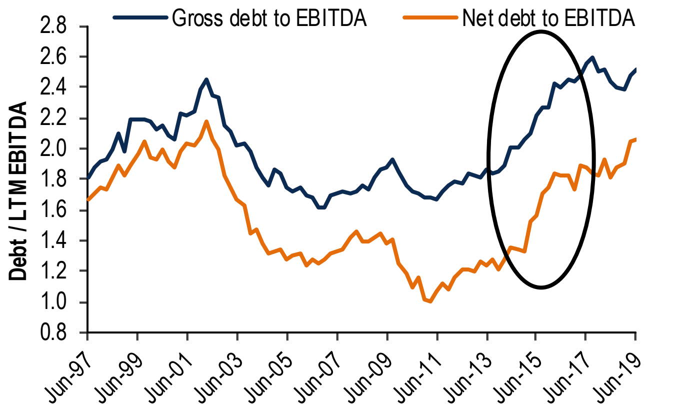
Figure 5: USD vs Non-USD IG fixed income yield



Note: Based on the ICE BofAML Global Broad Market Index (GBMI), which excludes some EM.
Source: ICE Data Indices, LLC, BofA Merrill Lynch Global Research

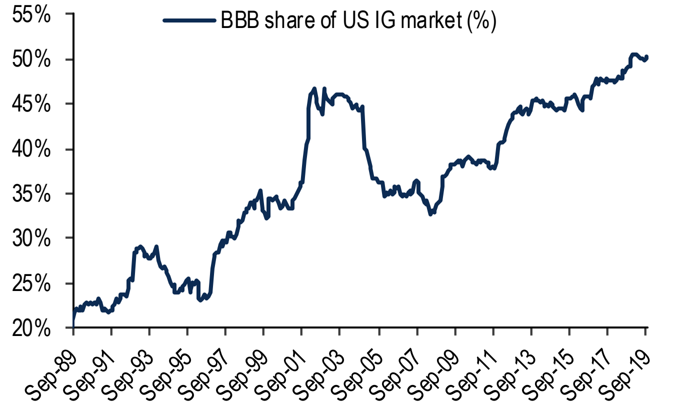
Why is there a lack of additional debt capacity in US IG? The reason is that IG companies responded to the secular decline in interest rates by adding debt (and equity) as they traded off lower weighted average cost of capital with higher default probabilities. A lot of this releveraging took place during the period 2014-2016, which seemed late cycle with weak economic growth, a recession in commodities and energy and interest rates that collapsed. IG companies very much responded like they are supposed to do by leveraging up (Figure 6). Sliding down in ratings quality from AA to A and BBB is fairly inconsequential for most non-financial companies. However, the cliff into HY is a game changer in many cases – especially for large companies. Hence, given that IG companies already leveraged up, a large segment of issuers have hit the wall leaving them with little capacity for further debt addition and in fact many will be reducing (Figure 7). Obviously we do expect higher rated (A-AAA) industrials to go through traditional late cycle deterioration in credit fundamentals - but that is offset by deleveraging BBBs as well as higher rated companies that have repatriated overseas earnings.

Figure 6: Net and gross US IG issuer leverage: ex. Financial & Utilities



Note: Medians based on the US HG universe (ex. Fins and Utilities). Universe is rebalanced each quarter. Adjusted for ASC 842 lease accounting rule change.
Source: BofA Merrill Lynch Global Research

Figure 7: BBB share of US IG corporate bond market



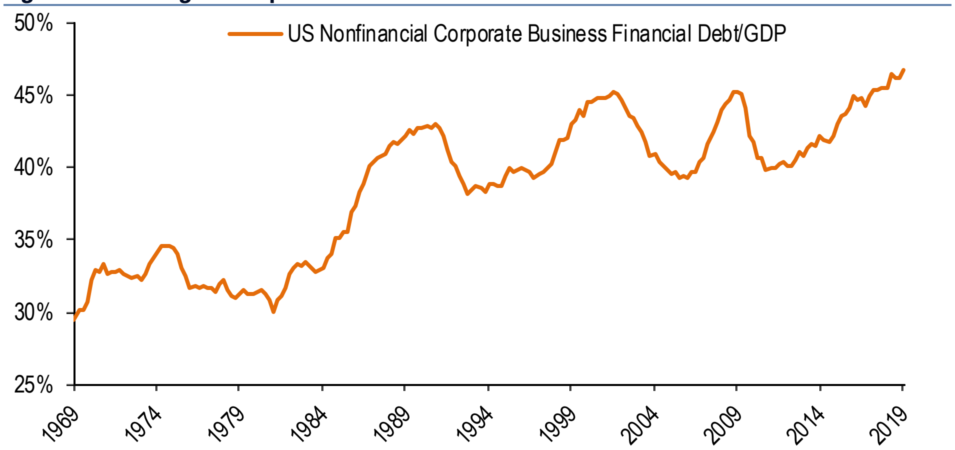
Source: ICE Data Indices, LLC

Previously published here
Situation Room: Optimal capital structure theory 07 October 2019

Optimal capital structure theory

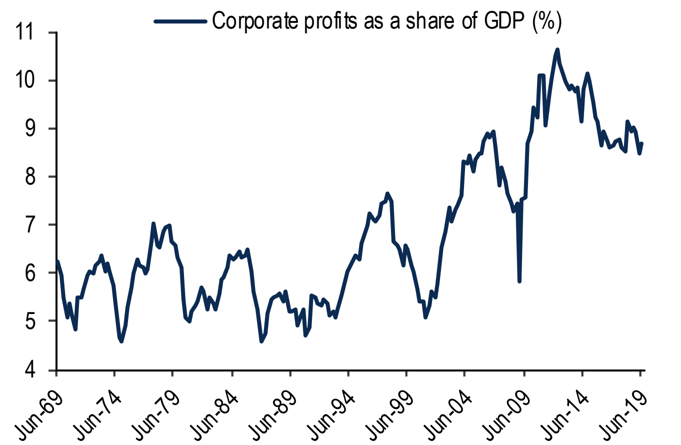
A fact receiving considerable attention – and today we got another question on it - is that US corporate debt is now at a record 47% share of GDP (Figure 8). Obviously it is important to analyze implications - especially for certain segments of the corporate debt market, and on the investor side in light of the risk of outflows. However, as we have argued, GDP is not an ideal scale for corporate debt. In one dimension is does appear appropriate, though, as corporate profits are part of GDP, which allows corporate debt to benefit from the fact the share of corporate profits in GDP is currently high (Figure 9). However, one of the defining aspects of the past couple of decades is a secular decline in interest rates, which has allowed the equity market multiple to expand (Figure 10). In other words there is currently high equity value per unit of earnings, and it is only natural with a similar situation on the debt side.

Figure 8: Record high US corporate debt/GDP



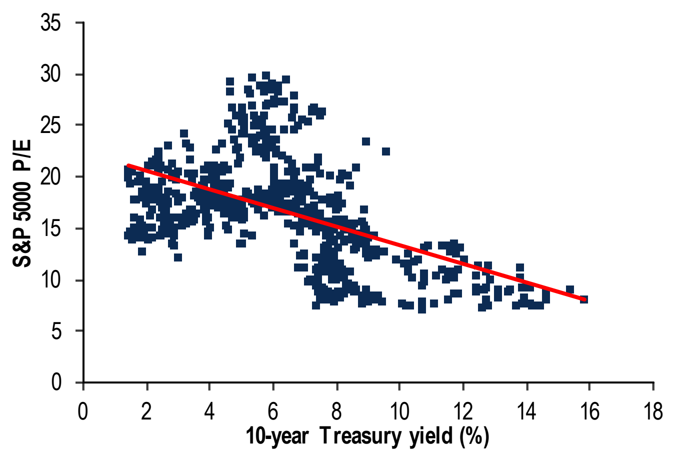
Source: Bureau of Economic Analysis, Federal Reserve, BofA Merrill Lynch Global Research

Figure 9: High US corporate profits as share of GDP



Source: Bureau of Economic Analysis, BofA Merrill Lynch Global Research

Figure 10: Equity market multiple expansion as interest rates declined



Source: Bloomberg, BofA Merrill Lynch Global Research

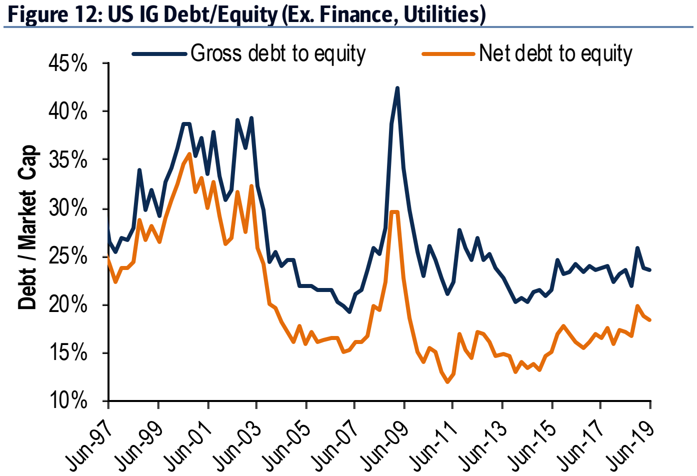
We think companies set optimal capital structures by maximizing shareholder value (and other objectives) while minimizing the weighted average cost of capital (WACC), which probably naturally translates into a certain leverage ratio - best defined as financial debt/equity market value. Currently debt/equity for US companies is 33%, which is just off the 28% all time low and well below the 57% average for the past 50 years (Figure 11). We see similar a pattern in our universe of US IG companies (Figure 12). In other words, compared to equity companies rely relatively less on debt these days than historically. However, obviously the increase in corporate profits, decline in interest rates and expansion of equity market multiples have allowed companies to use tremendous absolute amounts of debt and equity. But in both cases GDP is not an apples-to-apples denominator as even though it scales with earnings, there is no accounting for the secular shift lower in interest rates. .

What happened on the debt side appears straightforward – declining interest rates incentivized companies to use more debt in order to lower WACC. The trade-off is higher expected bankruptcy costs, as with more debt default probabilities are higher. Optimal capital structures nowadays lead to record high corporate-debt-to-GDP ratios. The flip side of the coin in saying corporate-debt-to-GDP is high is saying corporate-equity-to-GDP is also high.

Figure 11: US corporate debt to equity is currently very low

Source: Federal Reserve, BofA Merrill Lynch Global Research

Figure 12: US IG Debt/Equity (Ex. Finance, Utilities)



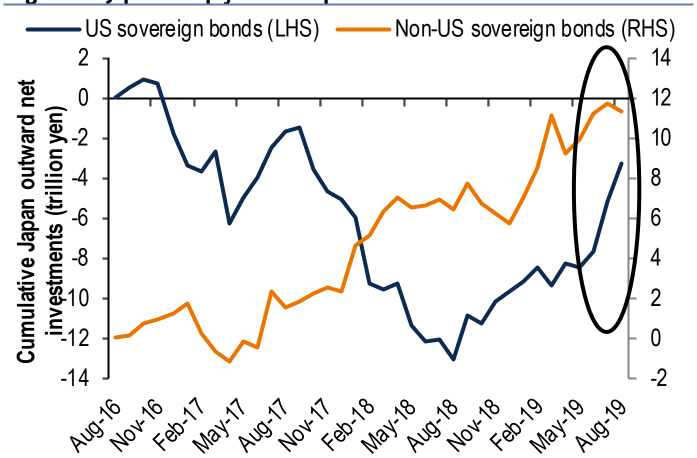
Note: Excludes leases that were capitalized in 1Q19 and 2Q19. Medians for US IG companies. Net debt is gross debt minus cash and marketable securities.
Source: BofA Merrill Lynch Global Research

Previously published here
Situation Room: Bang for the buck 08 October 2019

Bang for the buck

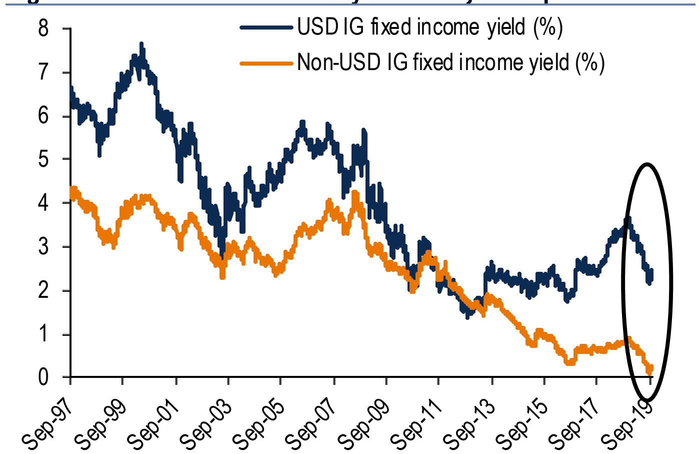
As our Japanese colleagues discuss below recent data from the Japan Ministry of Finance through August showed a sharp increase in Japanese purchases of US Treasuries over the summer as global interest rates collapsed – in part at the expense of European sovereign debt (Figure 13). The reason we bring this up is that with dollar hedging costs at the time around 2.5% there was no value in US Treasuries to Japanese investors on a currency hedged basis. Hence obviously they have chosen to take much more currency risk. Recall that we think the collapse in non-USD fixed income yields toward zero (Figure 14) is forcing foreign investors to take a lot more risk in at least four dimensions: (1) credit; (2) duration; (3) liquidity; and 4) currency (see: Yield to foreign investors 16 August 2019) We previously documented the first three (see: Four dimensional reach 29 September 2019). This fresh Japanese data strongly supports (4) as well.

Figure 13: Japan sharply increase purchase of UST over the summer



Source: BofA Merrill Lynch Global Research, Japan Ministry of Finance

Figure 14: Non-USD IG fixed income yield is now just 17bps



Note: Based on the ICE BofAML Global Broad Market Index (GBMI), which excludes some EM.
Source: ICE Data Indices, LLC, BofA Merrill Lynch Global Research

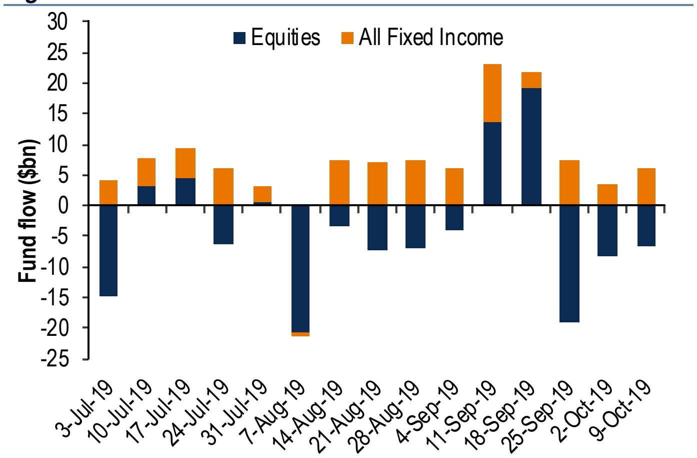
Previously published here
Situation Room: Flows: bonds over stocks 10 October 2019

Bonds over stocks

Inflows to US bond fund and ETF accelerated to $6.21bn this past week ending on October 9 from a $3.45bn inflow a week earlier. In contrast outflows from stocks have now continued for three consecutive weeks, although moderating to $6.61bn from an $8.36bn outflow in the prior week (Figure 15). The higher inflow to fixed income was driven by stronger flows for high yield, government bonds, global EM and munis, partially offset by weaker flows for high grade and leveraged loans.

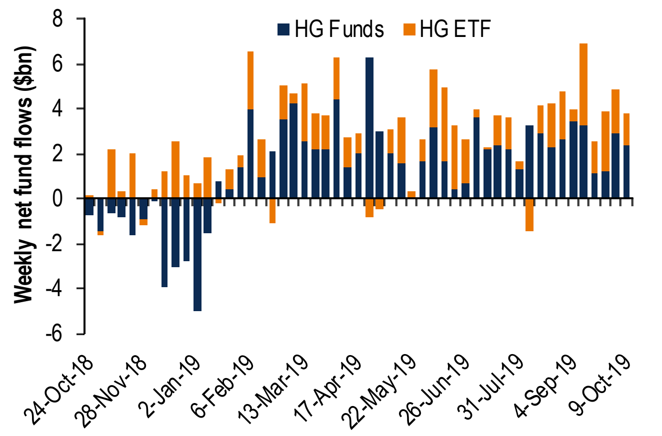
High grade inflows declined to $3.80bn from $4.89bn. The increase in short-term high grade inflows to $1.59bnfrom $0.07bn was offset by a decline in inflows ex. short-term to $2.21bn from $4.83bn. High grade inflows were lower for both funds (to $2.40bn from $2.91bn) and ETFs (to $1.40bn from $1.99bn, Figure 16). Flows also weakened for loans where outflows accelerated to $0.72bn from $0.52bn. On the other hand high yield flows turned positive with a small $0.02bn inflow following a $0.45bn outflow. Similarly government bonds enjoyed a $1.30bn inflow after a $0.23bn outflow. Outflows from global EM bonds moderated to $0.34bn from $1.26bn, while inflows to munis accelerated to $1.16bn from $0.64bn. Finally money market inflows were $7.55bn this past week and $15.22bn in the prior week.

Figure 15: Flows for the broad US asset classes: stocks and bonds



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

Figure 16: High grade fund and ETF flows, $bn



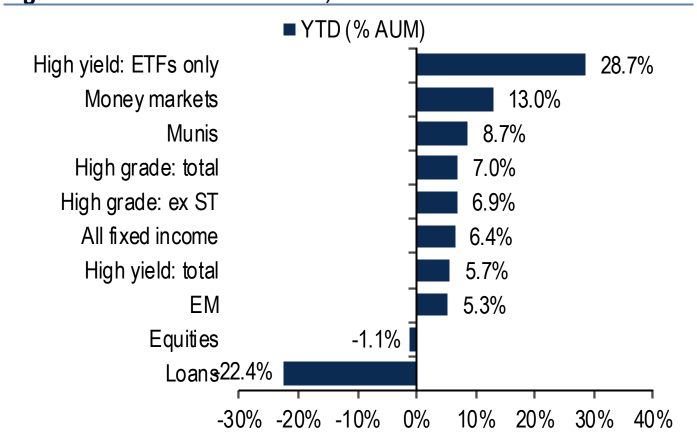
Note: data are for US-domiciled funds only.
Source: EPFR Global.

Figure 17: 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	0.23%	7.0%	202.7
High grade: ex short-term	0.31%	6.9%	152.1
High yield: total	0.01%	5.7%	16.3
High yield: ETFs only	-0.65%	28.7%	10.4
Loans	-0.93%	-22.4%	-32.2
EM	-0.07%	5.3%	30.7
Munis	0.24%	8.7%	67.3
All fixed income	0.21%	6.4%	305.6
Money markets	0.24%	13.0%	418.1
Equities	-0.10%	-1.1%	-129.7

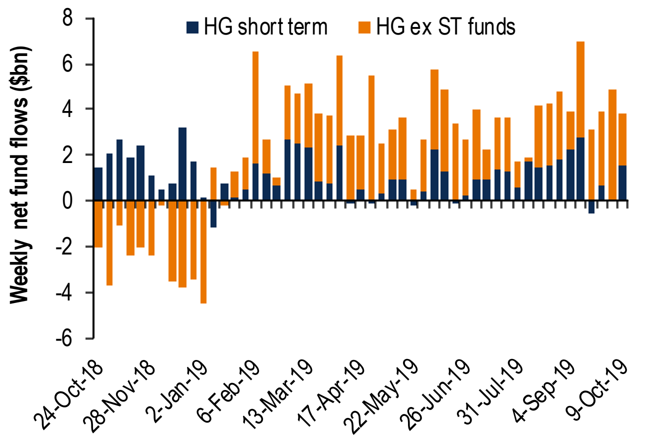
Note: Last week flow as % of AUM is based on AUM for weekly reporting funds / ETFs only. YTD flow as % of AUM is based on AUM for the full fund/ ETF universe as of December 31 2018. Global EM funds, US-domiciled funds only for other fund types.
Source: EPFR Global, BofA Merrill Lynch Global Research

Figure 18: Year to date fund flows, % of AUM



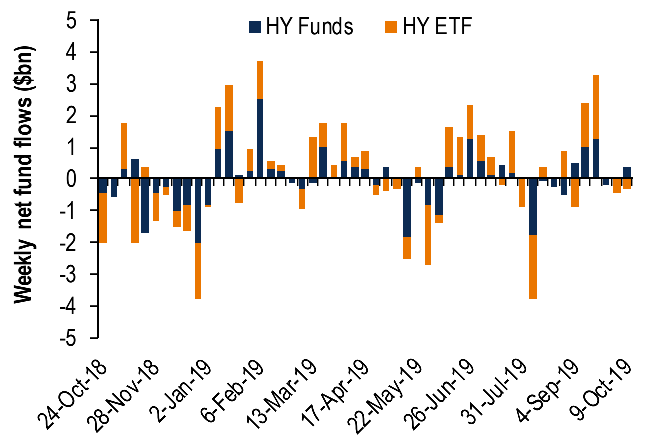
Note: Global EM funds, US-domiciled funds only for other fund types.
Source: EPFR Global, BofA Merrill Lynch Global Research

Figure 19: Weekly high grade fund flows, $bn



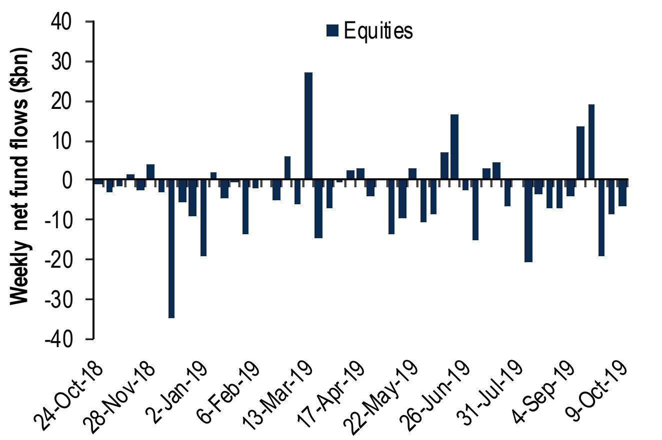
Note: the flows data is for US-domiciled funds and ETFs. The flows include high grade bond funds, high grade corporate bond bunds, and total return bond funds. We exclude two volatile funds from our aggregate data. Short-term refers to duration of 0 to 4 years.
Source: EPFR Global, BofA Merrill Lynch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

Figure 20: Weekly high yield fund flows, $bn



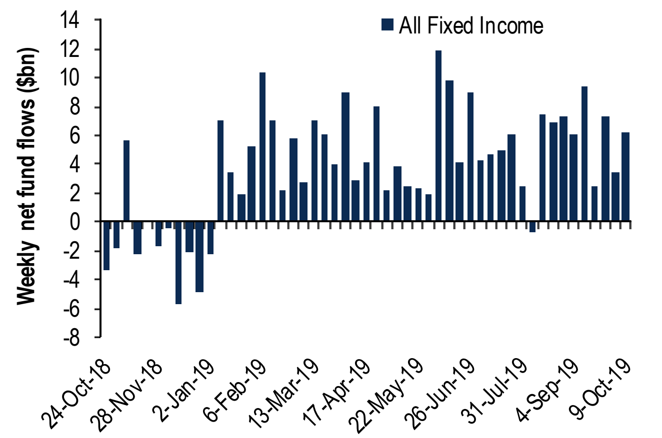
Note: the flows data is for US-domiciled funds and ETFs.
Source: EPFR Global.

Figure 21: Weekly equity fund flows, $bn



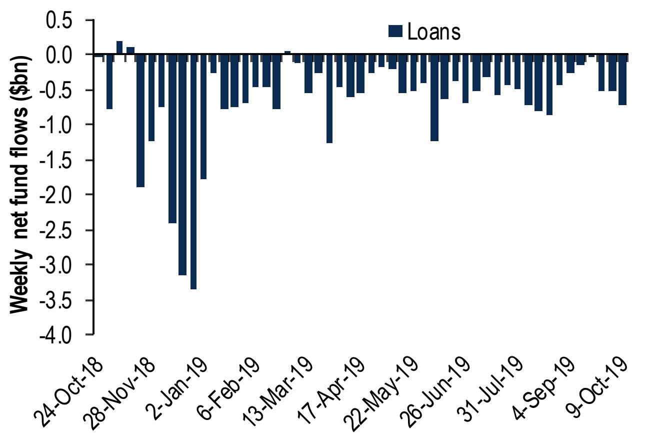
Note: the flows data is for US-domiciled funds and ETFs.
Source: EPFR Global.

Figure 22: Weekly fixed income fund flows, $bn



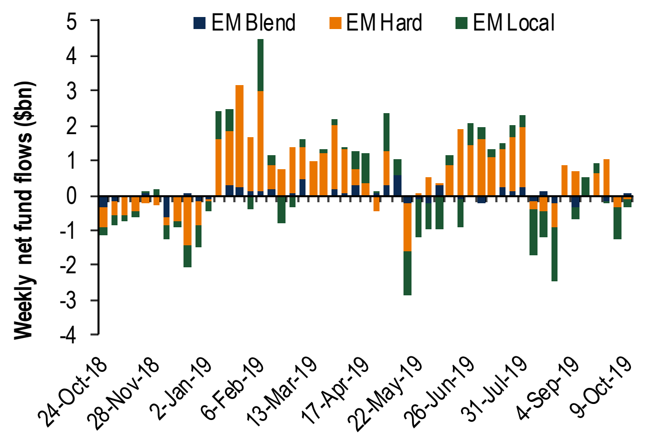
Note: the flows data is for US-domiciled funds and ETFs. The flows include the following asset classes: high grade (corporate and government), high yield, mortgage backed, floating rate, total return, municipals, inflation protected.
Source: EPFR Global.

Figure 23: Weekly loan fund flows, $bn



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

Figure 24: Weekly EM fund flows, $bn



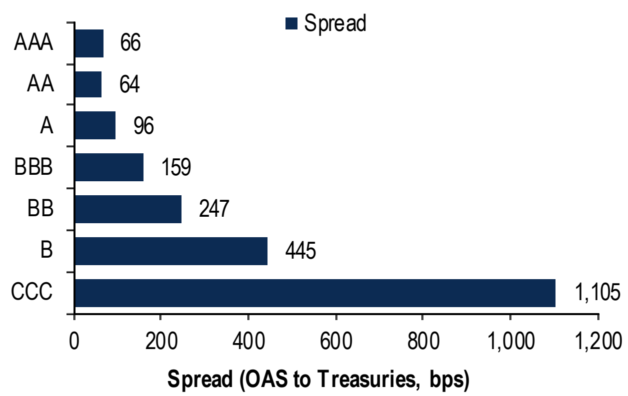
Note: the flows data is for US-domiciled funds and ETFs.
Source: EPFR Global

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.

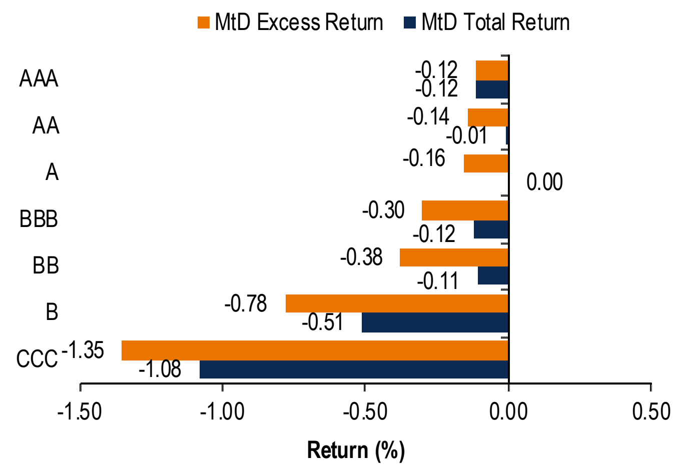
Corporate credit spreads and returns

Figure 25: Corporate spreads by rating



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

Figure 26: Month to date credit returns by rating



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

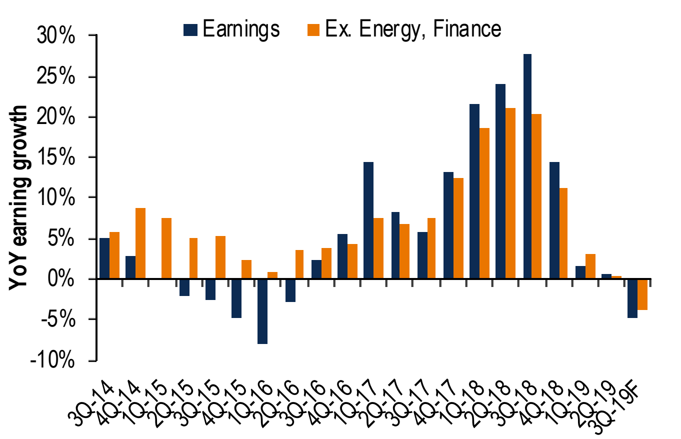
High Grade

Previously published here
[Situation Room: 3Q-19 earnings preview 09 October 2019]

3Q-19 earnings preview

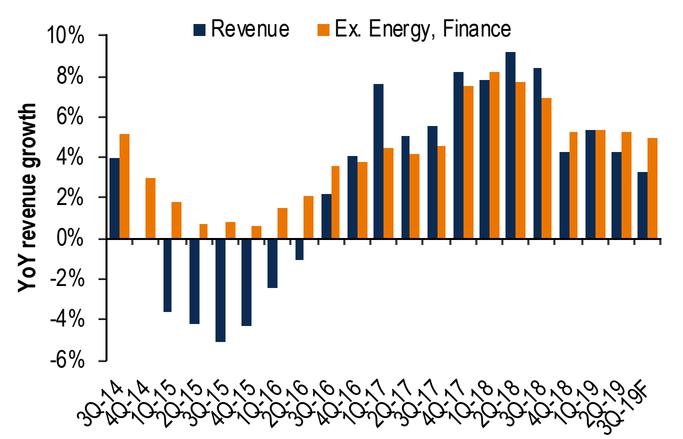
The large US banks and brokers will kick off 3Q earnings reporting season next week. For public US IG issuers bottom up analyst consensus is currently calling for earnings to decline 4.7% YoY while revenues are to grow 3.3%. The expected earnings and revenue growth excluding the more volatile Finance and Energy sectors are -3.8% and 5.0% YoY, respectively (Figure 27, Figure 28). Given the actual results tend to beat expectations (Figure 29, Figure 30), adding the average earnings surprise of 4.0% implies an earnings growth that is close to flat at -0.6%, below +0.5% in 2Q and +1.7% in 1Q-19. Similarly the historical 0.7% average sales surprise implies a sales growth of 4.0% in 3Q, close to 4.3% in 2Q but below 5.4% in 1Q-19.

Figure 27: Earnings growth for US investment grade issuers



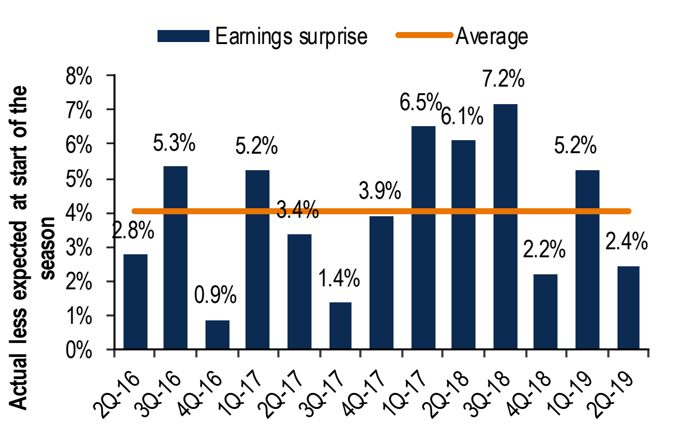
Note: 3Q-19 based on the actual results when available and consensus estimates otherwise
Source: BofA Merrill Lynch Global Research, FactSet.

Figure 28: Revenue growth for US investment grade issuers



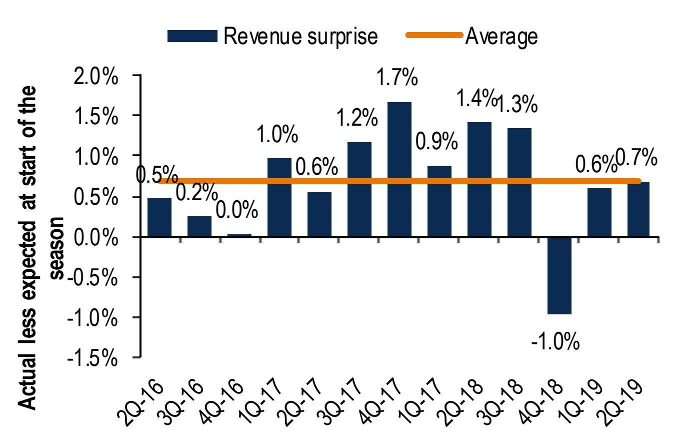
Note: 3Q-19 based on the actual results when available and consensus estimates otherwise
Source: BofA Merrill Lynch Global Research, FactSet.

Figure 29: Earnings surprises have averaged 4.2% since 2Q-16



Source: BofA Merrill Lynch Global Research

Figure 30: Sales surprises have averaged 0.7% since 2Q-16



Source: BofA Merrill Lynch Global Research

Results by sector

At the sector level earnings growth is expected to be the strongest for Utilities (+5.3%), REITs (+4.0%) and Insurance (+3.6%). On the flip side 3Q earnings growth is expected to be the weakest for Energy (-21.4%), Basic Materials (-15.5%), Aerospace/Defense (-10.8%) and Autos (-9.6%, Figure 31).

Figure 31: Bottom-up consensus estimates for 3Q-2019, US high grade issuers

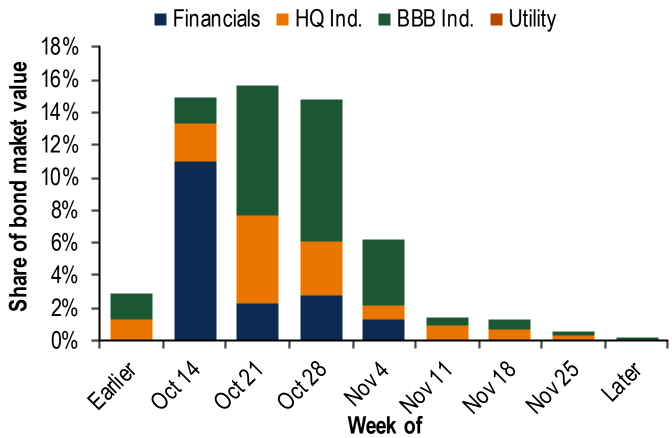
Sector	Earnings growth (YoY)	Sales growth (YoY)	Share of bond index value
Aerospace/Defense	-10.8%	0.3%	1.5%
Automobiles	-9.6%	0.6%	1.3%
Banks/Brokers	-7.1%	1.1%	11.8%
Basic Materials	-15.5%	-0.8%	1.4%
Consumer Products	1.4%	3.6%	0.6%
Energy	-21.4%	-3.1%	5.5%
Finance	-1.3%	-12.2%	0.8%
Food, Bev , & Bottling	-9.1%	2.5%	2.4%
Health Care	1.4%	12.7%	7.2%
Industrial Products	-2.3%	-1.7%	2.3%
Insurance	3.6%	2.6%	2.4%
Media & Entertainment	0.7%	15.4%	2.8%
REITs	4.0%	1.5%	2.2%
Retail	-1.1%	5.5%	3.0%
Technology	-9.5%	1.5%	6.7%
Telecom	3.3%	-0.4%	2.8%
Transportation	3.1%	1.4%	1.3%
Utilities	5.3%	5.1%	5.1%
Other	1.6%	4.5%	1.7%
Total US HG public co's	**-4.7%**	**3.3%**	**63.0%**
Total ex. Financials	-5.1%	4.1%	45.8%
Total ex. Energy	-3.7%	3.9%	57.5%
Total ex. Fin. & Energy	-3.8%	5.0%	40.2%
Yankee and private co's	**n.a.**	**n.a.**	**37.0%**
HQ ex . Financials, Utilities	-4.5%	3.8%	15.2%
BBB ex . Financials, Utilities	-7.0%	4.3%	25.5%

Note: 3Q-19 based on the actual results when available and consensus estimates otherwise
Source: BofA Merrill Lynch Global Research, FactSet,

Timing of the earnings season

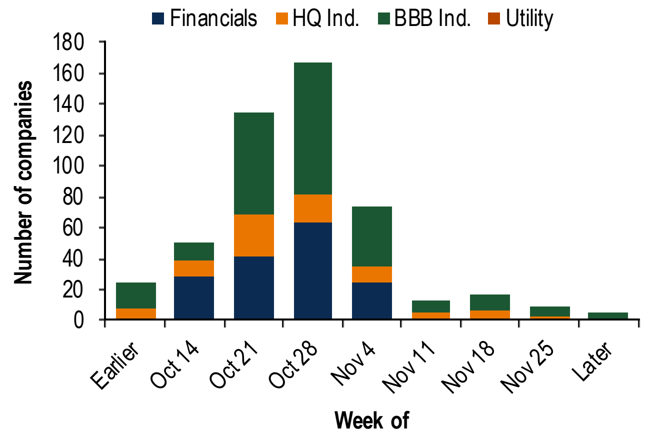
As usual the first week of the reporting season, or the week of October 14th, will be dominated by financials. During that week 51 US IG issuers are reporting results, or 14.9% of US IG bond index market value. Reporting will remain heavy during the following two weeks, with 139 issuers reporting the week of October 21 (15.6% of US IG bond index market value) and 185 the week of October 28 (14.8% of US IG bond index market value). The first week of November is effectively the last week of the season, with 86 IG issuers reporting (Figure 32, Figure 33).

Figure 32: Weekly reporting: by the share of the high grade bond index



Source: BofA Merrill Lynch Global Research.

Figure 33: Weekly reporting: by the number of credits



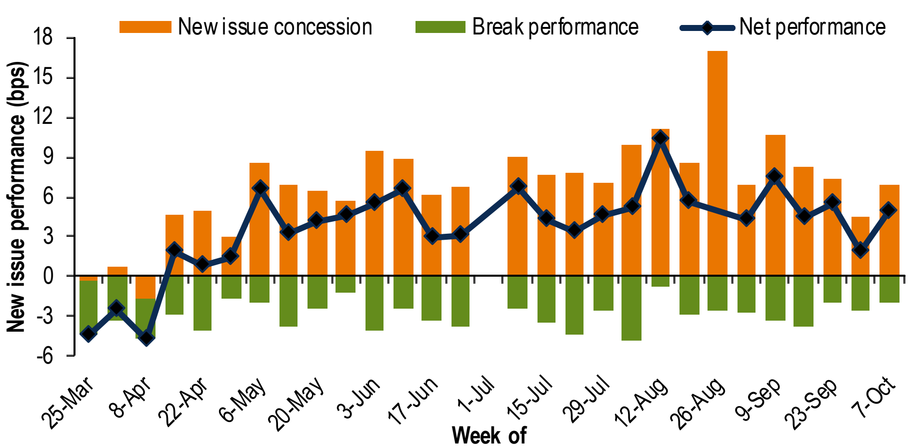
Source: BofA Merrill Lynch Global Research.

Another light short week

US IG new issuance declined further to $10.4bn this week from $12.2bn last week, including $6.3bn of financials, $1.6bn of high-quality industrials and $2.5bn of BBB industrials. Looking ahead, US primary market activity will remain light next week, shortened by the Columbus Day holiday on Monday. US banks and brokers will kick off the 3Q19 earnings reporting season on Tuesday with potential issuance to follow. On the other hand, non-financial issuance will be light as most US industrial companies are still in earnings blackouts. Hence we look for a modest $10-15bn of supply next week.

New issue performance weakened as the average new issue concession increased to 6.9bps this week from 4.5bps last week, and the average break performance softened to 2.0bps tighter this week from 2.6bps tighter last week. As a result, the overall new issue performance, which we measure as new issue concession plus break performance, weakened to 4.9bps this week from 1.9bps last week (Figure 34). This week's new issues are trading 3.7bps tighter on average from pricing.

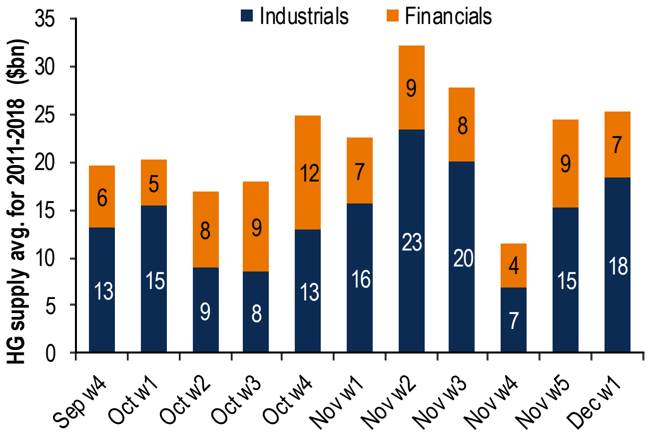
Figure 34: Weekly new issue supply performance



Source: BofA Merrill Lynch Global Research

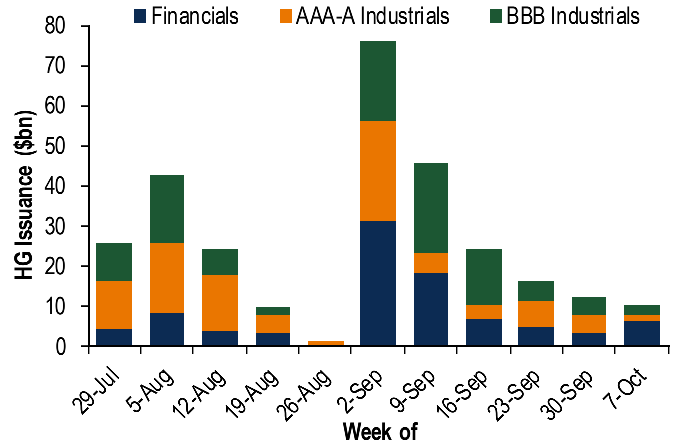
Figure 35: Weekly IG supply seasonality

Note: Sep W1 corresponds to the Labor Day week



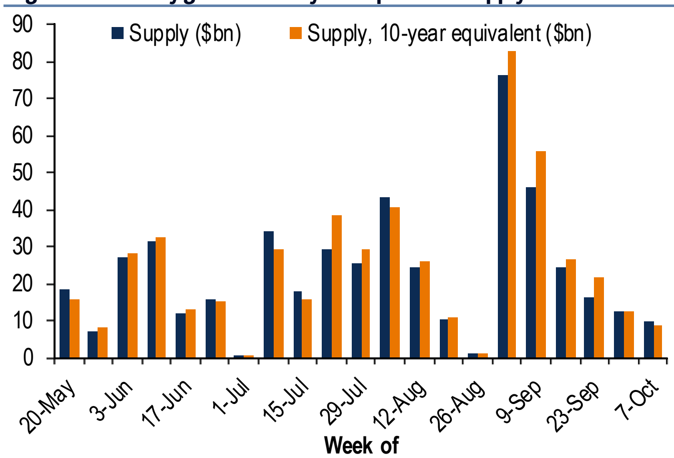
Source: BofA Merrill Lynch Global Research

Figure 36: Weekly IG supply volumes



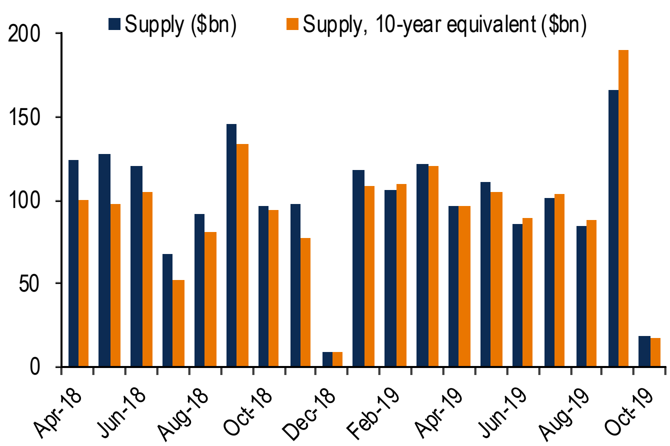
Source: BofA Merrill Lynch Global Research

Figure 37: Weekly gross and 10-year equivalent supply volumes



Source: BofA Merrill Lynch Global Research

Figure 38: Monthly gross and 10-year equivalent supply volumes



Source: BofA Merrill Lynch Global Research

Figure 39: Recent new issue pricing and new issue concessions

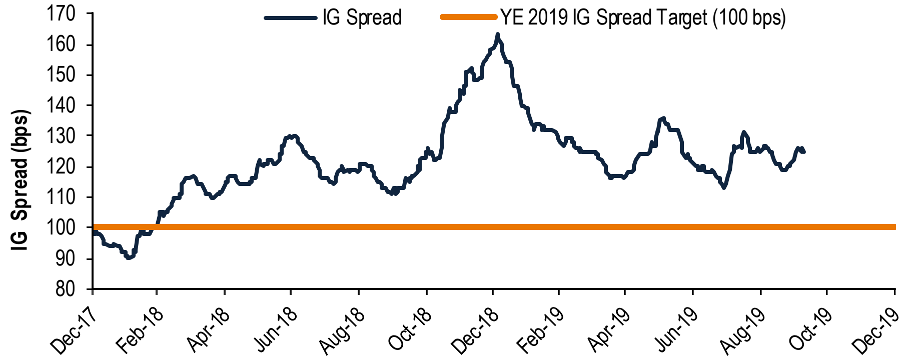
Date	Ticker	Name	Tenor	Size ($mm)	Moody's/S&P Rating	Coupon (%)	Px Spread (bps)	New Issue Conc. (bps)	* Break performance	Current spread (bps)
2019-10-07	DHI	DR Horton Inc	5	5/14/1901	Baa3/BBB	2.5	113	6	0	111
2019-10-07	ESS	Essex Portfolio LP	10	5/29/1900	Baa1/BBB+	3	125	5	-2	122
2019-10-07	KEYS	Key sight Technologies Inc	10	5/14/1901	Baa2/BBB	3	145	n.a.	-5	138
2019-10-07	PEP	PepsiCo Inc	30	9/26/1902	A1/A+	2.875	92	5	1	88
2019-10-07	PFG	Principal Life Global Funding II	2	10/26/1900	A1/A+	FRN	3mL+40	n.a.	n.a.	n.a.
2019-10-07	TD	Toronto-Dominion Bank/The	3	12/15/1900	Aa3/A	FRN	3mL+53	n.a.	n.a.	n.a.
2019-10-07	TD	Toronto-Dominion Bank/The	3	2/23/1903	Aa3/A	1.9	53	10	-1	52
2019-10-07	ULFP	WEA Finance LLC	7	1/19/1902	A2/A	2.875	143	n.a.	-1	138
2019-10-08	CUBE	CubeSmart LP	10	12/15/1900	Baa2/BBB	3	150	11	-3	146
2019-10-08	DLR	Digital Realty Trust Inc	PERP	2/14/1900	Baa3/BB+	5.2	n.a.	n.a.	n.a.	n.a.
2019-10-08	MQGAU	Macquarie Bank Ltd	3	6/3/1903	A2/A	2.1	75	0	-4	70
2019-10-08	PROMIG	Promigas SA ESP / Gases del Pacifico SAC	10	2/3/1901	Baa3/NA	3.75	230	n.a.	n.a.	218
2019-10-08	SOCGEN	Societe Generale SA	5	9/26/1902	Baa2/BBB+	2.625	130	11	-3	128
2019-10-08	TOYOTA	Toy ota Motor Credit Corp	5	2/29/1900	Aa3/AA-	1.875	n.a.	n.a.	n.a.	n.a.
2019-10-09	BNS	Bank of Nov a Scotia/The	3	9/26/1902	A2/A-	2	60	8	-3	57
2019-10-09	SUNTOR	Suntory Holdings Ltd	5	5/14/1901	Baa2/BBB	2.25	88	n.a.	-4	86
2019-10-09	TOPTB	Thaioil Treasury Center Co Ltd	30	7/18/1901	Baa1/BBB+	3.5	145	n.a.	n.a.	147
2019-10-10	HNDA	American Honda Finance Corp	2	5/14/1901	A2/A	FRN	3mL+45	n.a.	n.a.	n.a.

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

Source: BofA Merrill Lynch Global Research

Spread and supply forecasts

Figure 40: Spread targets for 2019



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

Sector views

Figure 41: BofA-ML High Grade Sector Views Summary

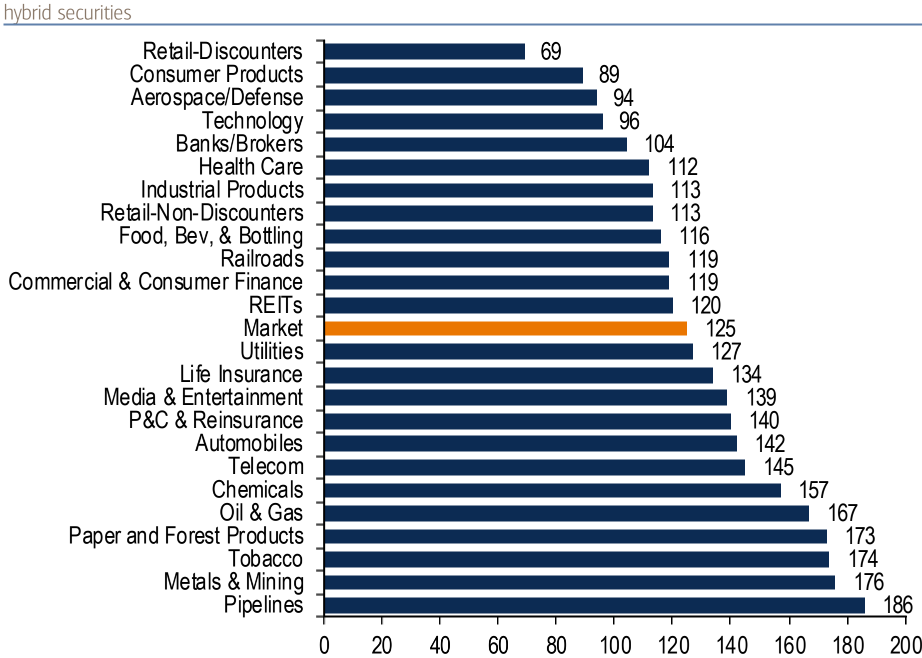
Overweight	View	Market weight	View	Underweight	View
Basic Materials	**Over**	**Food, Bev, & Bottling**	**Market**	**Aerospace & Defense**	**Under**
Chemicals	Over	**Healthcare**	**Market**	**Automobiles**	**Under**
Metals & Mining	Market	**REITS**	**Market**	**Banks/Brokers**	**Under**
Paper and Forest 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 42: High grade spreads by sector (bps)

Sector spreads for BofAML HG U.S. Corporate Master C0A0 as of October 10, 2019. Results include subordinated and hybrid securities



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

High grade sector historical performance

Figure 43: High Grade Sector Performance as of October 10, 2019

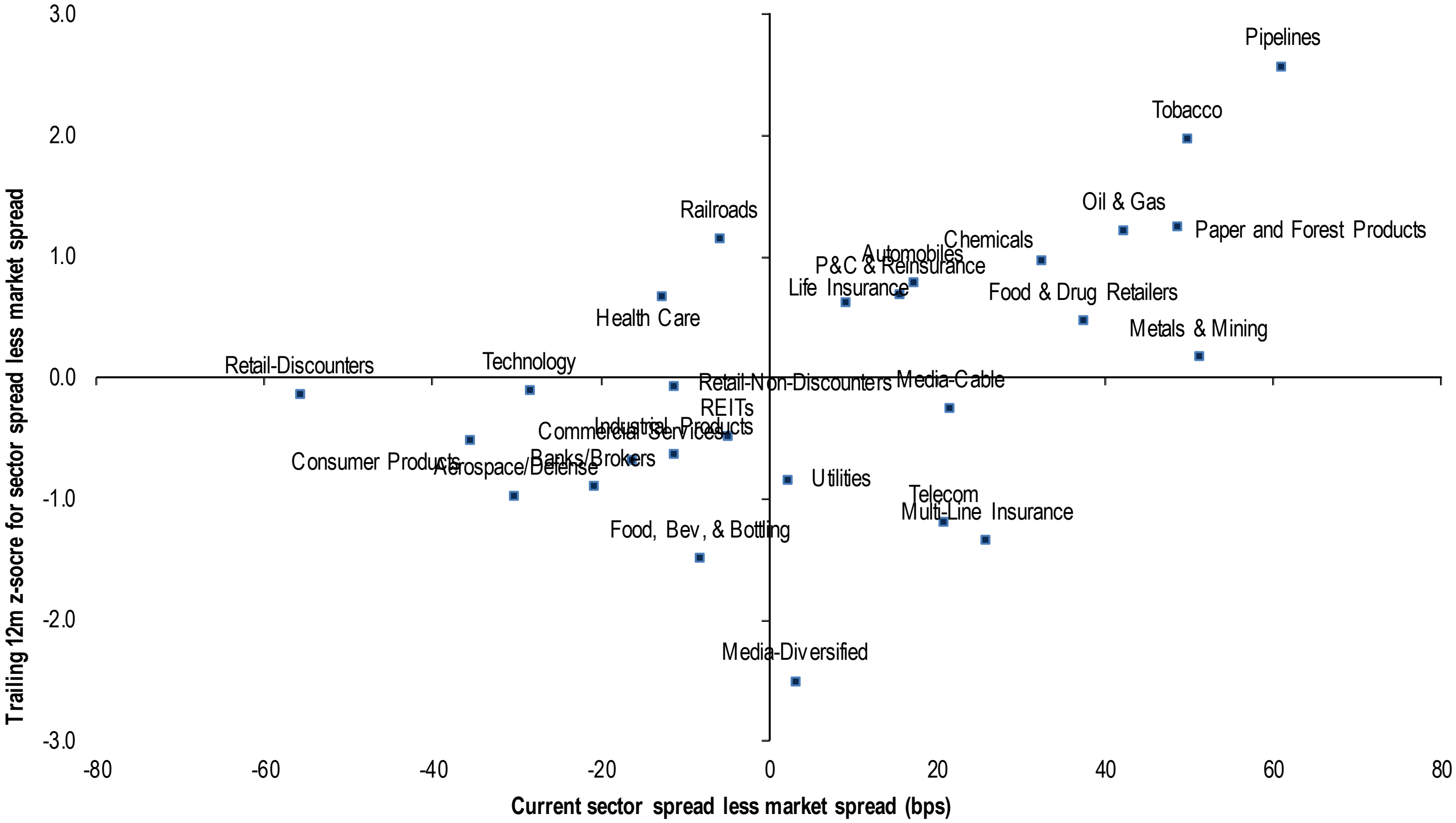
Sector spreads and performance for BofAML HG U.S. Corporate Master C0A0. Results include subordinated and hybrid securities

								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	94	8.6	2.67	110.0	113.8	1.73	-22	-22	398	67	2	2	-35	5	-9
Automobiles	BBB1	142	4.2	3.00	102.8	180.0	2.55	-45	-45	278	20	8	8	-36	27	-19
Banks/Brokers	A3	104	5.1	2.66	106.3	1,516.9	22.21	-15	-15	368	153	3	3	-43	0	11
Basic Materials	BBB2	166	7.7	3.36	109.5	309.4	4.68	-13	-13	408	29	2	2	-33	24	4
Building Materials	BBB2	169	8.3	3.40	106.5	21.0	0.31	8	8	531	106	-1	-1	-36	20	25
Chemicals	BBB2	157	7.4	3.25	107.3	138.0	2.04	-13	-13	377	34	2	2	-31	25	5
Homebuilders	BBB1	83	4.4	2.38	107.0	3.1	0.04	23	23	296	156	-1	-1	-116	-63	51
Metals & Mining	BBB1	176	8.2	3.49	112.4	103.9	1.61	-21	-21	467	32	3	3	-41	22	-6
Paper and Forest Products	BBB2	173	7.2	3.40	110.9	43.5	0.67	-6	-6	334	-33	1	1	-19	35	15
Commercial Services	A3	108	10.0	2.84	112.0	72.8	1.12	-24	-24	316	91	2	2	-30	1	-19
Consumer Products	A2	89	6.9	2.55	107.6	67.9	1.01	-15	-15	216	64	2	2	-21	5	6
Energy	BBB1	174	7.8	3.45	108.4	757.1	11.32	-53	-53	355	-132	6	6	-27	33	-37
Oil & Gas	A3	167	7.6	3.37	108.1	493.8	7.36	-40	-40	368	-109	4	4	-30	30	-24
Pipelines	BBB2	186	8.2	3.60	108.9	263.3	3.96	-76	-76	331	-174	9	9	-23	39	-62
Finance	A3	120	6.0	2.83	107.3	147.2	2.18	-1	-1	333	121	0	0	-46	1	21
Commercial & Consumer Finance	BBB1	119	4.1	2.75	104.7	70.7	1.02	6	6	369	162	-1	-1	-48	8	35
Finance-Other Services	A3	121	7.7	2.91	109.8	76.5	1.16	-7	-7	302	84	1	1	-45	-6	9
Food, Bev, & Bottling	BBB1	116	8.4	2.89	108.9	281.7	4.23	-21	-21	534	145	2	2	-41	10	-9
Health Care	A3	112	8.8	2.86	109.4	606.5	9.13	-17	-17	292	-11	2	2	-20	18	-6
Industrial Products	A3	113	7.2	2.81	106.7	196.7	2.89	-28	-28	368	-55	3	3	-40	19	-11
Insurance	A3	136	8.6	3.16	111.9	264.4	4.08	-16	-16	400	71	2	2	-28	13	-3
Insurance-Other	BBB1	123	7.8	2.94	109.6	23.7	0.36	-22	-22	338	65	2	2	-35	0	-7
Life Insurance	A2	134	8.2	3.14	110.8	149.7	2.29	-15	-15	365	47	2	2	-31	11	-2
Multi-Line Insurance	BBB1	150	8.6	3.26	112.1	24.3	0.38	-1	-1	699	111	0	0	-51	7	14
P&C & Reinsurance	A3	140	9.7	3.22	115.4	66.8	1.06	-19	-19	383	114	2	2	-9	24	-10
Leisure	BBB3	145	4.8	3.02	106.1	27.9	0.41	-16	-16	493	222	3	3	-62	-5	15
Media & Entertainment	BBB1	139	9.2	3.14	112.0	206.5	3.19	-24	-24	490	97	2	2	-39	0	-13
Media-Cable	BBB1	146	9.8	3.24	113.1	127.6	1.99	-23	-23	531	150	2	2	-35	-6	-15
Media-Diversified	BBB1	128	8.4	3.00	110.3	76.3	1.16	-27	-27	443	35	3	3	-47	1	-13
Media-Publishing	BBB1	90	4.8	2.44	105.4	2.6	0.04	15	15	275	167	-3	-3	-27	10	45
Real Estate Dev & Mgt	A3	129	6.3	2.91	110.2	7.0	0.11	9	9	368	243	-2	-2	-44	-12	35
REITs	BBB1	120	6.4	2.81	106.0	163.5	2.39	-7	-7	347	154	1	1	-36	1	19
Retail	A3	102	8.8	2.75	110.0	212.7	3.23	-28	-28	375	-1	3	3	-39	4	-17
Food & Drug Retailers	BBB2	162	7.6	3.33	107.0	25.9	0.38	-39	-39	454	36	4	4	-16	39	-23
Retail-Discounters	A1	69	9.1	2.42	112.6	81.2	1.26	-26	-26	333	61	2	2	-27	5	-15
Retail-Non-Discounters	BBB1	113	9.0	2.88	108.8	105.6	1.58	-27	-27	356	-67	3	3	-32	9	-17
Technology	A2	96	7.6	2.65	107.8	508.1	7.54	-12	-12	350	31	2	2	-30	14	4
Telecom	BBB1	145	9.6	3.22	113.2	272.3	4.24	-38	-38	644	253	3	3	-45	0	-29
Tobacco	BBB1	174	8.0	3.45	104.3	73.8	1.06	-66	-66	399	-276	7	7	-23	61	-51
Transportation	BBB1	132	10.0	3.11	109.6	158.5	2.39	-32	-32	281	-110	2	2	-20	17	-27
Railroads	A3	119	11.8	3.04	112.8	86.0	1.33	-45	-45	265	-148	3	3	-14	19	-47
Transportation-Other	BBB1	150	7.8	3.20	105.8	72.5	1.06	-17	-17	301	-65	2	2	-26	17	-1
Utilities	A3	127	9.9	3.06	111.9	541.3	8.34	-15	-15	292	-84	2	2	-32	7	-8
Market	A3	125	7.6	2.95	108.6	6,686.3	100.00	-23	-23	372	44	3	3	-34	12	-6

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

Sector performance and relative value

Figure 44: Trailing 12 month spread Z-score vs. current sector spread differential to the market



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

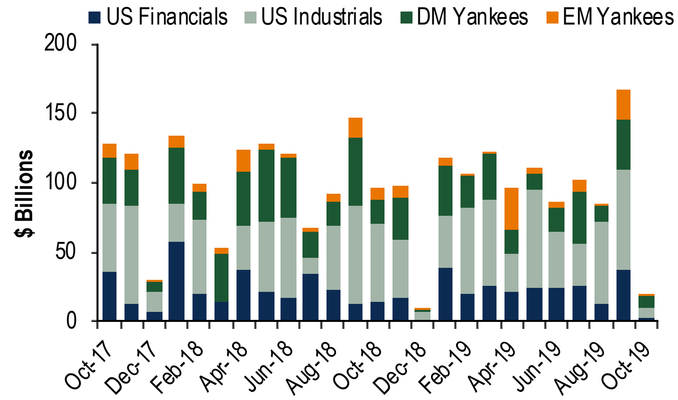
Supply statistics

Figure 45: High grade supply summary, $bn

Sector	WTD	MTD	QTD	YTD
US Financials	0.8	2.9	2.9	229.2
US Industrials	2.6	7.2	7.2	468.6
European Financials	1.8	2.1	2.1	83.1
European Industrials	0.0	0.7	0.7	69.8
EM Yankees	1.0	1.3	1.3	78.9
Non-Euro Non-EM Yankees	4.3	5.0	5.0	81.1
Total	**10.4**	**19.2**	**19.2**	**1,010.7**

Source: BofA Merrill Lynch Global Research

Figure 46: HG monthly issuance, $bn



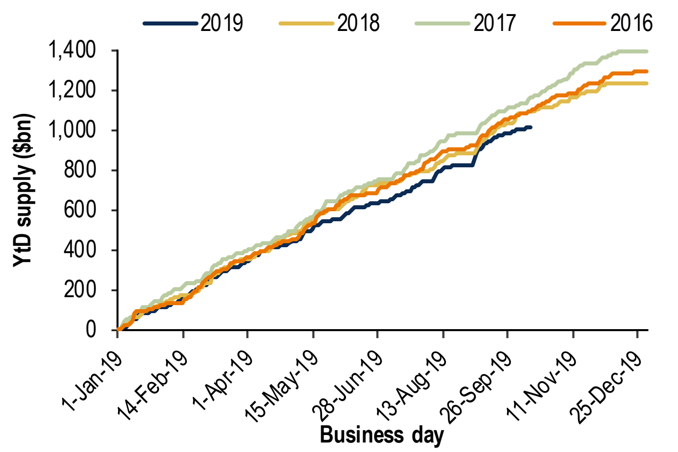
Source: BofA Merrill Lynch Global Research

Figure 47: Cumulative High grade supply YTD, $bn

Sector	YTD 2016	YTD 2017	YTD 2018	YTD 2019
Financials	434.3	483.4	466.9	393.1
AAA-A Industrials	337.0	294.9	240.8	286.5
BBB Industrials	323.6	385.0	381.4	331.1
Total	**1,094.8**	**1,163.3**	**1,089.1**	**1,010.7**
%-change		**6%**	**-6%**	**-7%**
US	668.1	781.5	697.0	697.8
Europe	222.2	175.0	223.0	152.9
EM	73.4	74.4	64.7	78.9
Other DM	131.1	132.4	104.4	81.1

Source: BofA Merrill Lynch Global Research

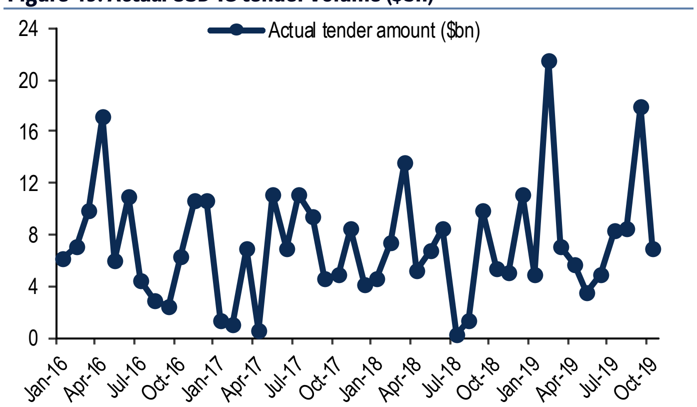
Figure 48: Cumulative High grade supply, $bn



Source: BofA Merrill Lynch Global Research

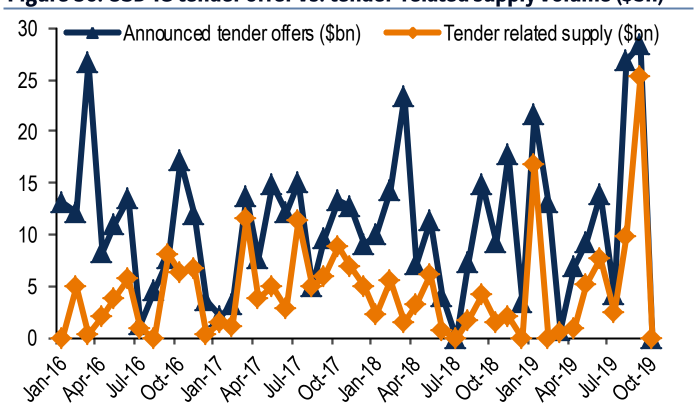
Announced vs actual tenders & related supply

Figure 49: Actual USD IG tender volume ($bn)



Note: Limited to issuers with public tender offer announcements for USD bonds with at least one HG rating from Moody's, S&P and Fitch.
Source: BofA Merrill Lynch Global Research, Bloomberg, company reports

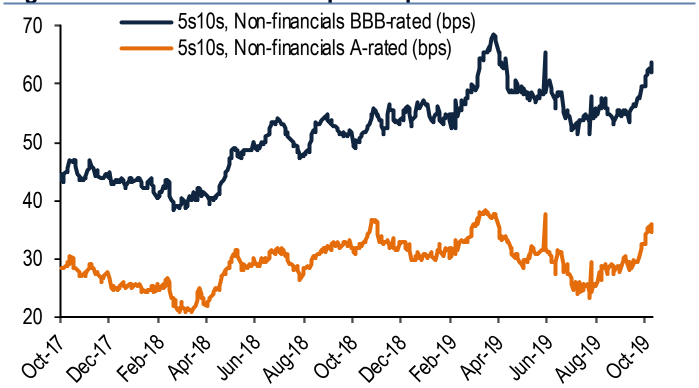
Figure 50: USD IG tender offer vs. tender-related supply volume ($bn)



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

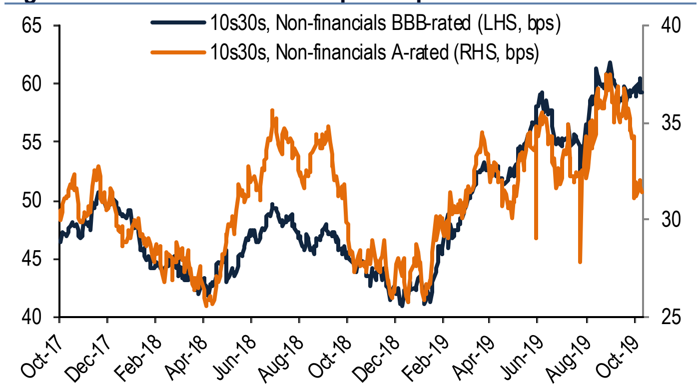
Corporate spread curves

Figure 51: 5s10s non-financial corporate spread curves



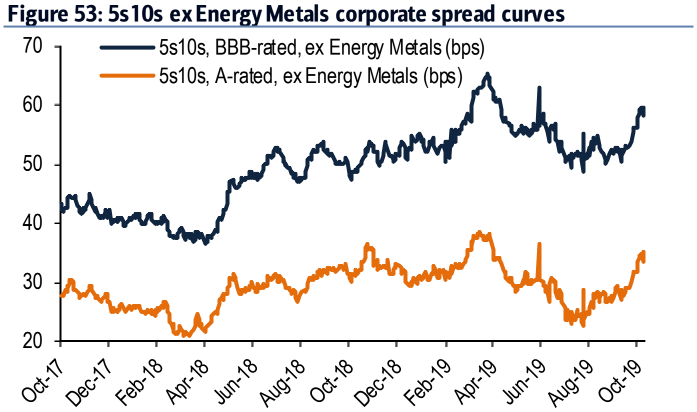
Note: the curve is computed for individual issuers first, and then aggregated to create the average.
Source: BofA Merrill Lynch Global Research

Figure 52: 10s30s non-financial corporate spread curves



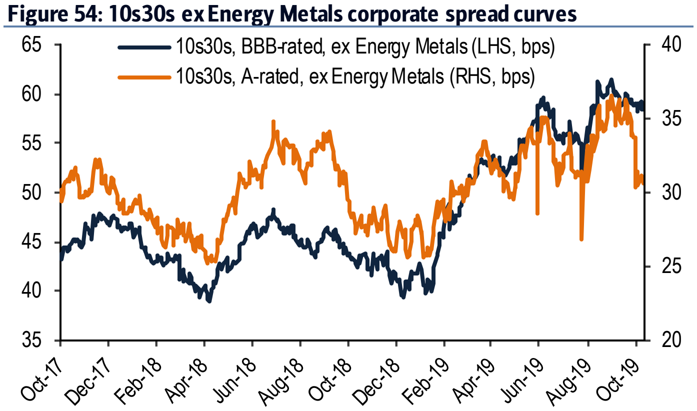
Note: the curve is computed for individual issuers first, and then aggregated to create the average.
Source: BofA Merrill Lynch Global Research

Figure 53: 5s10s ex Energy Metals corporate spread curves



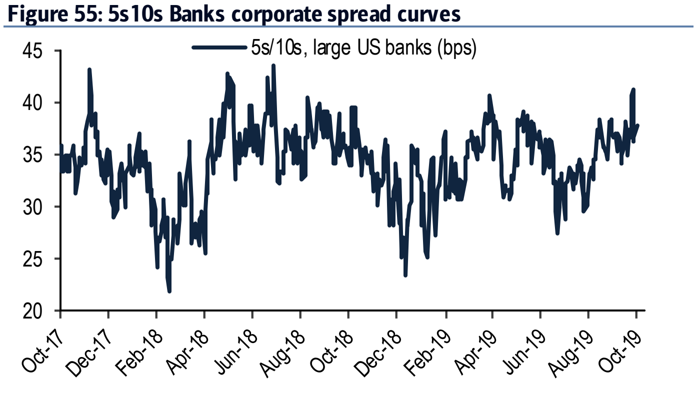
Note: the spread curve calculation is restricted to issuers that have bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual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

Figure 54: 10s30s ex Energy Metals corporate spread curves



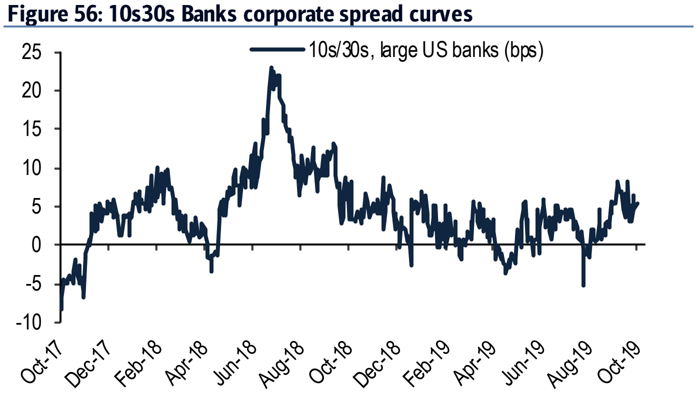
Note: the spread curve calculation is restricted to issuers that have bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual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

Figure 55: 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

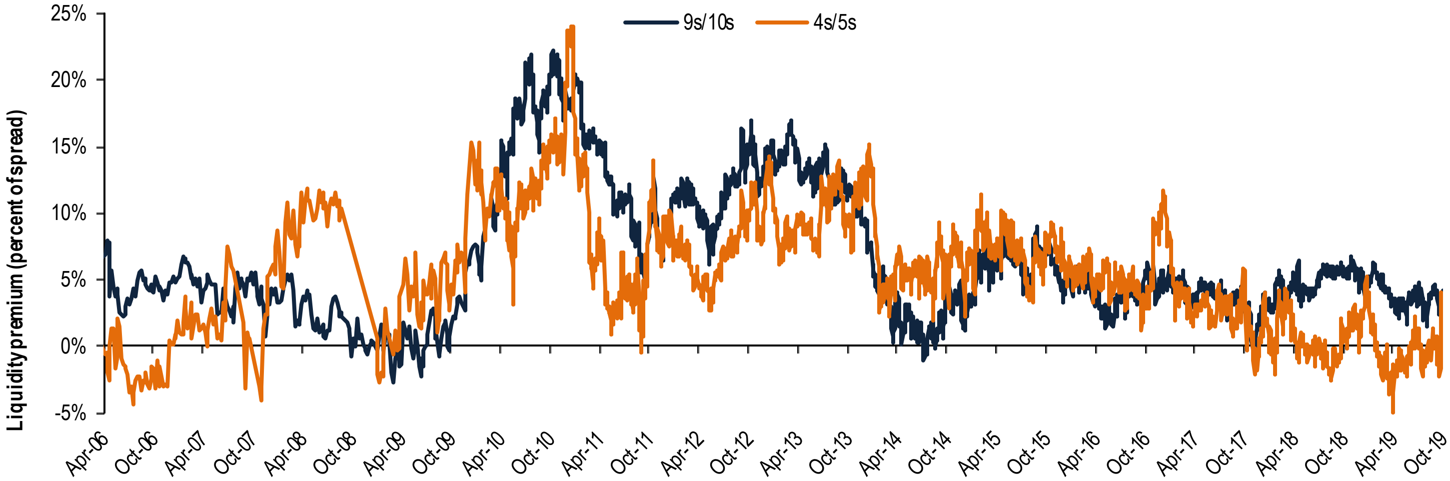
Figure 56: 10s30s Banks corporate spread curves



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 57: Liquidity premium in high grade spreads

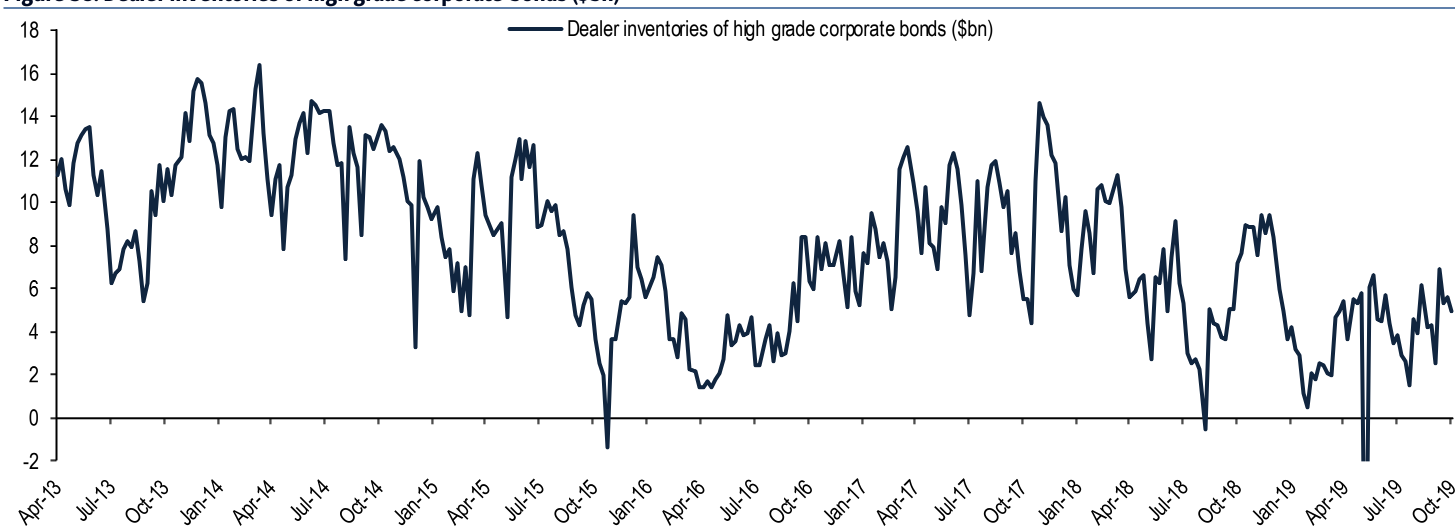


Note: our liquidity premium is the spread difference between old bonds that have rolled down to the 9, 8, 7, 6 and 4-year tenors and on-the-run 10-year and 5-year (for the 4-year tenor) bonds, adjusted for the credit curve.

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

Dealer inventories

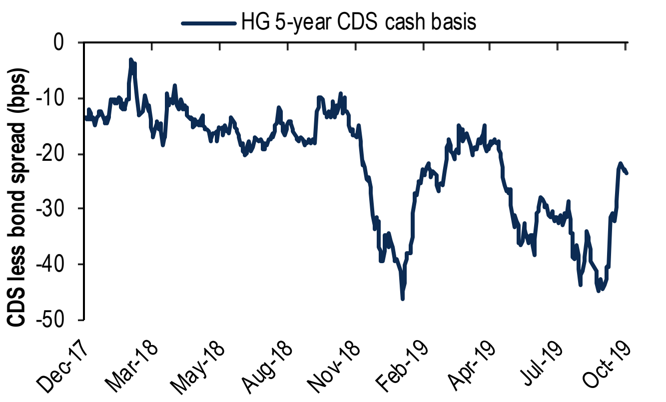
Figure 58: Dealer inventories of high grade corporate bonds ($bn)



Source: BofA Merrill Lynch Global Research, Federal Reserve Bank

CDS cash basis

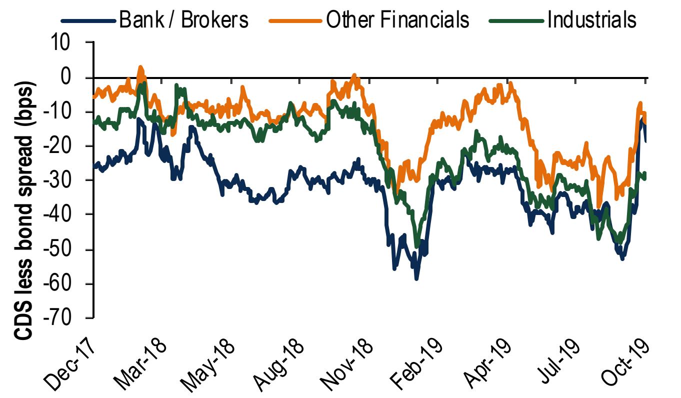
Figure 59: 5-year CDS cash basis



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 60: 5-year CDS cash basis by broad sector

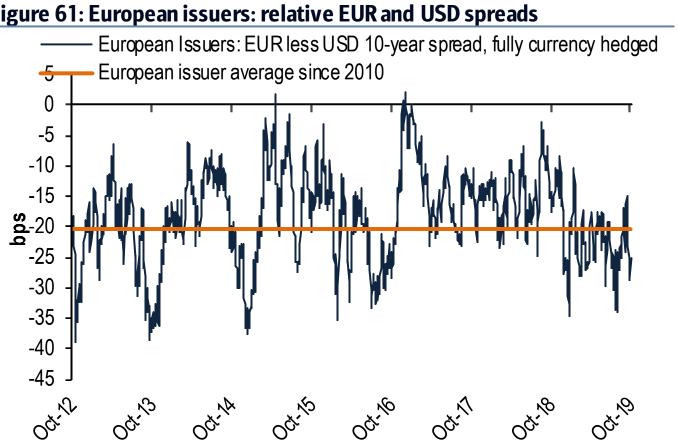


Note: CDS-Cash and based on spreads of the following 30 issuers: AIG, AMGN, AXP, BAC, BRK, C, CAT, CMCSA, COF, CVS, DE, DIS, F, GE, GS, HD, HPQ, IBM, JPM, MET, MO, MS, PFE, PRU, SPG, T, VZ, WFC, WMT, VIA

Source: BofA Merrill Lynch Global Research

USD EUR relative value

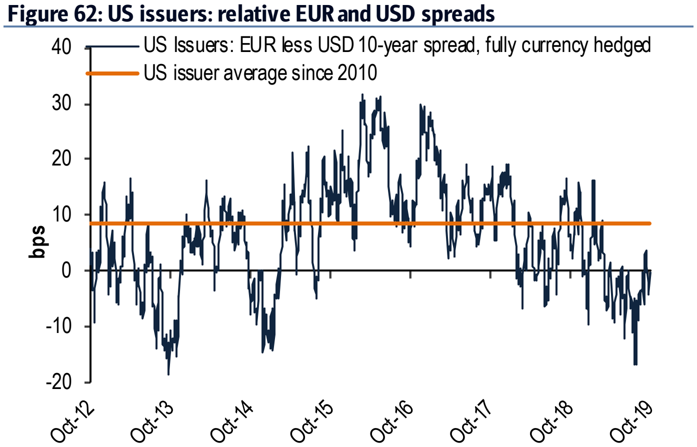
Figure 61: European issuers: relative EUR and USD spreads



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 62: US issuers: relative EUR and USD spreads



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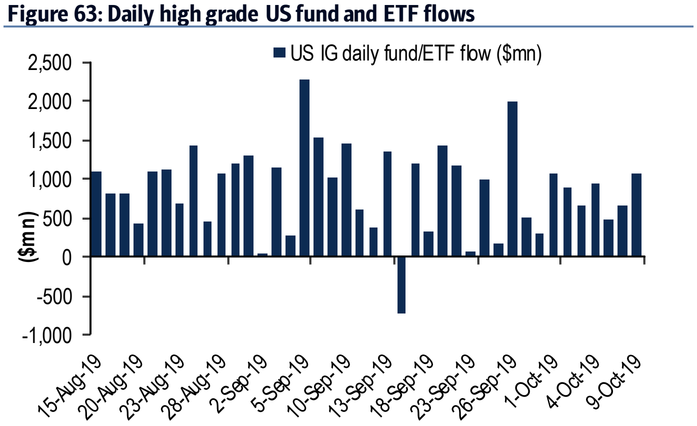
Source: BofA Merrill Lynch Global Research, Bloomberg, ICE Data Indices, LLC

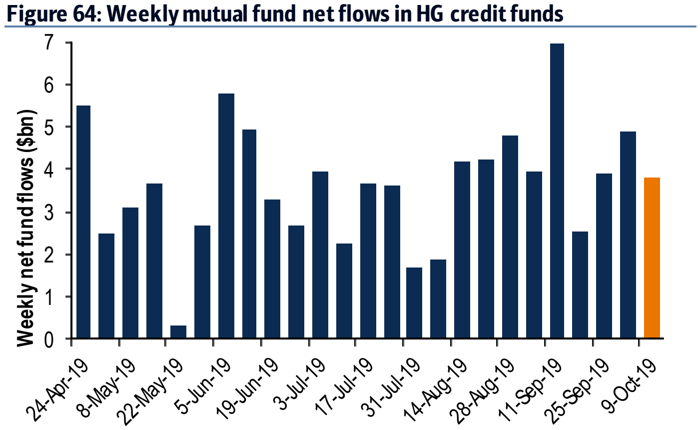
Mutual fund flows

Figure 63: Daily high grade US fund and ETF flows



EPFR Global, BofA Merrill Lynch Global Research

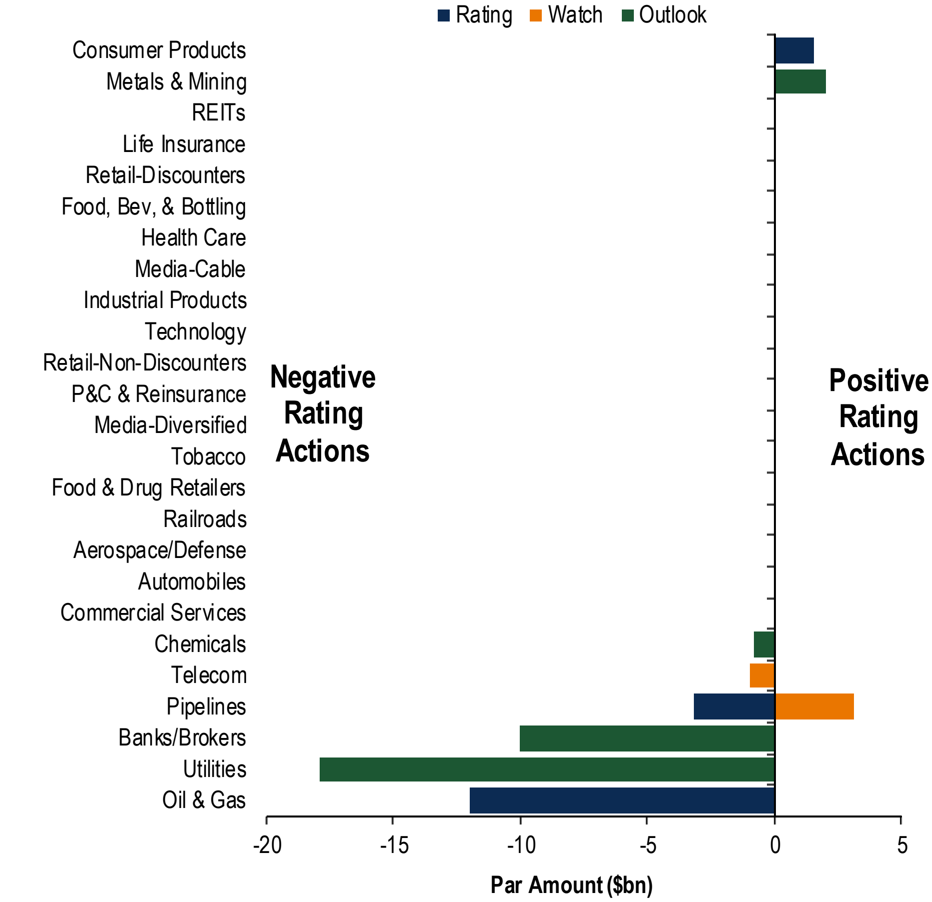
Figure 64: Weekly mutual fund net flows in HG credit funds



Source: BofA Merrill Lynch Global Research, EPFR.

Rating actions summary

Figure 65: Weekly rating actions by sector, notional value in HG Master index

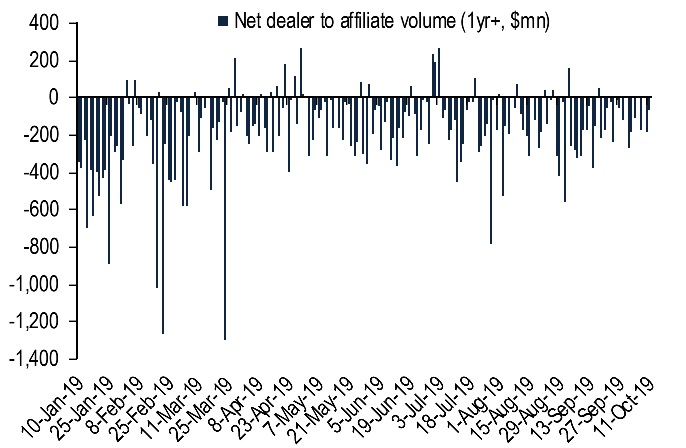


Source: BofA Merrill Lynch Global Research, ICE Data Indices, LLC

Daily foreign demand tracker

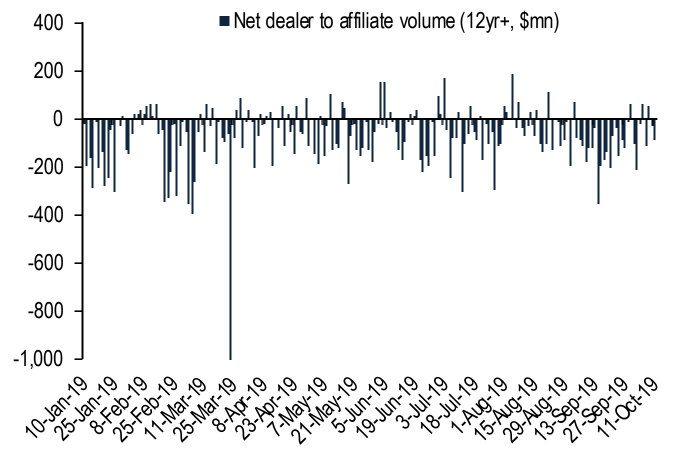
We believe net dealer-to-affiliate volumes from Trace are correlated with foreign buying of US HG corporate bonds - i.e., negative numbers mean foreign investor buying (US dealers taking down inventory in favor of foreign affiliates). For supporting material see our "primer" on tracking foreign inflows (See: Credit Market Strategist: One year round-trip in spreads 15 July 2016). Figure 66 shows the overall daily dealer-to-affiliate volumes while Figure 67, Figure 68 and Figure 69 show subsets of this data. In particular Figure 67 shows net dealer-to-affiliate volumes for longer maturity (12+ years) bonds, Figure 68 displays volumes reported to Trace before 8am NY time (biased toward Asian buying) and Figure 69 shows the subset of net trades reported between 8am and noon (biased toward European buying). Figure 66 and Figure 67 include data from today, whereas Figure 68 and Figure 69 run through the previous business day.

Figure 66: Net dealer buying from affiliate (1yr+)



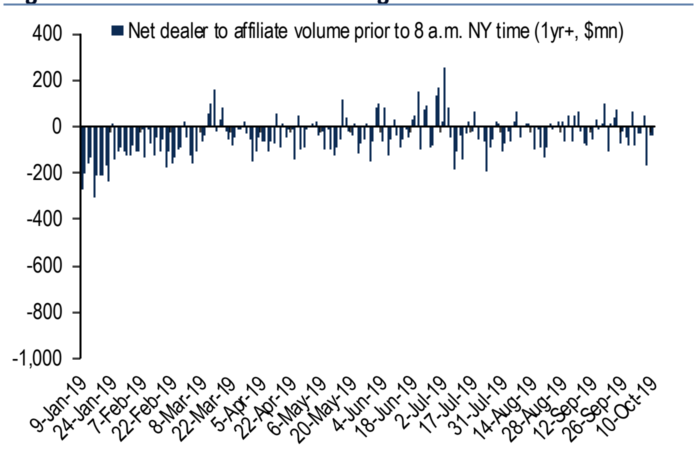
Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.
Source: Bloomberg, TRACE

Figure 67: Net dealer buying from affiliate (12yr+)



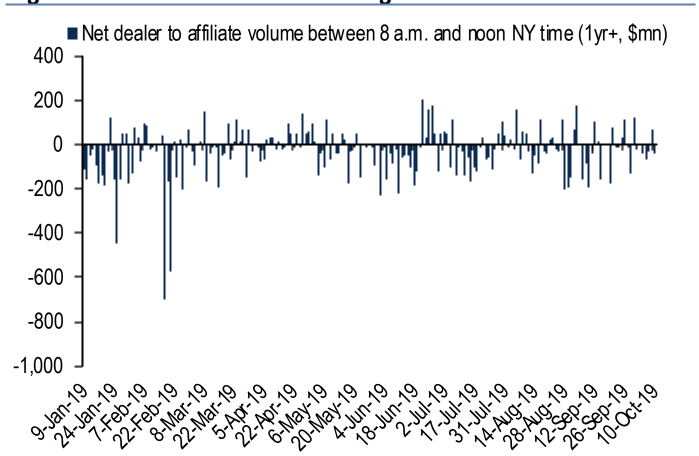
Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.
Source: Bloomberg, TRACE

Figure 68: 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 69: 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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