Credit Market Strategist

The flattening 10s

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Credit Strategy
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BofA Data Analytics

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The flattening 10s

The jump in Treasury yields to new cyclical highs this week not surprisingly led to some selling in the back end of the IG corporate curve. However, technicals remain supportive, with just $26bn of issuance this week and IG spreads continuing to outperform the elevated interest rate volatility. Hence, rather than weakening across the board, the demand instead shifted from 30yr to the lower duration 10yr maturities. This shift drove 5s10s non-financial IG spread curve 11bps flatter since August, to just 8th percentile since 2013, and consistent with the IG index spread at the 2021 tights. We screen for the 5s10s IG spread curves that have flattened the most since August.

5s10s relative value

Typically, the 5s10s IG spread curve tracks the level of spreads. Hence, in a mild risk-on environment the lower-beta 5yr spreads underperforms, flattening the spread curve. However, since mid-September the IGs spreads were moderately wider, while the 5s10s spread curve flattened significantly. That brought the 5s10s curve to levels consistent with the IG spread tights from 2021.

The world is flat

With both 10s30s and now 5s10s IG non-financial spread curves flattening this year, the 5s30s IG spread curve has reached the flattest level since 2011.

Bank spreads vs rates

Bank spreads have underperformed due to the big increase in interest rates since September. Hence rates peaking should be particularly positive for Bank spreads.

The economy vs. rates vol

IG spreads remained resilient to the jump in rates. The correlation between rates and IG spreads is approaching the lower end of the range since Aug.

Rising Stars > Fallen Angels

Both rating agencies and market pricing currently signal limited risk of fallen angels.

TIC update for October

According to TIC foreign investors net bought +$23.8bn of corporate bonds in August.

IG market technicals

Supply: $26.0bn of issuance this week, expect $10-20bn next week. **Flows**: -$2.41bn inflow this past week ending on October 18. **Weekly technicals**: expect $4.9bn of coupon payments, $0.8bn of calls to become effective next week. Bond maturities: $14.0bn this week, $7.2bn next week. **Dealer inventories**: -$873mn past week ended Thu. Details inside.

We published the weekly CMS data and charts in Situation Room

Recent credit strategy research

Publication	Name
Situation Room	Situation Room: Outflows from HG, near flat for equities
Situation Room	Situation Room: Bank spreads vs rates
Situation Room	Situation Room: The economy vs. rates vol
Situation Room	Situation Room: Rising Stars > Fallen Angels
Monthly HG Market Review	Situation Room: Sep '23 Monthly HG Market Review: Rates shock
Credit Market Strategist	Credit Market Strategist: The state of IG supply
Credit Market Strategist	Summer 2023 snapshot of US IG market

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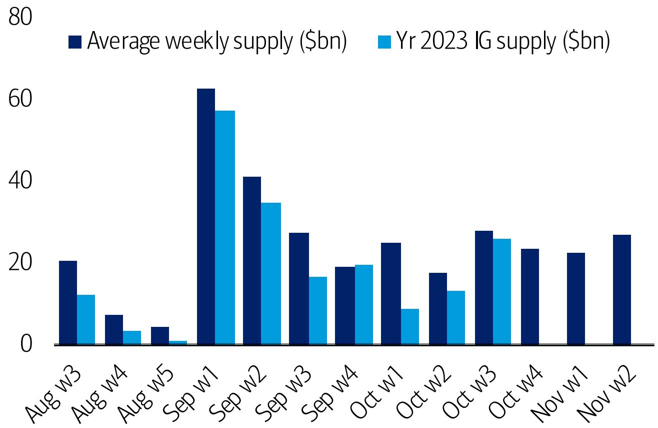
Figure 1: IG supply has been subdued since September
Since the start of September IG issuance has lagged the typical volumes by $44bn.



Source: BofA Global Research

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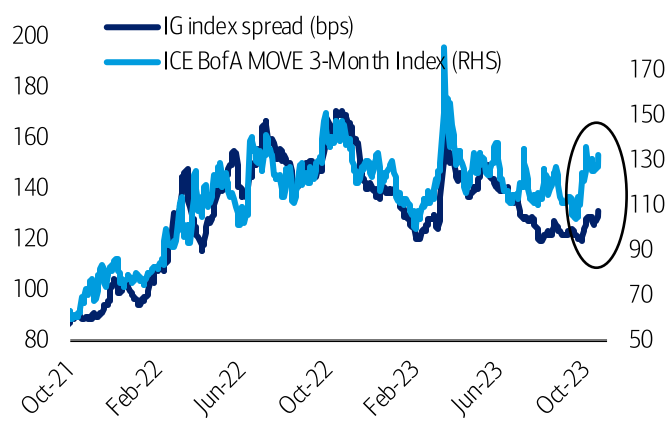
Figure 2: IG spreads have been resilient vs. higher rates vol
IG spreads have outperform the big increase in interest rate vol since mid-Septemeber.



Source: ICE Data Indices, LLC, Bloomberg.

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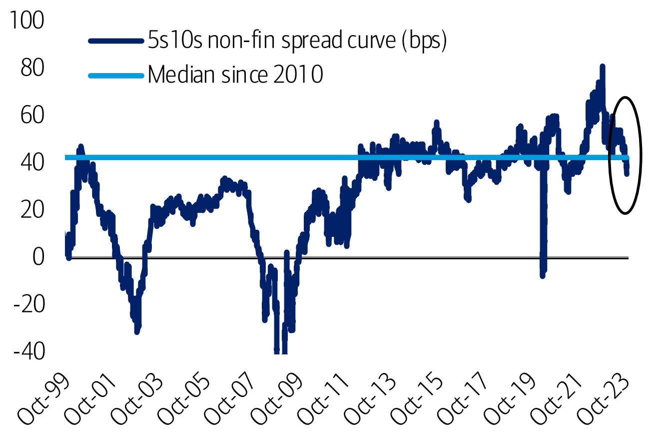
5s10s relative value

After trading at some of steepest levels on record in 2022 on the back of big outflows from mutual funds / ETFs, 5s10s IG non-financial spread curve largely normalized through August of this year. However, after the selloff in Treasury yields intensified in the second half of September the curve flattened rapidly by 11bps, reaching some of the flattest levels over the past 10 years (Figure 3).

Typically, the 5s10s IG spread curve tracks the level of spreads. Hence, in a mild risk-on environment the lower-beta 5yr spreads underperforms, flattening the spread curve. However, since mid-September the IGs spreads were moderately wider, while the 5s10s spread curve flattened significantly driven by technicals. That brought the 5s10s curve to levels consistent with the IG spread tights from 2021 (Figure 4).

Figure 3: 5s10s IG non-fin spread curve flattened rapidly
Since mid-Sept. the 5s10s IG spread curve flattened rapidly by 11bps, reaching some of the flattest levels over the past 10 years.



Source: BofA Global Research, ICE Data Indices, LLC

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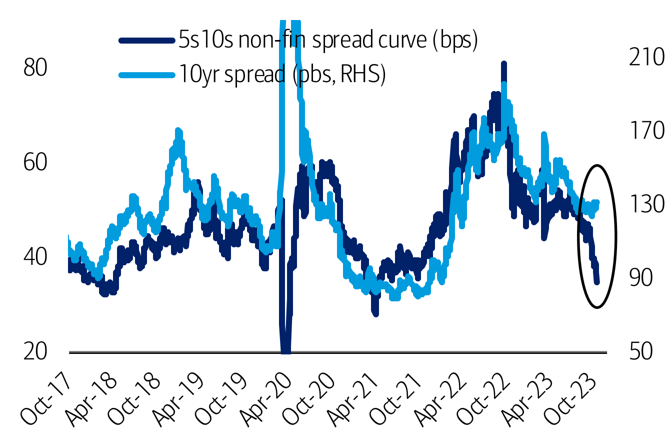
Figure 4: 5s10s IG spread curve is flat vs. spreads
While IG spreads widened moderately, the 5s10s IG non-financial spread curve flattened significantly to levels consistent with 2021 tights.



Source: BofA Global Research, ICE Data Indices, LLC

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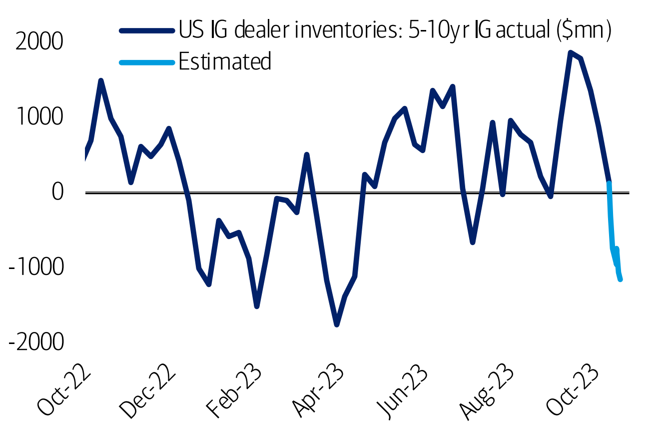
Out of 30yr and into 10yr

Dealer inventory data is consistent with investors selling 30yr bonds and shifting demand to the 10yr part of the curve. We estimate based on TRACE that dealer inventories of IG corporate bonds have dropped to the lowest levels since April for 5-10yr bonds (Figure 5). In contrast, dealer inventories of bonds longer than 10yr have instead increased to the highest level in 12 months (Figure 6).

Figure 5: Investors on net bought 5-10yr bonds …
We estimate current dealer inventories of 5-10yr IG corp. bonds of -$1.1bn – the lowest since April.



Source: BofA Global Research, NY Fed, TRACE.

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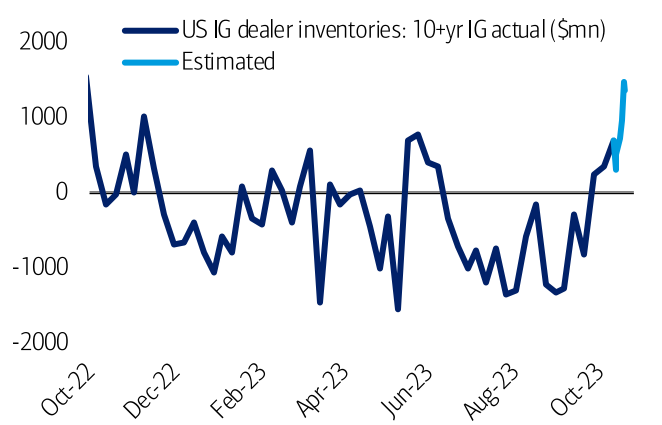
Figure 6: … and sold 10+yr bonds
We estimate current dealer inventories of 10+yr corp. bonds of +$1. 4bn, the highest in 12 months.



Source: BofA Global Research, NY Fed, TRACE.

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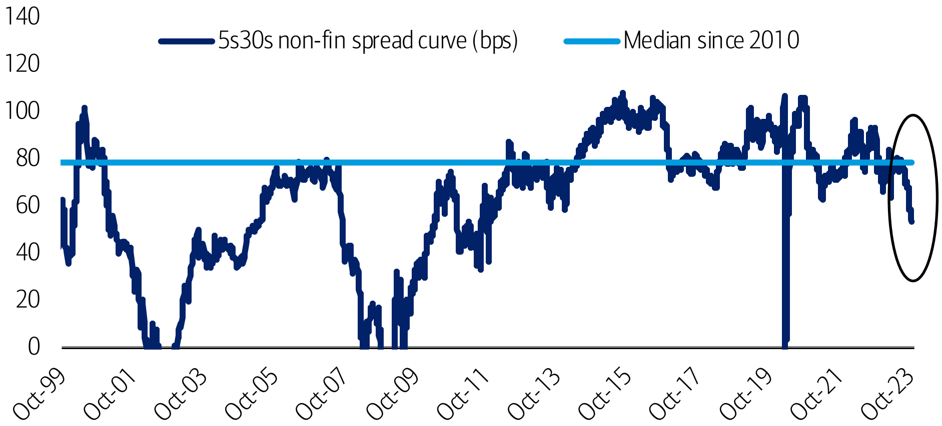
The world is flat

With both 10s30s and now 5s10s IG non-financial spread curves flattening this year, the 5s30s IG spread curve has reached the flattest level since 2011 (Figure 7). That recent flattening of the IG spread curve consistent with the big jump in Treasury yields (Figure 8), as well as the steepening the Treasury yield curve. Still, the 5s30s IG spread curve is currently significantly flatter relative to the prior periods when the Treasury yield curve inverted in 2000 and 2006 (Figure 9).

Figure 7: 5s30s IG non-financial spread curve is now the flattest since 2011

The current 5s30s IG non-financial spread curve is 53pbs, the flattest since 2011 ex. the Covid period in 2020.



Source: BofA Global Research, ICE Data Indices, LLC

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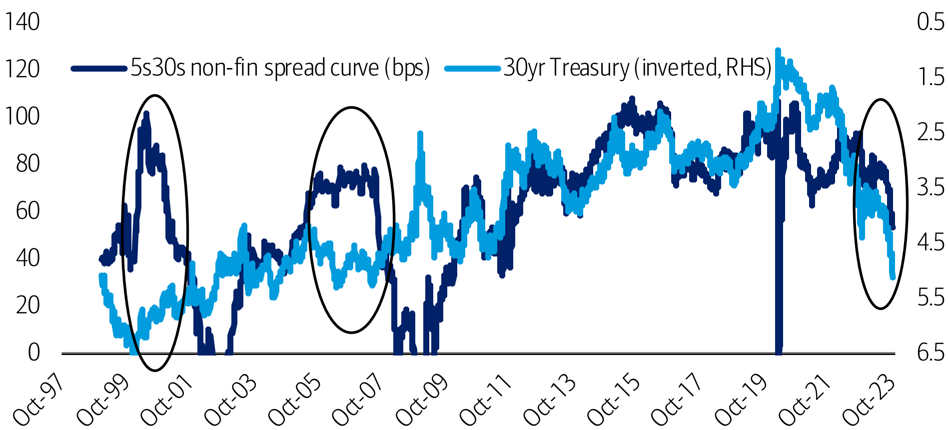
Figure 8: 5s30s IG spread curve has flattened in line with the increase in Treasury yields

The flattening in 5s30s IG spread curve since July 31st (-23bps) is consistent with the big increase in 30yr Treasury yields (+90bps).



Source: BofA Global Research, ICE Data Indices, LLC

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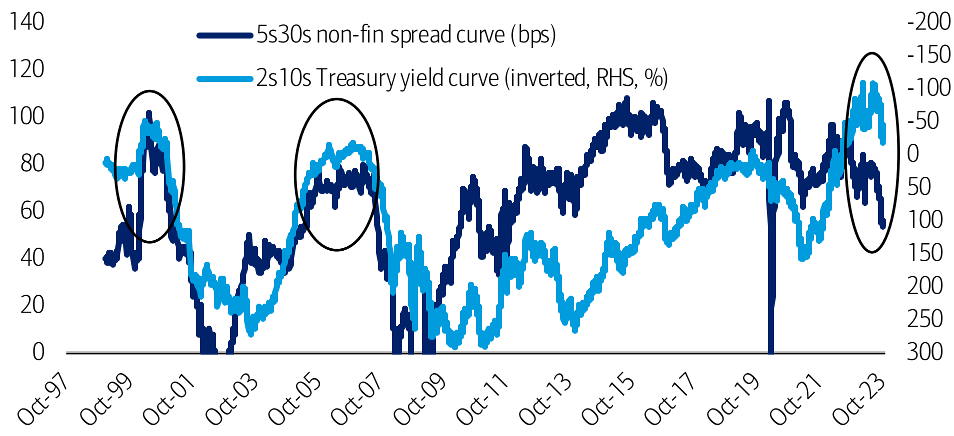
Figure 9: 5s30s IG spread curve is currently flatter than in 2006 and 2000

The 5s30s IG non-financial spread curve is currently notably flatter than the prior periods when 2s10s Treasury yield curve was inverted.



Source: BofA Global Research, ICE Data Indices, LLC

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5s10s spread curve screen

In Figure 10 below we screen for 5s10s spread curves that have flattened the most since August 31st.

Figure 10: spread curve screen

5s10s spread curves that have flattened the most since August 31st

Issuer	5yr bond	10yr bond	Index rating	Sector	5yr g-spread (bps)	10yr g-spread (bps)	5s10s curve (bps)	Curve on Aug 31	Curve change
SIMON PROP GP LP	SPG 1 3/8 01/15/27	SPG 5 1/2 03/08/33	A3	REITs	104	159	55	78	-23
CITIGROUP INC	C 4.658 05/24/28	C 6.27 11/17/33	A3	Banks/Brokers	146	179	33	50	-17
BANK OF NY MELLO	BK 4.543 02/01/29	BK 4.967 04/26/34	A1	Finance	136	156	20	36	-16
GOLDMAN SACHS GP	GS 4.482 08/23/28	GS 3.102 02/24/33	A3	Banks/Brokers	152	170	18	34	-16
AERCAP IRELAND	AER 5 3/4 06/06/28	AER 3.3 01/30/32	BBB2	Finance	184	207	22	37	-14
HSBC HOLDINGS	HSBC 6.161 03/09/29	HSBC 6.254 03/09/34	A2	Banks/Brokers	188	207	19	32	-14
FIFTH THIRD BANC	FITB 6.339 07/27/29	FITB 4.337 04/25/33	BBB1	Banks/Brokers	222	229	7	20	-13
NATWEST GROUP	NWG 5.808 09/13/29	NWG 6.016 03/02/34	A3	Banks/Brokers	196	205	8	20	-12
CONSTELLATION BR	STZ 4.35 05/09/27	STZ 4.9 05/01/33	BBB3	Food, Bev, & Bottling	106	135	29	40	-11
KEY BANK NA	KEY 5.85 11/15/27	KEY 5 01/26/33	A3	Banks/Brokers	261	292	32	43	-11
GLENCORE FDG LLC	GLENLN 5.4 05/08/28	GLENLN 5.7 05/08/33	BBB1	Basic Materials	144	189	45	56	-11
ELEC DE FRANCE	EDF 5.7 05/23/28	EDF 6 1/4 05/23/33	BBB1	Utilities	137	178	41	52	-11
AMER ELEC PWR	AEP 5 3/4 11/01/27	AEP 5 5/8 03/01/33	BBB2	Utilities	100	156	57	68	-11
NEXTERA ENERGY	NEE 4.9 02/28/28	NEE 5.05 02/28/33	BBB1	Utilities	120	149	29	39	-10
TAQA ABU DHABI	TAQAUH 4 3/8 01/24/29	TAQAUH 4.696 04/24/33	AA3	Utilities	75	77	2	12	-10
GE HEALTHCARE	GEHC 5.65 11/15/27	GEHC 5.905 11/22/32	BBB2	Health Care	117	146	29	39	-9
ROCHE HLDGS INC	ROSW 2.314 03/10/27	ROSW 2.076 12/13/31	AA2	Health Care	60	74	14	24	-9
MITSUB UFJ FIN	MUFG 5.242 04/19/29	MUFG 5.406 04/19/34	A2	Banks/Brokers	140	155	14	23	-9
ENEL FINANCE AM	ENELIM 7.1 10/14/27	ENELIM 7 1/2 10/14/32	BBB1	Utilities	149	203	53	62	-9
EVERSOURCE ENERG	ES 5.45 03/01/28	ES 5 1/8 05/15/33	BBB1	Utilities	119	156	37	45	-8
HEICO CORP	HEI 5 1/4 08/01/28	HEI 5.35 08/01/33	BBB2	Aerospace/Defense	132	151	19	27	-7
ALABAMA POWER CO	SO 3 3/4 09/01/27	SO 3.94 09/01/32	A2	Utilities	64	107	43	50	-7
HCA INC	HCA 5.2 06/01/28	HCA 5 1/2 06/01/33	BBB3	Health Care	152	179	27	34	-7
STANDARD CHART	STANLN 6.301 01/09/29	STANLN 6.296 07/06/34	A3	Banks/Brokers	189	238	50	56	-7
JPMORGAN CHASE	JPM 5.299 07/24/29	JPM 5.35 06/01/34	A1	Banks/Brokers	142	158	16	22	-6
HONEYWELL INTL	HON 4 1/4 01/15/29	HON 4 1/2 01/15/34	A2	Industrial Products	68	91	23	29	-6
MORGAN STANLEY	MS 5.449 07/20/29	MS 5.424 07/21/34	A2	Banks/Brokers	157	175	17	23	-5
CRED AGRICOLE SA	ACAFP 5.301 07/12/28	ACAFP 5.514 07/05/33	AA3	Banks/Brokers	124	156	31	36	-5

Source: BofA Global Research, ICE Data Indices, LLC

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[Situation Room: Bank spreads vs rates]

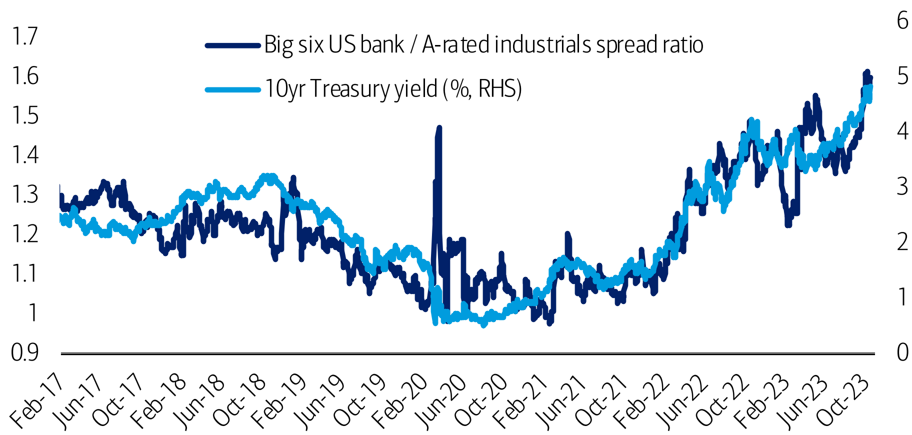
Bank spreads vs rates

Bank spreads have underperformed significantly in September and October as interest rates continue to increase (see Situation Room: Very cheap banking). In fact, the big six US bank spread ratio to A-rated industrials (the relative bank spread) has been tracking 10yr Treasury yields closely since last year (Figure 11). That suggests that, although banks are already historically cheap, it would likely take some stabilization in rates before bank spreads can finally outperform industrials.

Reaching new highs on rates

10yr Treasury yield reached new highs of 4.9% today. That's approaching the 5% expected peak rate, as argued by our rates strategists (see Liquid Insight: US rate shock FAQ). Hence, while interest rate uncertainties remain high, potentially approaching the peak on rates should be positive for spreads in general, but especially so for bank spreads.

Figure 11: Bank spread underperformance has been tracking 10yr Treasury yields since 2022
Currently bank spreads relative to industrials appear in line with the increase in interest rates.



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

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Situation Room: The economy vs. rates vol

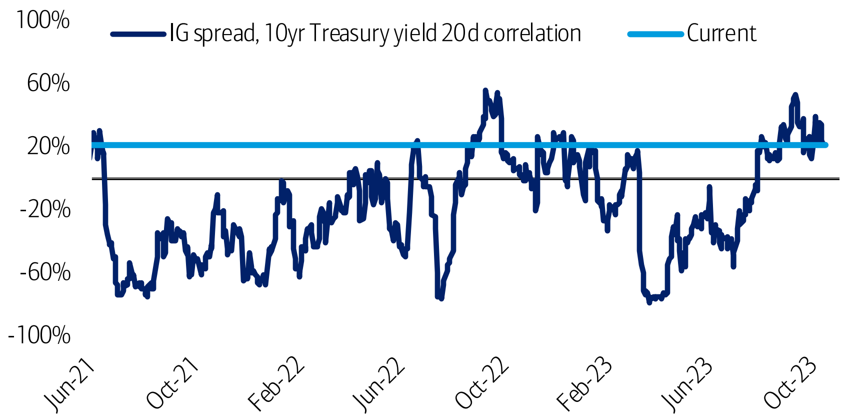
The economy vs. rates vol

Following another bout of strong US data (see US Watch: Another month, another beat in retail sales) 10yr Treasury yields reached new cyclical highs of 4.83%. While the elevated interest rate volatility continues to pressure demand for 30yr bonds, both IG spreads and equities remained resilient today. Hence despite the 13bps jump in 10yr Treasury yields IG spreads closed mixed, about in line with the S&P 500 that was little changed on the day.

More balanced

That means the positives (a strong US economy, more attractive yields) are getting more in balance with the negatives (higher rates volatility, bigger risks to US growth from the higher for longer rates). Hence the correlation between rates and IG spreads, while still positive, has now approached the lower end of the range since August (Figure 12). That's similar to equities, where the negative correlation with rates (higher Treasury yields, lower equity prices) is also off the lows in August and September (Figure 13).

Figure 12: The positive correlation between IG spreads and rates has declined recently
The 20-day correlation is currently 21%, down from 53% in early September.



Note: the correlation of daily IG index spread changes and 10yr Treasury yield changes.
Source: BofA Global Research, Bloomberg.

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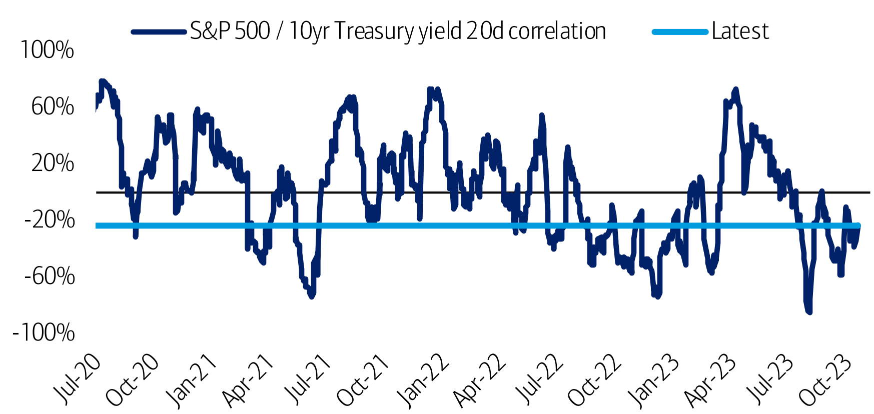
Figure 13: The negative correlation between stocks and rates has moderated
The current 20-day correlation is -24%, up from -85% in early August.



Note: the correlation of daily S&P 500 index price returns and 10yr Treasury yield changes.
Source: BofA Global Research, Bloomberg.

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Situation Room: Rising Stars > Fallen Angels

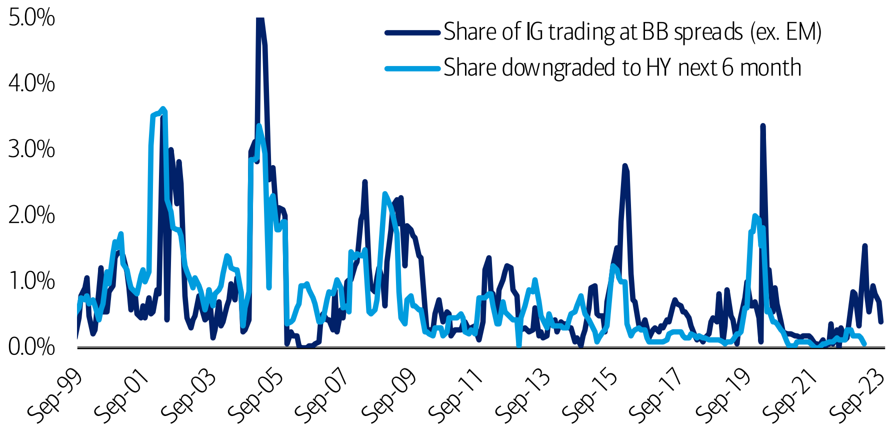
Rising Stars > Fallen Angels

On Friday night (October 13) Moody's placed Walgreens (WBA) Baa3 rating on watch negative. Since WBA does not have a Fitch rating, a downgrade at Moody's would push the issuer into the high yield index at Bloomberg / Barclays, although not at ICE (see below). With a $5.7bn notional, this would be the largest fallen angel since the $9.8bn Nissan (NSANY) downgrade in Mach. Despite the potential for WBA to become a fallen angel, both rating agencies and market pricing currently signal limited risk of fallen angels (downgrades to HY), and elevated volumes of rising stars (upgrades to IG).

Quantifying fallen angel risks

First, currently $29bn (or 0.4% of the IG index) of BBB-rated bonds trade at spreads wider than the BB-rated index. That amount has historically been correlated with downgrades to HY over the subsequent six months (Figure 14). That's benign by historical standards, as fallen angels peaked at over 2% of the IG index in 2020 and 2009. Second, the share of low BBB-rated bonds on a negative watch / outlook is currently 12% – about as low as it gets historically. At the same time, the share of low BBB bonds on positive watch remains high, and the amount of HY bonds one upgrade away from IG, which is correlated with rising stars over the next 12 months, remains robust at $89bn.

Figure 14: Market pricing implies limited downgrade risk to HY
Currently $29bn (or 0.4% of the IG index) of BBB-rated bonds trade at spreads wider than the BB-rated index. That has been correlated with downgrades to HY over the subsequent six months.



Source: BofA Global Research, ICE Data Indices

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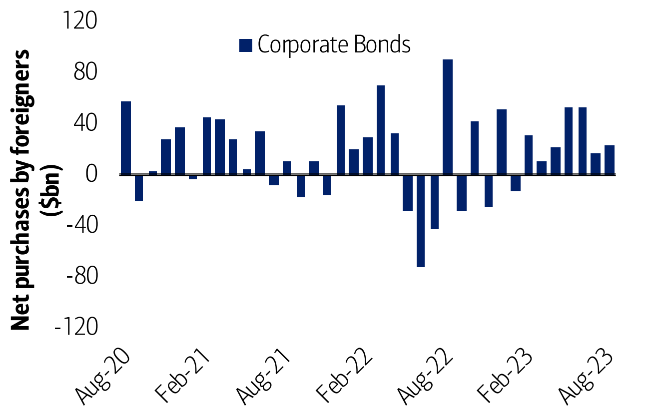
Situation Room: Bank spreads vs rates

TIC update for October

According to TIC (Treasury International Capital) data released today foreign investors net bought +$23.8bn of US corporate bonds (excluding ABS) in August, after net buying +$16.4bn in July (Figure 15). Note that the net purchase amount is based on monthly market value of securities holdings, adjusted for the price change. In August foreign investors net bought +$42.6bn of Treasuries, after net buying +$19.1bn in July. In August, foreign investors net sold -$154.9bn of stocks, after net buying +$369.4 in July. Foreign investors also net sold -$0.0bn of Agencies and net bought +$79.7bn of Agency MBS (Figure 16).

By region, where data includes ABS, European investors net bought +$30.9bn, Asia net sold -$12.9bn and the Caribbean net bought +$11.2bn (Figure 17). Within Asia, Japan net sold -$15.9bn, China net sold -$0.3bn, while the rest of Asia net bought +$3.7bn (Figure 18). Notice that this data on the geographical breakdown of foreign purchases is fairly useless as it tracks the money manager or the custodian – i.e. often not the root source of demand.

Figure 15: Foreign net purchases of corporate bonds (excl. ABS)
Foreign investor flows have been mixed over the past months.



Note: net purchases are based on monthly market value of security holdings, adjusted for the price change.
Source: TIC system, BofA Global Research

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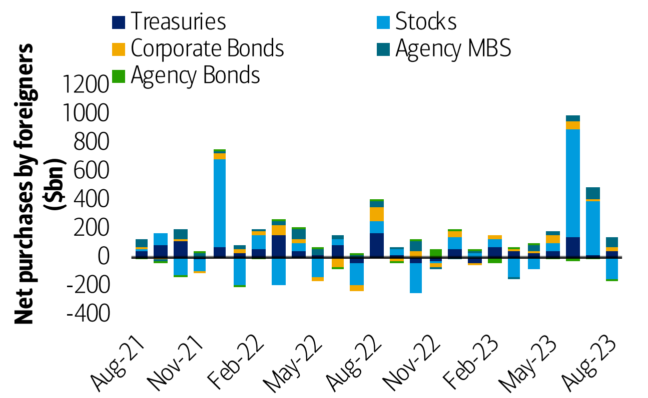
Figure 16: Monthly foreign net purchases of long-term US securities
Foreign investors were net buyers of US treasuries, corporate bonds, agency MBS bonds and agency bonds in August, and they were net sellers of stocks.



Note: net purchases are based on monthly market value of security holdings, adjusted for the price change. Agency MBS excludes prepayments.
Source: TIC system, BofA Global Research

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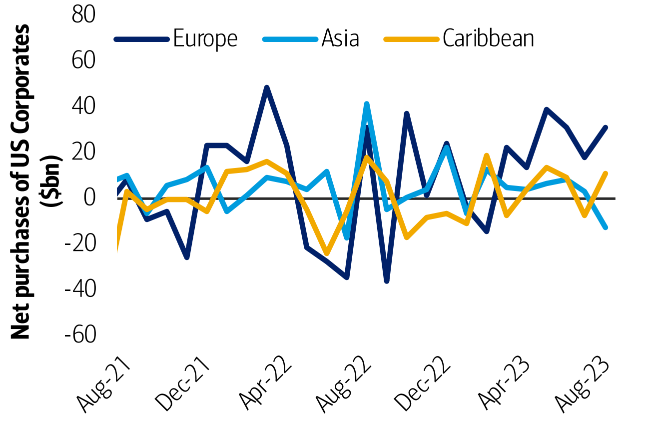
Figure 17: Net purchases of US corporate bonds by region (incl. ABS)
Asia and the Caribbean were net buyers of US corporate bonds in August, while Asia was a net seller.



Note: net purchases are based on monthly market value of security holdings, adjusted for the price change.
Source: TIC system, BofA Global Research

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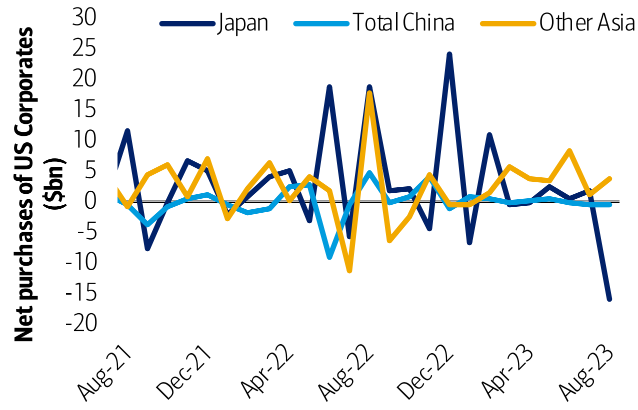
Figure 18: Net purchases of US corporate bonds by Asia (incl. ABS)
Within Asia, Japan and China were net sellers of US corporate bonds in August, while the rest of Asia were net buyers.



Note: net purchases are based on monthly market value of security holdings, adjusted for the price change.
Source: TIC system, BofA Global Research

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Flows

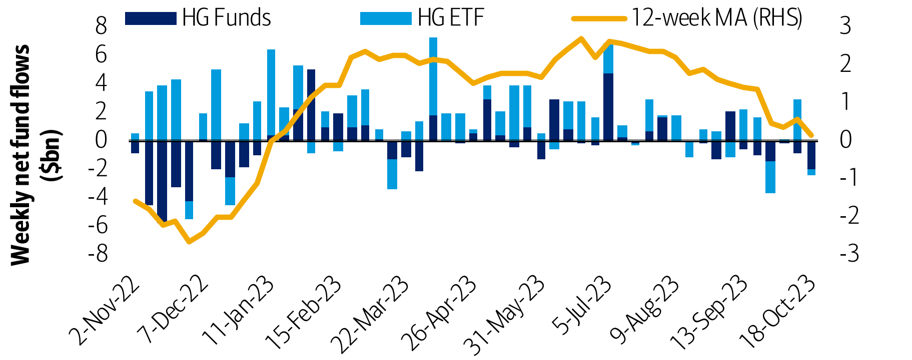
Outflows from HG

Flows to US HG bond funds and ETFs turned negative to -$2.41bn this past week ending on October 18, down from a +$2.08bn inflow in the prior week. This outflow was mostly due to outflows from HG Funds (to -$2.05bn from -$0.87bn), however flows also turned negative for HG ETFs (to -$0.36bn from +$2.95bn). Flows for short-term HG turned negative (to -$2.46bn from +$0.47bn), while inflows to ex. short-term moderated (to +$0.06bn from +$1.60bn).

Near flat for equities

Stocks recorded a -1.43bn outflow this past week, after recording a -$3.49bn outflow the previous week. Outflows accelerated for high yield (to -$1.84bn from -$1.51bn) as well as for global EM bonds (to -$2.16bn from -$1.99bn). On the other hand outflows moderated for munis (to -$0.08bn from -$0.17bn), while inflows accelerated for loans this past week (to +$0.26bn from +$0.04bn). Finally, money markets reported a -$101.12bn outflow this past week, following a -$8.33bn outflow a week earlier.

Figure 19: Weekly high grade fund flows, $bn
HG ETF -$0.36bn, HG Funds -$2.05



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

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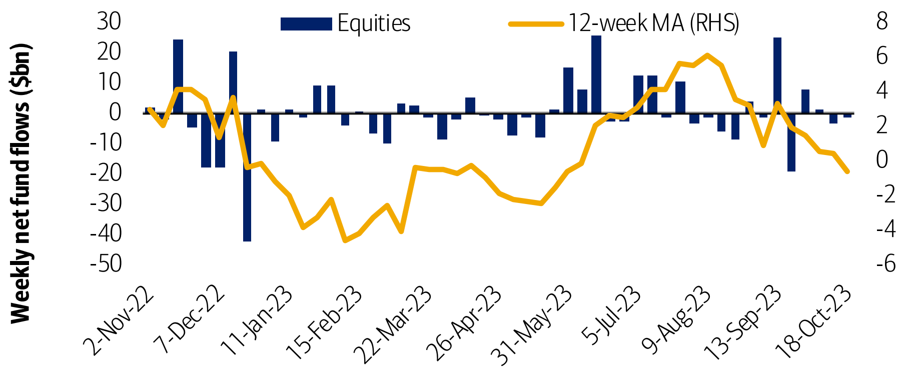
Figure 20: Weekly equity fund flows, $bn
Equities -$1.43bn



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

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Figure 21: Fund flows summary
YTD fund flows summary by asset class

Asset class	Last week (% of AUM for weekly reporting funds/ETFs)	YTD (% of AUM for all funds/ETFs)	YTD ($bn)
High grade: total	-0.12%	4.1%	148.9
High grade: ex short-term	0.00%	8.2%	226.0
High yield: total	-0.83%	-3.3%	-10.9
High yield: ETFs only	-2.77%	-15.2%	-10.1
Loans	0.33%	-9.5%	-11.4
EM	-0.48%	-3.9%	-23.6
Munis	-0.02%	0.5%	4.5
All fixed income	-0.04%	4.0%	241.1
Money markets	-1.64%	13.8%	739.9
Equities	-0.01%	-0.3%	-58.3

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 2020. Global EM funds, US-domiciled funds only for other fund types.
Source: EPFR Global, BofA Global Research

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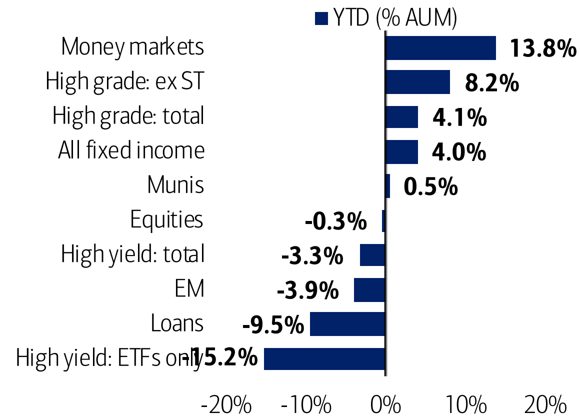
Figure 22: Year to date fund flows, % of AUM
HY ETFs have had the biggest outflows so far in 2023.



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

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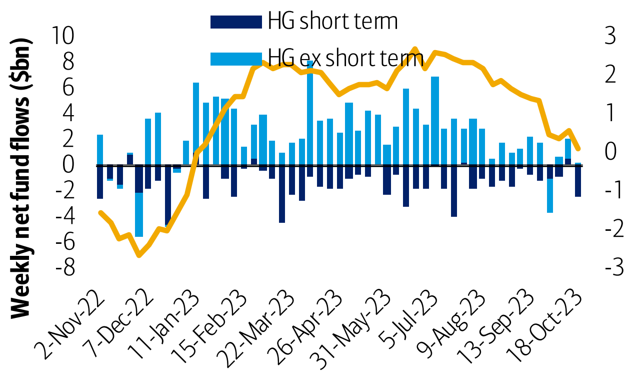
Figure 23: Weekly high grade fund flows, $bn
HG short-term -$2.46bn, HG ex short-term +$0.06



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

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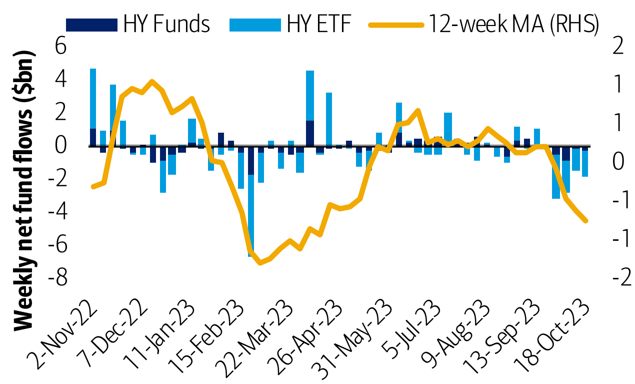
Figure 24: Weekly high yield fund flows, $bn
HY ETFs -$1.59bn, HY funds -$0.26



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

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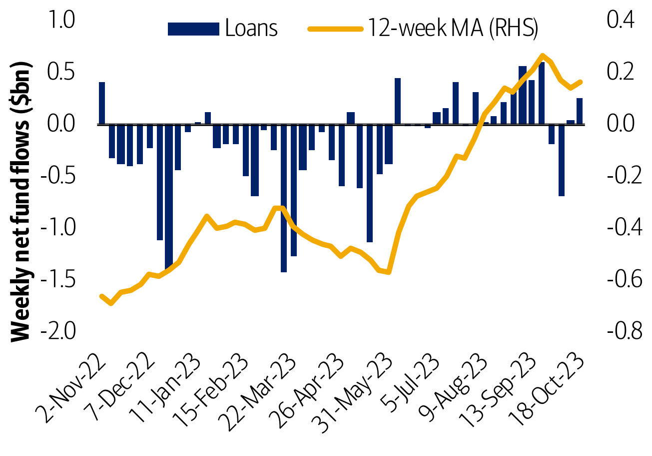
Figure 25: Weekly loan fund flows, $bn
Leveraged loans +$0.26bn



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

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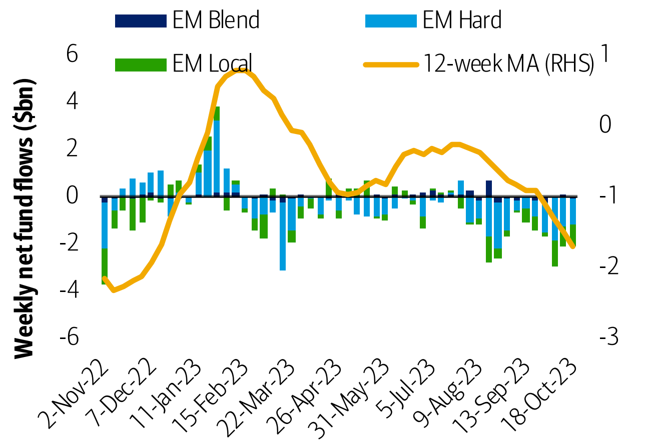
Figure 26: Weekly EM fund flows, $bn
Global EM bonds -$2.16bn



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

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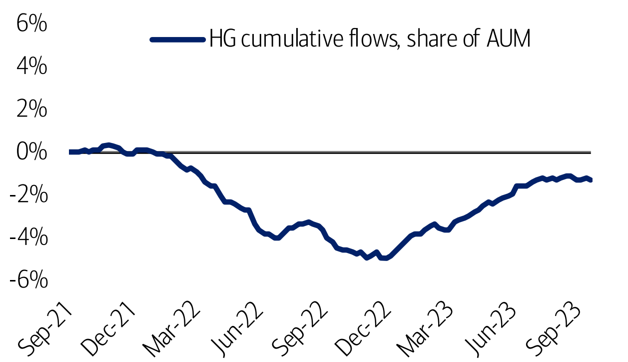
Figure 27: Cumulative % flows in HG over the last 2 years
Following large outflows in 2022, HG flows turn positive in 2023



Source: EPFR Global, BofA Global Research

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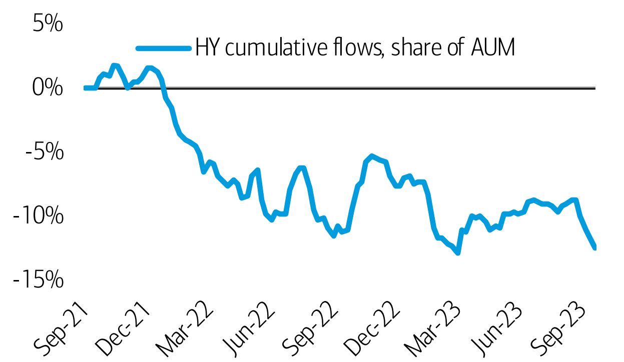
Figure 28: Cumulative % flows in HY over the last 2 years
2022 and 2023 have seen consequent outflows in HY



Source: EPFR Global, BofA Global Research

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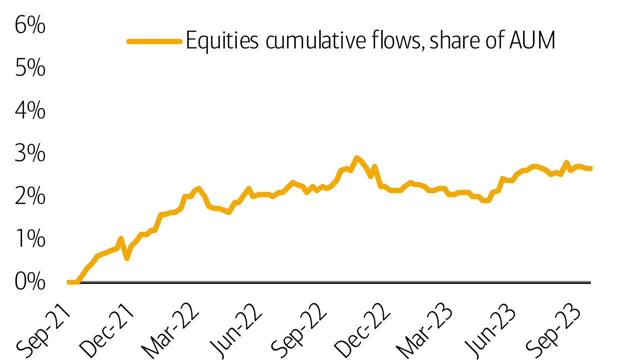
Figure 29: Cumulative % flows in equities over the last 2 years
Flows moderate in equities after two years of inflows



Source: EPFR Global, BofA Global Research

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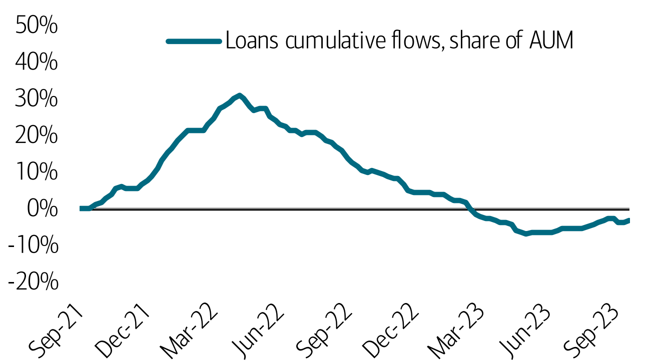
Figure 30: Cumulative % flows in loans over the last 2 years
After large inflows until mid-2021, loans subject to large outflows ever since



Source: EPFR Global, BofA Global Research

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Appendix: defining high grade

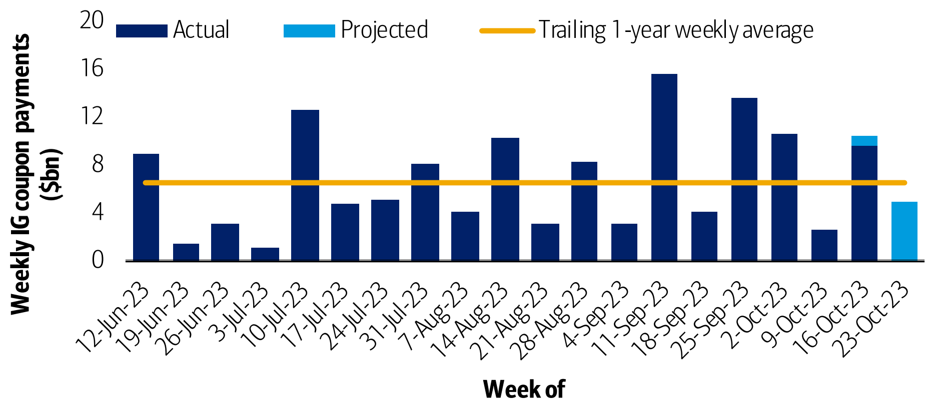
We define our high grade flows metric as a combination of "bond" and "corporate bond" fixed income funds and ETFs domiciled in the US (and investing in any currency, although the majority is invested in USD). We also exclude funds primarily focused on Government, HY, EM and MBS from the sample. The "bond" 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.

Weekly technicals

The US IG corporate bond market is expected to generate $4.9bn in coupon payments next week, below the trailing 1-year weekly average of $6.5bn (Figure 31). In addition, $0.2bn of tender offers were settled and paid this week, while $0.8bn of calls are expected to become effective next week. Bond maturities: $14.0bn this week, $7.2bn next week.

Figure 31: Weekly US IG coupon payments

Expect $4.9bn of coupon payments next week, below the $6.5bn trailing 1-year weekly average.



Source: ICE Data Indices, LLC, BofA Global Research

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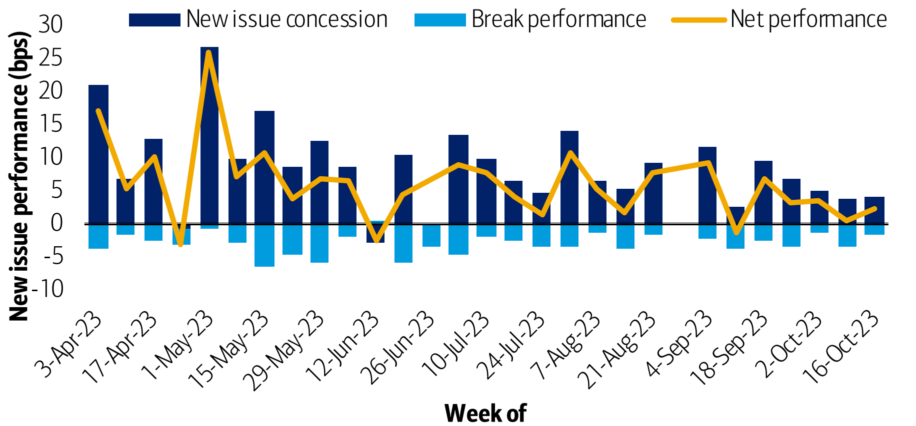
Supply

US IG gross issuance totaled $26.0bn this week, consisted of $25.0bn financials, $0.0bn high-quality industrials and $1.0bn BBB industrials. Given $48.2bn of gross issuance, $34.4 bn of maturities, net issuance is tracking $12.6bn MTD. Post 3Q results, two big US banks yet to issue the supply in IG market. Given the elevated market volatility and a big jump in Treasury yields we look for lighter issuance in $10-$20bn range next week (Figure 33).

New issue performance weakened this week from last week. The average new issue concession increased by 0.1bp to 4.1bps from 4.0bps last week, while the average break performance declined to 1.8bps this week from 3.6bps tighter last week. As a result, the overall new issue performance, which we measure as new issue concession plus break performance, weakened to 2.3bps this week from 0.4bps wider last week (Figure 32). This week's new issues are trading 1bp tighter on average from pricing.

Figure 32: Weekly new issue supply performance

For the week of Oct 16 2023: new issue concession = 4.1bps; break performance = -1.8bps; net performance = 2.3bps.



Source: BofA Global Research

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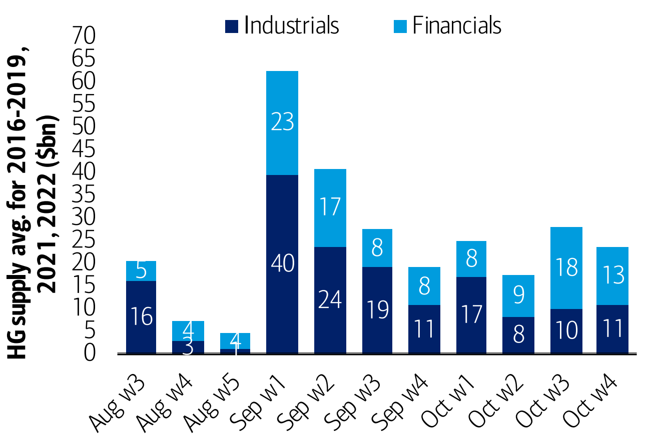
Figure 33: Weekly Supply seasonality

Supply volumes pick tend to slow after the 1st week of September.



Source: Bloomberg, BofA Global Research

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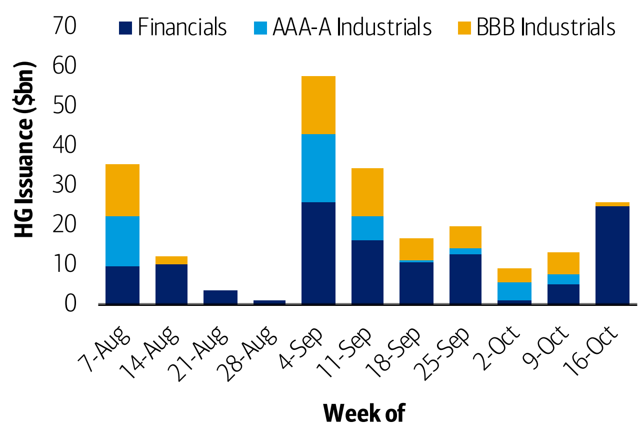
Figure 34: Weekly Supply

This week's supply consisted of $25.0bn financials, $0.0bn high-quality industrials and $1.0bn BBB industrials.



Source: Bloomberg, BofA Global Research

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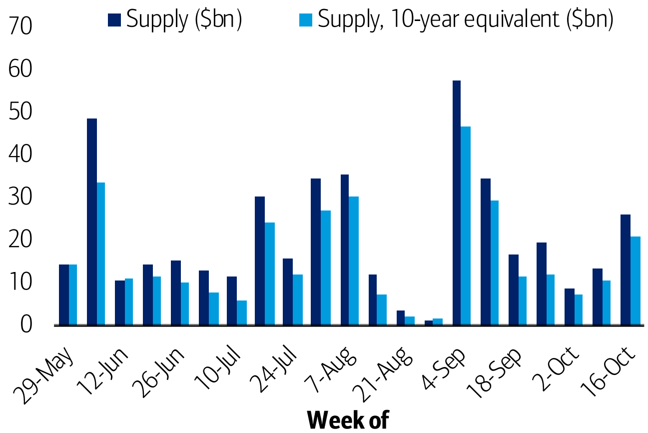
Figure 35: Weekly gross and 10-year equivalent supply volumes
10-year equivalent supply = $20.7bn WTD



Source: BofA Global Research, Bloomberg

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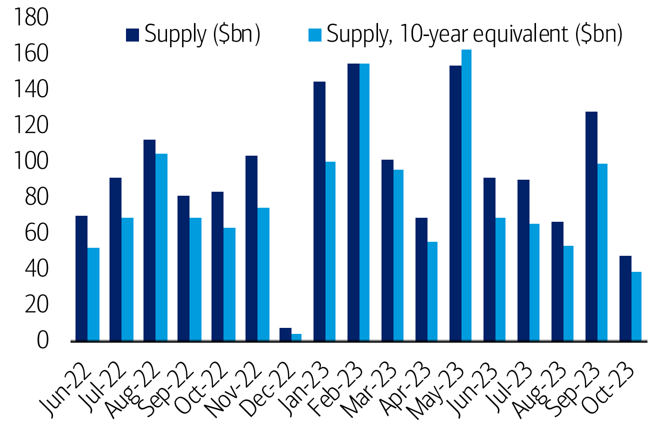
Figure 36: Monthly gross and 10-year equivalent supply volumes
10-year equivalent supply = $38.7bn in October



Source: BofA Global Research, Bloomberg

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Figure 37: Recent new issue pricing and new issue concessions
List of new issues in the IG corporate bond market today along with performance metrics.

Date	Ticker	Name	Tenor	Size ($mm)	Moody's/S&P Rating	Coupon (%)	Px Spread (bps)	New Issue Conc. (bps)	* Break performance	Current spread (bps)
2023-10-16	JPM	JPMorgan Chase & Co	4	2,000	A1/A-	6.07	120	0	0	121
2023-10-16	JPM	JPMorgan Chase & Co	6	2,250	A1/A-	6.087	138	3	-1	139
2023-10-16	JPM	JPMorgan Chase & Co	11	3,000	A1/A-	6.254	155	-1	-2	155
2023-10-16	WFC	Wells Fargo & Co	6	2,750	A1/BBB+	6.303	160	6	-1	162
2023-10-16	WFC	Wells Fargo & Co	11	3,250	A1/BBB+	6.491	180	0	-4	180
2023-10-17	KEBHNB	Hana Bank	5	500	Aa3/A+	5.75	100	n.a.	n.a.	n.a.
2023-10-17	PNC	PNC Financial Services Group Inc/The	4	1,250	A3/A-	6.615	160	8	-2	158
2023-10-17	PNC	PNC Financial Services Group Inc/The	11	2,250	A3/A-	6.875	203	8	-4	201
2023-10-18	BK	Bank of New York Mellon Corp/The	6	900	A1/A	6.317	140	2	n.a.	139
2023-10-18	BK	Bank of New York Mellon Corp/The	11	1,100	A1/A	6.474	158	-4	-1	158
2023-10-18	GS	Goldman Sachs Group Inc/The	6	2,750	A2/BBB+	6.484	157	-4	2	160
2023-10-18	GS	Goldman Sachs Group Inc/The	11	1,250	A2/BBB+	6.561	167	n.a.	0	170
2023-10-18	MUFG	Mitsubishi UFJ Financial Group Inc	PERP	750	Baa3/BB+	8.2	n.a.	n.a.	n.a.	n.a.
2023-10-19	AZO	AutoZone Inc	5	500	Baa1/BBB	6.25	132	15	-9	123
2023-10-19	AZO	AutoZone Inc	10	500	Baa1/BBB	6.55	162	11	0	162
2023-10-19	USB	US Bancorp	4	1,000	A3/A	6.787	175	10	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 same issuer prior to the new issue deal announcement, adjusted for the spread impact of dollar prices deviating from par. Break performance is computed as the difference between new issue pricing and secondary closing spread on the first day of trading.
Source: BofA Global Research, Bloomberg

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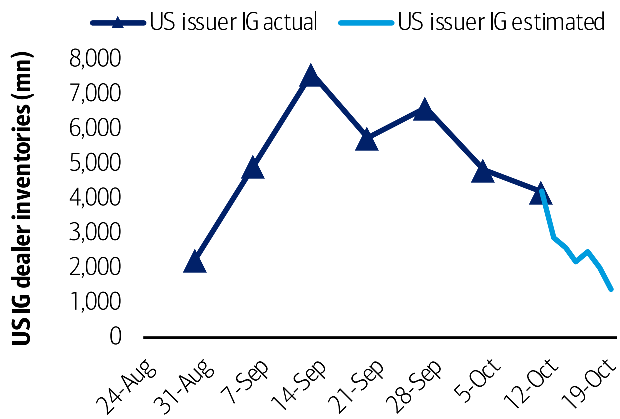
Dealer inventories

Below we estimate dealer inventories for the IG corporate bonds based on TRACE data. The actual inventories of US issuer bonds based on NY Fed survey, as well as the estimated change since the latest Fed report are plotted in Figure 38 and Figure 39. We estimate the corresponding DV01 equivalent in Figure 39. More details by sector and maturity are available in Figure 40 and Figure 41. Finally, note that the data for the current date is through about 4:40 p.m. Eastern Standard Time.

Figure 38: Estimated dealer inventories of IG corporate bonds.
We estimate IG dealer inventories of US issuer bonds declined to $1.4bn currently from $4.2bn on Oct-11.



Note: data for US issuer bonds only, maturities 13M or longer. Actual dealer inventory data is from Primary Dealer Statistics survey by the NY Fed. The subsequent change in inventory is estimated based on TRACE.
Source: BofA Global Research, FINRA, TRACE, Federal Reserve

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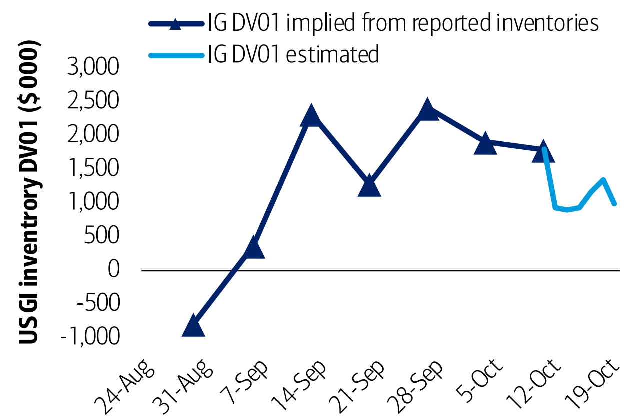
Figure 39: Estimated dealer inventory DV01 for IG corporate bonds.
We estimate IG dealer inventory DV01 of US issuer bonds declined to $1.0mn currently from $1.8bn on Oct-11.



Note: data for US issuer bonds only, maturities 13M or longer. Actual dealer inventory data is from Primary Dealer Statistics survey by the NY Fed. The subsequent change in inventory is estimated based on TRACE.
Source: BofA Global Research, FINRA, TRACE, Federal Reserve

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Figure 40: Estimated changes in IG dealer inventories by maturity and broad sector.
We estimate IG dealer inventories declined -$467mn today and declined -$873mn over the prior week.

	Net dealer buy ($mn)					Net dealer DV01 change ($thousand)					Trading volumes on 19-Oct-23 ($mn)			
Sector	**19-Oct**	**18-Oct**	**1 W**	**2 W**	**4 W**	**19-Oct**	**18-Oct**	**1 W**	**2 W**	**4 W**	**Buy**	**Sell**	**Dealer**	**Total**
High grade (13M+)	**-467**	**-333**	**-873**	**-2,375**	**-4,492**	**-315**	**308**	**426**	**120**	**-150**	**11,136**	**11,603**	**8,068**	**30,806**
<3yr	188	-417	147	-503	-1,338	35	-78	10	-123	-344	2,023	1,835	1,270	5,128
3-5yr	-439	-384	-2,228	-2,589	-3,732	-147	-125	-809	-925	-1,301	1,919	2,358	1,655	5,933
5-11yr	-154	-174	-187	-1,259	-2,862	-128	-113	-189	-838	-1,696	3,867	4,021	3,000	10,889
11+yr	-62	642	1,395	1,977	3,440	-75	624	1,414	2,005	3,190	3,326	3,388	2,142	8,857
Fin	-84	-90	323	-268	-370	-76	142	197	-89	-212	4,722	4,806	3,191	12,718
Non-Fin	-383	-242	-1,196	-2,107	-4,122	-240	166	230	208	61	6,414	6,797	4,877	18,088
Fixed	-427	-300	-727	-2,207	-4,554	-294	307	448	111	-203	11,102	11,530	8,029	30,661
Floating	-40	-33	-145	-168	62	-22	0	-21	8	52	33	73	39	145
US issuers	-642	-458	-1,483	-3,100	-6,649	-353	179	84	-306	-1,329	8,751	9,393	6,711	24,856
DM Yankees	57	55	504	702	1,721	-24	93	303	442	1,001	2,026	1,969	1,238	5,234
EM Yankees	118	70	105	23	436	62	35	39	-17	178	358	240	118	716

Note: data for maturities 13M or longer. Changes in inventories are estimated based on TRACE.
Source: BofA Global Research, FINRA, TRACE.

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Figure 41: Estimated changes in IG dealer inventories by sector.
We estimate today IG dealer inventories declined -$104mn for Banks/Brokers and declined -$52mn for Energy.

	Net dealer buy ($mn)					Net dealer DV01 change ($thousand)					Trading volumes on 19-Oct-23 ($mn)			
Sector	**19-Oct**	**18-Oct**	**1 W**	**2 W**	**4 W**	**19-Oct**	**18-Oct**	**1 W**	**2 W**	**4 W**	**Buy**	**Sell**	**Dealer**	**Total**
Aerospace/Defense	-127	14	-25	-271	-262	-110	30	11	-258	-82	182	310	163	655
Automobiles	14	-12	-138	-229	-393	36	-19	-47	-82	-146	226	212	155	593
Banks/Brokers	-104	37	506	184	281	-127	200	248	98	35	3,554	3,658	2,226	9,438
Basic Materials	-24	-68	-215	-211	-424	-37	-39	-102	-67	-246	334	358	239	931
Commercial Services	-30	-3	-18	-11	257	-25	17	22	65	250	91	121	66	277
Energy	-52	-120	-348	-112	-571	4	-49	-44	90	-206	655	707	632	1,994
Finance	-49	-112	-285	-461	-682	-3	-47	-145	-184	-196	534	583	470	1,586
Food, Bev, & Bottling	-5	24	83	530	353	-13	33	111	627	556	511	516	338	1,364
Health Care	25	-12	361	346	-494	58	59	368	506	115	1,196	1,171	665	3,031
Industrial Products	-28	-30	-170	-227	-377	-15	-12	-56	-48	-60	262	290	240	792
Insurance	-38	-50	-164	-171	-357	-14	-20	-64	-109	-243	246	284	244	774
Media & Entertainment	-11	5	-141	-436	-449	-16	10	31	-177	-97	490	501	278	1,269
REITs	106	35	267	179	388	69	9	159	107	193	388	281	251	920

Figure 41: Estimated changes in IG dealer inventories by sector.
We estimate today IG dealer inventories declined -$104mn for Banks/Brokers and declined -$52mn for Energy.

	Net dealer buy ($mn)					Net dealer DV01 change ($thousand)					Trading volumes on 19-Oct-23 ($mn)			
Sector	**19-Oct**	**18-Oct**	**1 W**	**2 W**	**4 W**	**19-Oct**	**18-Oct**	**1 W**	**2 W**	**4 W**	**Buy**	**Sell**	**Dealer**	**Total**
Retail	28	-14	-56	-315	-379	-1	6	-24	-171	-1	418	391	454	1,263
Technology	-26	-69	-45	-227	-838	4	-14	8	-15	-331	590	616	575	1,781
Telecom	-97	56	-128	-374	-252	-88	52	-69	-214	-61	445	543	269	1,257
Tobacco	-19	-13	-77	-151	-170	-1	-7	-16	-54	34	99	118	76	293
Transportation	-16	41	-6	-69	-31	1	72	42	-12	-4	196	212	106	514
Utilities	-15	-37	-230	-300	113	-35	33	21	-4	347	584	600	517	1,701
Other	1	-6	-42	-49	-204	-2	-6	-26	23	-5	135	133	106	374

Note: data for maturities 13M or longer. Changes in inventories are estimated based on TRACE.
Source: BofA Global Research, FINRA, TRACE.

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Common abbreviations:
IG: Investment Grade
HG: High Grade
LQD: iShares iBoxx $ Investment Grade Corporate Bond ETF
DV01: Dollar value of a basis point
CDX IG: The Markit CDX North America Investment Grade Index
CDX HY: Markit CDX North America High Yield Index
ECB: European Central Bank
QE: Quantitative Easing
CSPP: corporate sector purchase programme
CPI: Consumer Price Index
FOMC: The Federal Open Market Committee

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