

Credit Market Strategist

Fluid rate dynamics

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The sharp jump in rates has been bullish for IG bond spreads on net, as expected (see [Credit Market Strategist: Rate resilience](#)). That is because the positive impact on demand outweighs risk related to higher potential funding costs and tighter monetary policy. In the near term we look for this IG spread resilience to continue. The jump in rates effectively shut down the IG primary market post the FOMC this week and should continue weighing on issuance volumes next week. At the same time, given the ~10yr average IG bond maturity, it will take years for higher rates to impact IG overall funding costs materially. Moreover, on the margin IG non-financial issuers use debt mostly for M&A and share buybacks. Hence to the extent higher-for-longer rates reduce borrowing, IG credit fundamentals could improve without much of an impact on dividends or capex.

Even stronger technicals next week

IG issuance volumes this week dropped from \$15bn on Monday to \$0.6bn on Thursday after the FOMC. The sharply higher Treasury yields should weigh on issuance volumes next week as well. That, combined with stronger investor demand supported by even more attractive yields, means trends from this week continue: tighter IG spreads, bond spreads outperforming CDS, and flatter IG spread curves.

The shrinking BBBs

So far in 2023 net upgrades from BBB to single-A have reached \$100bn – the highest since at least 2010.

Hawkish Fed, resilient IG spreads

The biggest takeaway from FOMC was to lower the number of Fed cuts in 2024 and the corresponding bear flattening in the Treasury yield curve.

IG spread curve: how low can it go?

The answer is: ever lower (flatter). The biggest current mismatch between lackluster supply and strong demand is in the back end of the IG corporate spread curve.

TIC update for September

Foreign investors net bought +\$29.5bn of US corporate bonds (excluding ABS) in July, after net buying +\$41.7bn in June.

IG market technicals

Supply: \$16.7bn of issuance this week, expect \$15-20bn next week. **Flows:** +\$0.63bn inflow this past week ending on September 20. **Weekly technicals:** expect \$5.3bn of coupon payments, \$1.2bn of calls and \$1.3bn of tender offers to become effective next week. Bond maturities: \$11.8bn this week, \$11.0bn next week. **Dealer inventories:** -\$3,450mn past week ended Thu. Details inside.

We published the weekly CMS data and charts in [Situation Room](#).

22 September 2023

Credit Strategy
United States

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Recent credit strategy research

Publication	Name
Situation Room	Weaker flows for bonds, big outflows from stocks
Situation Room	Hawkish Fed, resilient IG spreads
Situation Room	The shrinking BBBs
Situation Room	IG spread curve: how low can it go?
Monthly HG Market Review	Aug '23: It's all about the data
Credit Market Strategist	Jul '23 Credit Investor Survey: Bear retreating
Credit Market Strategist	Summer 2023 snapshot of US IG market

See page for definitions of common abbreviations used in our reports.

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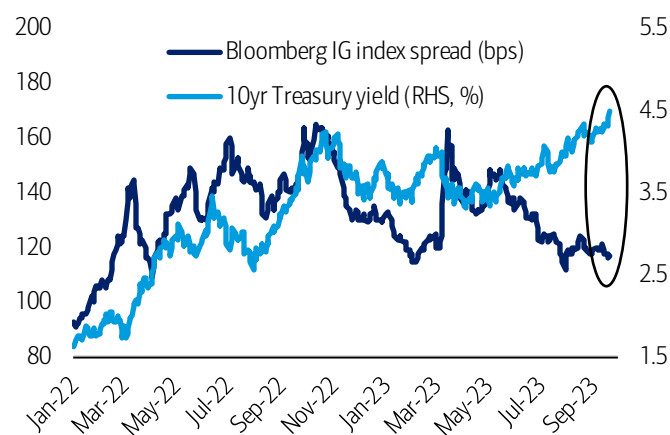
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Fluid rate dynamics

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Figure 1: Higher rates / tighter IG spreads ...

IG corporate index spread is 4bps tighter since September 12.

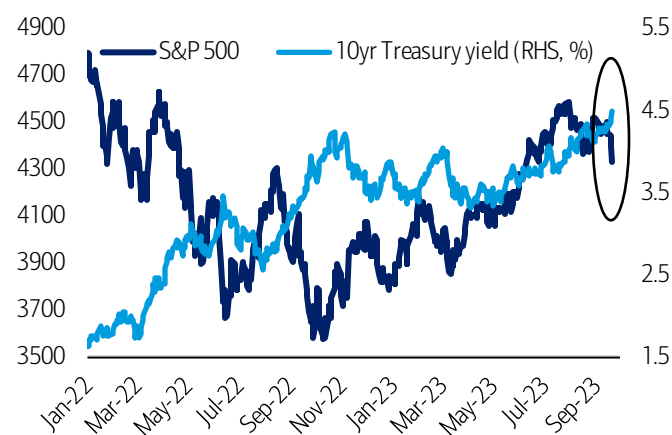


Source: Bloomberg

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Figure 2: ... despite the decline in equity prices

S&P 500 index is -3.0% lower since September 12.



Source: Bloomberg

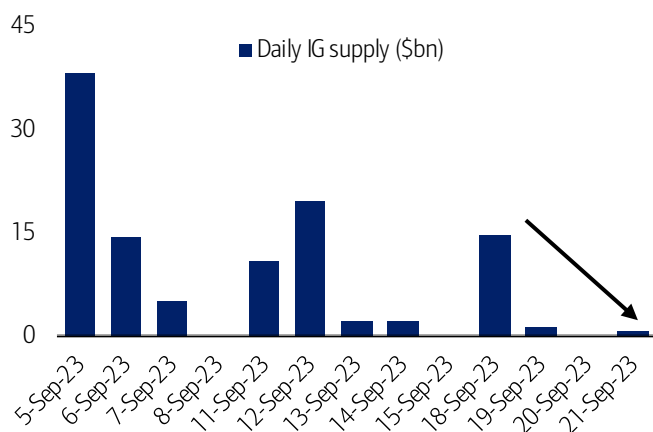
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Even stronger technicals next week

IG issuance volumes this week dropped from \$15bn on Monday to \$0.6bn on Thursday post the FOMC. The sharply higher Treasury yields should weigh on issuance volumes next week as well. That, combined with stronger investor demand supported by even more attractive yields, means trends from this week continue: tighter IG spreads, bond spreads outperforming CDS (Figure 4), and flatter IG spread curves (Figure 5, Figure 6).

Figure 3: Supply volumes declined sharply post the FOMC on Wed.

IG supply volumes declined from \$15bn on Monday to \$0.6bn on Thursday post the FOMC.

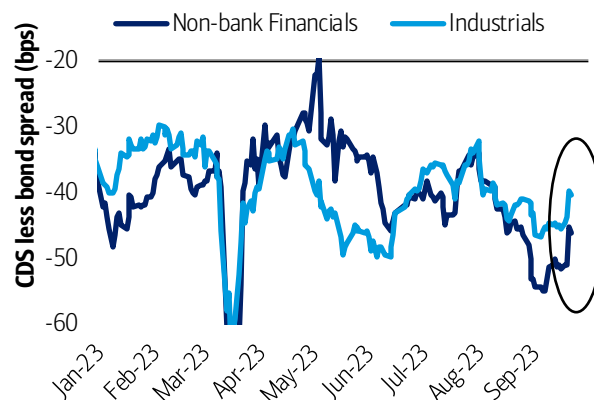


Source: BofA Global Research

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Figure 4: Tighter CDS / cash basis

Cash bonds outperformed CDS by 4 - 5bps this week.



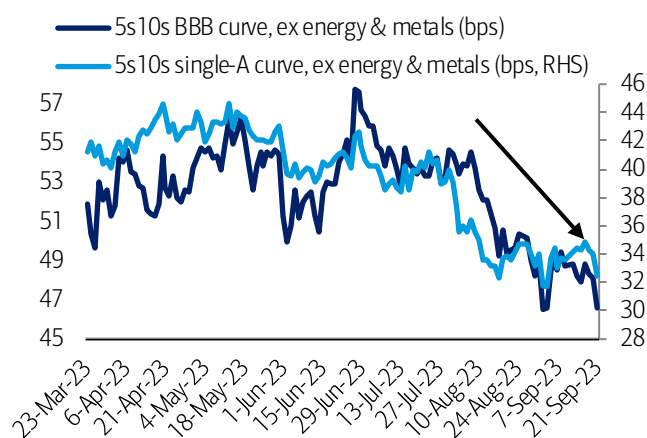
Note: based on a representative sample of liquid IG issuers.

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

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Figure 5: Flatter 5s10s IG corporate spread curves

IG 5s10s spread curves were 1 to 2bps flatter this week.

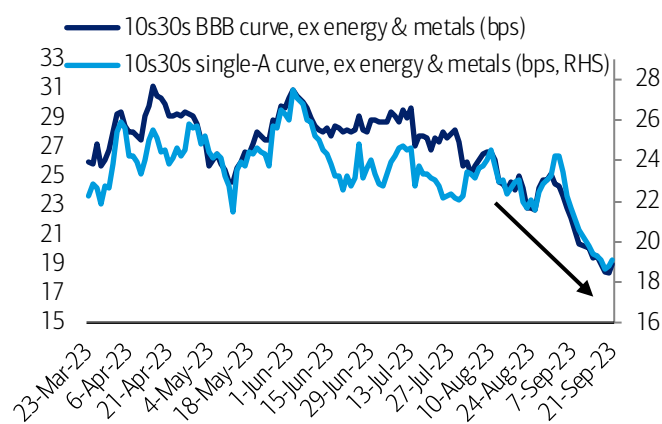


Source: BofA Global Research, ICE Data Indices, LLC

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Figure 6: Flatter 10s30s IG corporate spread curves

10s30s IG spread curves were about 1bps flatter this week



Source: BofA Global Research, ICE Data Indices, LLC

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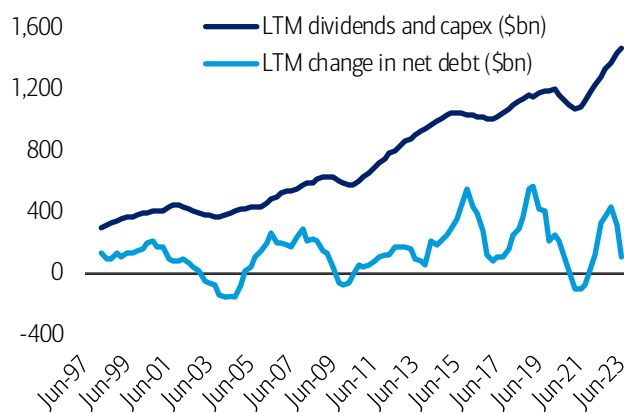
Marginal IG borrowing is for shareholder returns

The stronger US growth, and the FOMC this week, highlight rising risks of higher-for-longer interest rates. To the extent higher funding costs restrict IG company borrowing, the effect should be positive for IG fundamentals. That is because major uses of cash – such as dividends and capex – are funded largely by earnings. Hence little correlation exists between the aggregate spending on capex and dividends and changes in net debt (Figure 7).

In contrast, most variation in net debt is explained by spending on share buybacks and M&A (Figure 8). Hence rising funding costs are unlikely to have a material impact on IG company operations but could limit the extend of debt-funded shareholder returns. On net that should be positive for IG credit fundamentals.

Figure 7: Little correlation between debt and capex/ dividends

That suggests dividends and capex are largely funded with earnings.

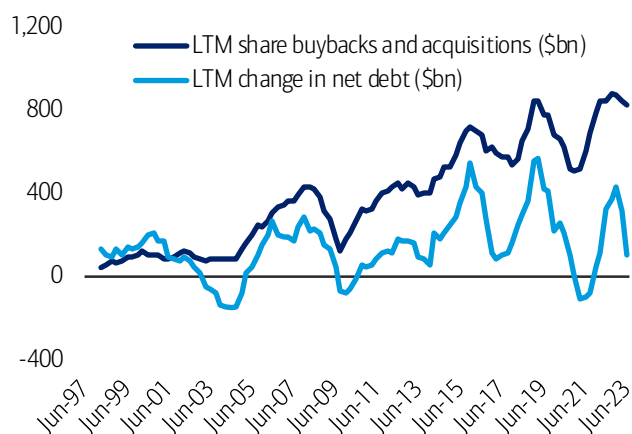


Source: BofA Global Research

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Figure 8: Share buybacks and M&A drive IG debt levels

On the margin IG companies use debt to fund shareholder returns such as share buybacks and M&A.



Source: BofA Global Research

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Slow impact on IG borrowing costs

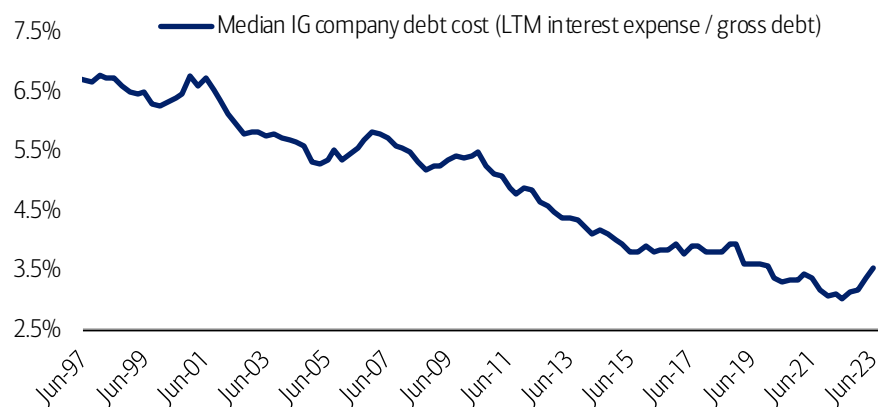
Funding costs for IG issuers are rising. However, we see limited impact on IG aggregate fundamentals for two reasons. First, companies locked-in very low borrowing costs in 2020 and 2021, bringing the average cost of debt to the record low 3.0% by 2Q-2022 for US industrial issuers (Figure 9). Second, while interest rates certainly impact the IG coverage ratio, they do so with a big lag (Figure 10, Figure 11).

The average maturity of the IG corporate bond index is 10 years. Hence, even if interest rates remain high for the next two years, the impact on the overall borrowing cost will only be gradual. For example, we estimate the average corporate bond coupon (across all currencies) for US industrial issuers will rise from 3.72% currently to 4.15% assuming all bonds maturing in 2024 and 2025 are refinanced at 6%, which is the current IG index yield. That would bring the average coupon back to 2016 levels. Rolling bonds instead at 7% yield results in the average coupon of 4.30% by the end of 2025 – the level last seen in mid-2015 (Figure 12).

Similarly, higher-for-longer rates could bring the IG coverage ratio (assuming earnings stay unchanged at 2Q-2023 levels) near the lower end of historical range by the end of 2025 (Figure 13).

Figure 9: IG debt costs are rising, but from record low levels

The median debt cost for a US IG industrial issuer increased to 3.55% as of 2Q-2023 from the record low 3.02% in 2Q-2022.

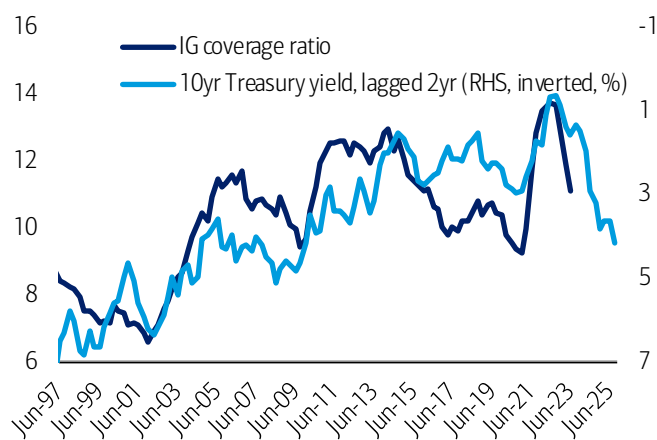


Source: BofA Global Research

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Figure 10: Interest rates drive the IG coverage ratio, but with a lag

IG coverage ratio tracks 10yr Treasury yields, but with a lag of about two years.

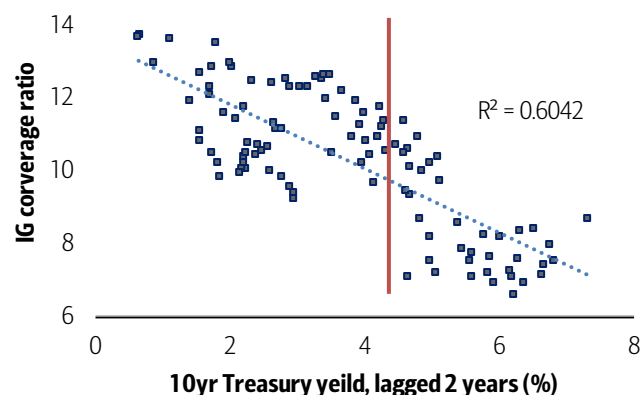


Source: BofA Global Research, Bloomberg

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Figure 11: Strong relationship between rates and IG coverage ratio

Lagged 10yr rates have a 60% R^2 with IG coverage ratio.

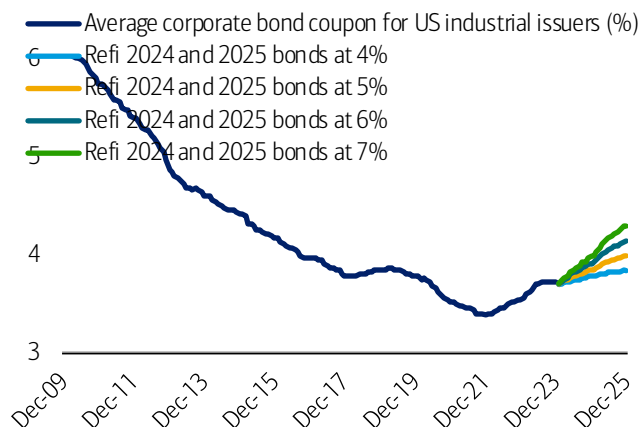


Source: BofA Global Research, Bloomberg

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Figure 12: Higher rates = gradual increase in borrowing costs ...

Average coupon by year-end 2025: 3.84% at 4% refi, 3.99% at 5% refi, 4.15% at 6% refi, and 4.30% at 7% refi rate.



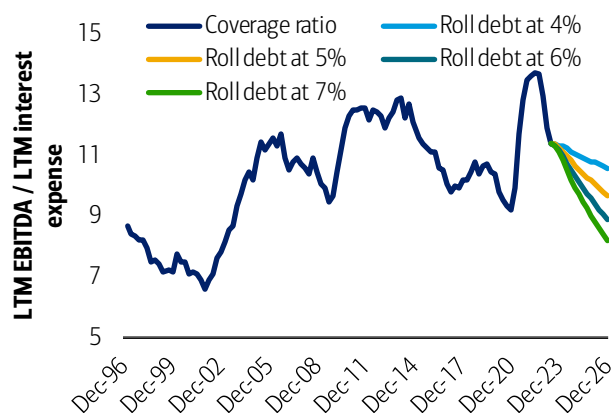
Note: the average coupon includes bonds across all DM currencies for US-domiciled industrial issuers.

Source: BofA Global Research, ICE Data Indices, LLC

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Figure 13: ... and a decline in coverage ratio for IG issuers.

Hypothetical coverage ratio by year-end 2025: 10.82 at 4% refi, 10.16 at 5% refi, 9.57 at 6% refi, 9.03 at 7% refi rate. The ratio is 11.4 as of 2Q-2023.



Note: coverage ratio changes assuming earnings remain unchanged at 2Q-2023 levels.

Source: BofA Global Research, ICE Data Indices, LLC

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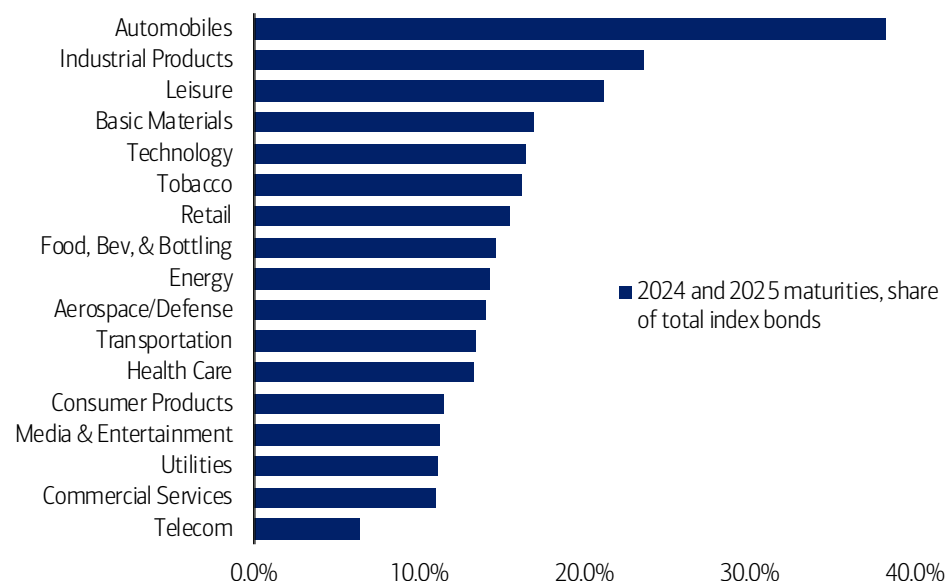
Sector detail

At the sector level, Telecom, Commercial Services and Utilities have fewer 2024 and 2025 maturities as a share of the total. In contrast Autos, Industrial Products and Leisure have the most (Figure 14).

The other part of the story is the potential impact of the higher borrowing costs. The y-axis in Figure 15 plots the difference between current yield and the average coupon for bonds maturing in 2024 and 2025. A higher value corresponds to bigger potential increase in funding costs. Hence sectors in the top right corner could see the biggest increase in funding costs should rates stay high (Autos, Industrial Products Consumer Products). On the other hand sectors in the bottom left corner should be less impacted (Media & Entertainment, Energy, Telecom and Transportation).

Figure 14: US non-financials: share of index bonds maturing in 2024 and 2025

Autos, Industrial Products and Leisure have the highest share of 2024/2025 bond maturities.



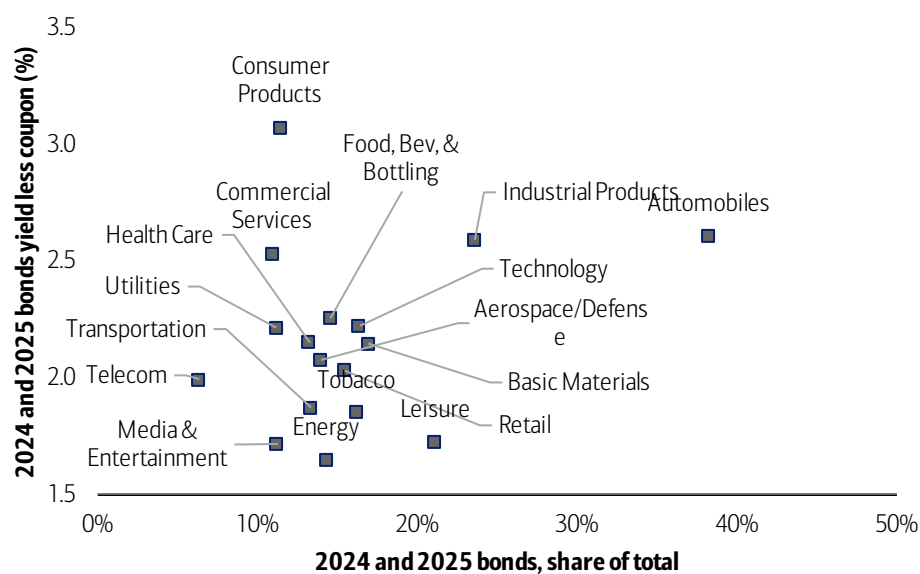
Note: bonds across all currencies for US-domiciled issuers.

Source: BofA Global Research, ICE Data Indices, LLC

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Figure 15: 2024 and 2025 index bond maturities vs. potential borrowing cost increase

Sectors in the top right corner have the highest potential increase in borrowing costs over the next two years.



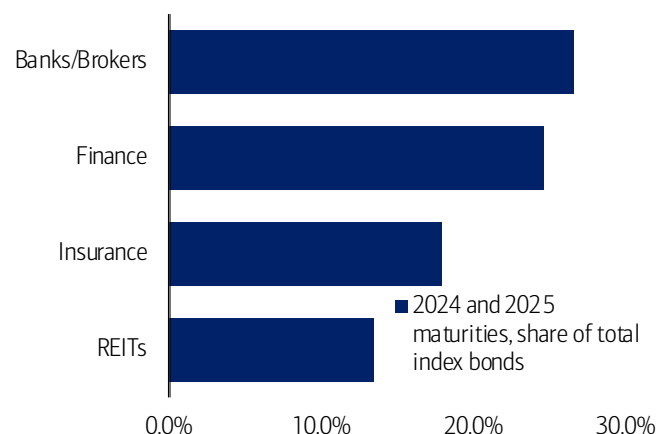
Note: bonds across all currencies for US-domiciled issuers.

Source: BofA Global Research, ICE Data Indices, LLC

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Figure 16: US financials: share of index bonds maturing in '24/'25.

Banks and Finance have a high share of maturities in 2024/2025.



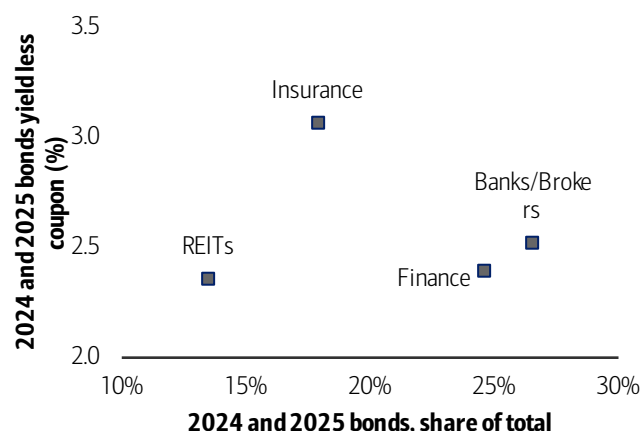
Note: bonds across all currencies for US-domiciled issuers.

Source: BofA Global Research, ICE Data Indices, LLC

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Figure 17: Near-term maturities vs. potential borrowing cost increase

Sectors in the top right corner have the highest potential increase in borrowing costs over the next two years.



Note: bonds across all currencies for US-domiciled issuers.

Source: BofA Global Research, ICE Data Indices, LLC

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[Situation Room: Hawkish Fed, resilient IG spreads 20 September 2023](#)

Hawkish Fed, resilient IG spreads

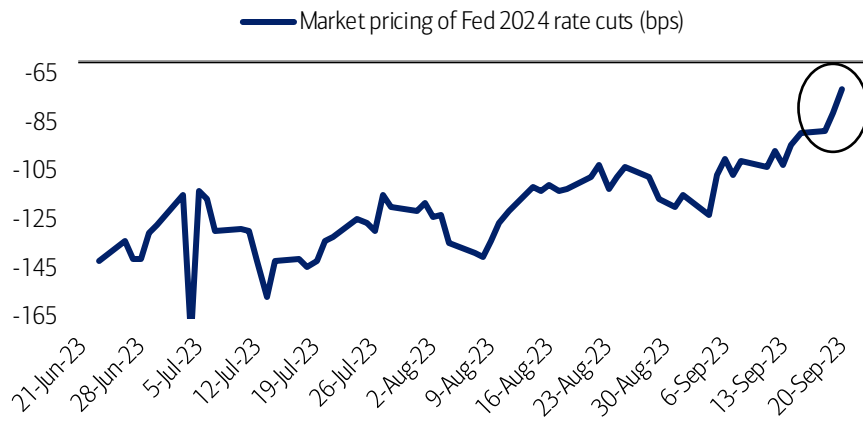
The biggest takeaway from today's FOMC was the re-pricing lower the number of Fed cuts in 2024, and the corresponding bear flattening in the Treasury yield curve. While that was negative for risk assets such as stocks (S&P 500 index down -0.94%) and CDX HY (-\$0.19pts), IG cash bond spreads remained resilient (closing unchanged to -1bps tighter). The benign IG spread reaction is entirely due to the very strong IG market technicals, driven by attractive yields ([Credit Market Strategist: More buyers than sellers](#)). Hence the positive impact on demand from the increase in interest rates offsets the negative impact on credit valuations from lower stocks. Such resilience should continue, particularly as interest rate implied volatility remains low (ICE BofA MOVE index declined -4pts today, Figure 20).

Hawkish SEP, neutral press conference

The biggest takeaway from today's FOMC was the revision lower in the SEP (Summary of Economic Projections) of the number of Fed rate cuts in 2024 (see [September FOMC quick reaction: No surprises](#)). The projected cuts declined from 100bps in the June SEP to 50bps of cuts in the latest September SEP. That was only a marginal surprise, however, as the market pricing of the cuts has also declined substantially over the same period on the strong US data (Figure 21). Still, market pricing of the Fed rate cuts for 2024 declined by 11bps today to 70bps (Figure 18). The press conference delivered little in terms of new information, with Chair Powell highlighting that the stronger than expected US economy warranted fewer Fed rate cuts in 2024.

Figure 18: Market pricing of 2024 Fed rate cuts declined by 11bps today to 70bps.

Market pricing of 2024 Fed rate cuts is down 49bps so far in September.

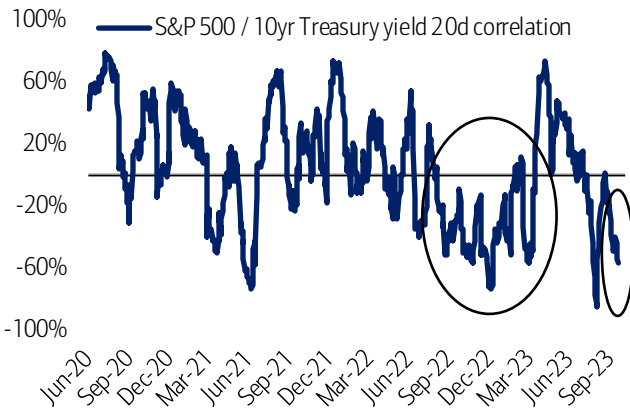


Source: BofA Global Research, Bloomberg

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Figure 19: Higher rates, lower stocks

The negative correlation between stock prices and Treasury yields highlights the risks of US economic re-acceleration and a more hawkish Fed.

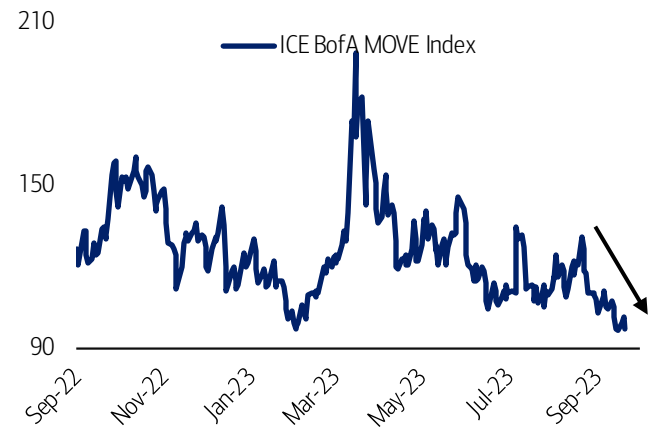


Source: BofA Global Research, Bloomberg

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Figure 20: Even lower interest rate volatility

Implied interest rate volatility (ICE BofA MOVE index) declined further today, even as Treasury yields increased.

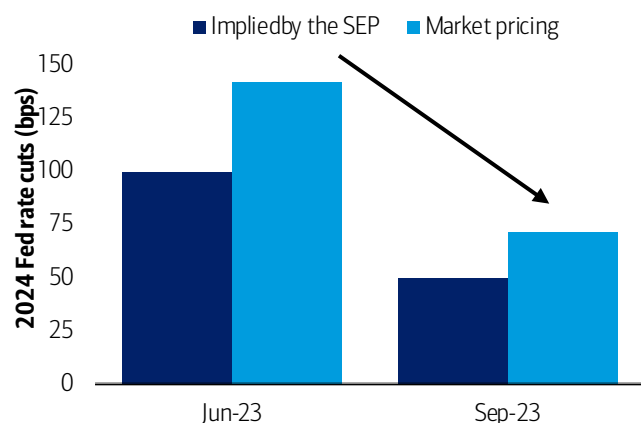


Source: Bloomberg

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Figure 21: Fewer 2024 Fed cuts

Markets were already pricing in much fewer 2024 Fed rate cuts before today's SEP.



Source: BofA Global Research, Bloomberg, Federal Reserve.

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[Situation Room: The shrinking BBBs 19 September 2023](#)

The shrinking BBBs

So far in 2023 net upgrades from BBB to single-A have reached \$100bn – the highest since at least 2010 and twice the previous record high of \$50bn reached in 2019 (Figure 22). This upgrade cycle is the reflection of companies shoring up their balance sheets ahead of a potential recession, originally expected for this year. The biggest upgrades since 2020 include Anheuser-Busch InBev (\$52bn), Barclays (\$28bn) and Union Pacific (\$25bn, Figure 24).

Reversal of the trend

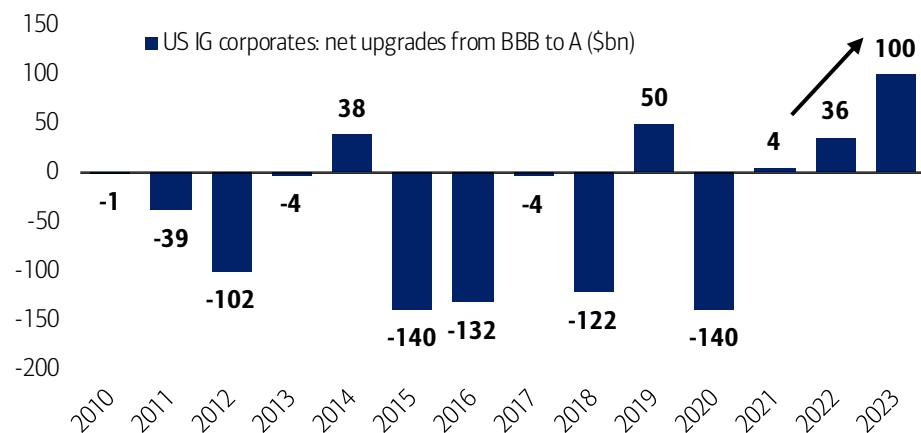
The record pace of upgrades has partially reversed the big downgrade cycle following the global financial crisis. The share of BBB-rated bonds in the IG index jumped from 37.9% in Jan-2010 to the record high of 51.9% in Mar-2021. However, the share then dropped to 47.5% by Aug-2023, undoing 32% of the prior 11-year downgrade cycle in less than two and a half years (Figure 23).

Spread impact

Fewer BBBs are taking the IG index spread tighter. We measure the spread impact by comparing index spreads to a hypothetical spread based on the rating distribution fixed at the post-Covid Dec-2020 levels. The rating impact currently is -2bps (Figure 27). In other words, should rating distribution remain unchanged, the index spread would have been 124bps, up from 122bps actual index spread. The impact is much higher for financials (-6bps, (Figure 28) compared to industrials (-0.2bps, Figure 29).

Figure 22: A record net \$100bn has been upgraded from BBB to single-A so far in 2023

The YTD net upgrade is bigger than the prior record since 2010 of +\$50 in 2019.

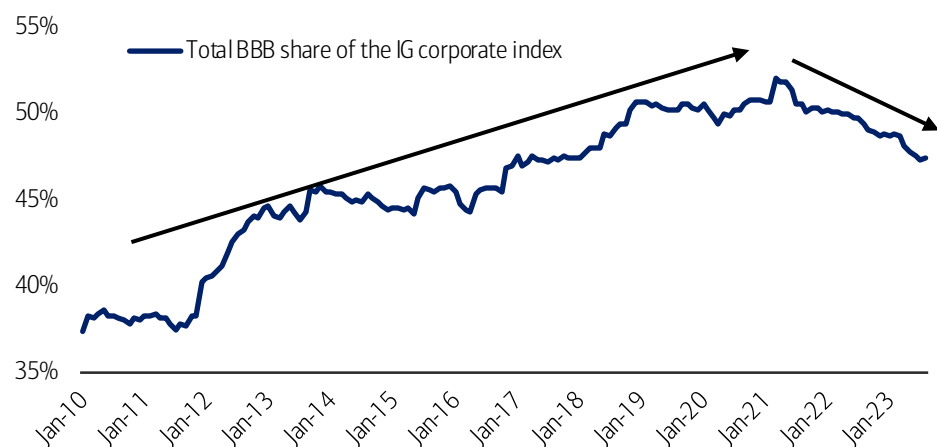


Source: BofA Global Research, ICE Data Indices, LLC

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Figure 23: Share of BBBs in the index

Positive rating migrations since mid-2021 resulted in the share of BBBs in the index declining to 47.5% in August 2023 – the lowest level since January 2018 – and down from 51.9% in March 2021.



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

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Figure 24: Largest upgrades from BBB to A by name since 2020

The largest upgraded names from BBB to A since 2020 include ABIBB, BACR and UNP

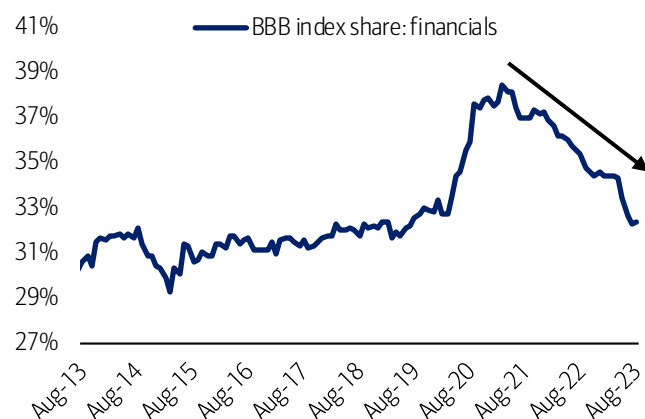
Rank	Upgrade month	Ticker	Sector	Old Rating	New Rating	Bond count	Par Amount (\$bn)	Seniority
1	Apr-2023	ABIBB	Food, Bev, & Bottling	BBB1	A3	27	52,490	SENR
2	May-2023	BACR	Banks/Brokers	BBB1	A3	20	28,400	SNPR
3	Sep-2021	UNP	Transportation	BBB1	A3	38	25,037	SENR
4	Jun-2023	UBS	Banks/Brokers	BBB2	A3	11	24,249	SNPR
5	Jul-2021	AZN	Health Care	BBB1	A3	18	20,387	SENR
6	Jun-2021	BAC	Banks/Brokers	BBB1	A3	10	18,535	T2
7	Jul-2021	DAIGR	Automobiles	BBB1	A3	19	14,850	SENR
8	Sep-2022	NWG	Banks/Brokers	BBB1	A3	8	11,750	SENR
9	Jun-2022	TMO	Health Care	BBB1	A3	8	9,000	SENR
10	May-2021	PYPL	Finance	BBB1	A3	8	9,000	SENR

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

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Figure 25: Share of BBBs in the index for financials...

Since mid-2021 BBBs have accounted for a shrinking share of financials, currently sitting at its lowest level since 2019

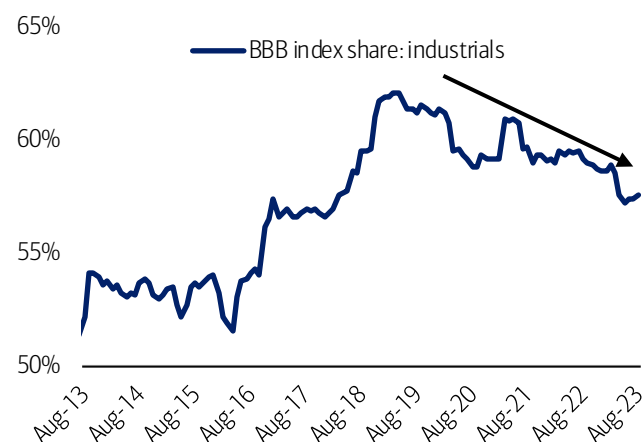


Source: BofA Global Research, ICE Data Indices, LLC.

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Figure 26: ... and for industrials

Since mid-2021 BBBs have also accounted for a shrinking share of industrials, recently hitting its lowest level since 2018

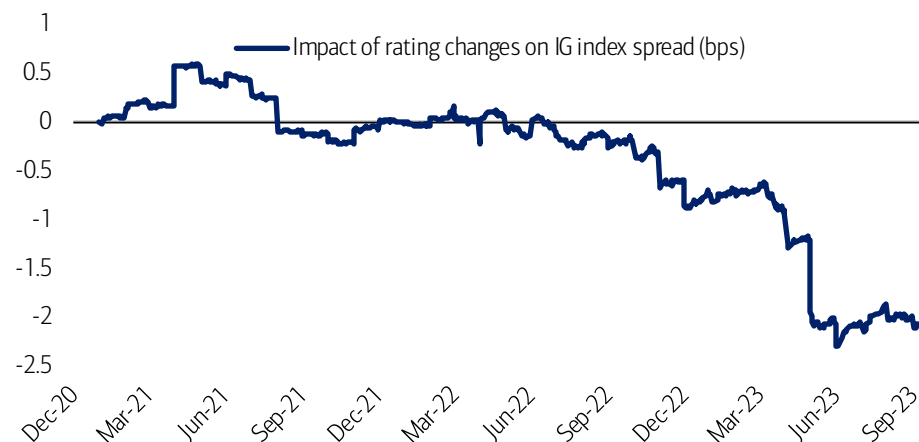


Source: BofA Global Research, ICE Data Indices, LLC.

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Figure 27: Impact of rating changes on IG index spreads (bps)

The total tightening impact of rating changes on IG index spreads has been of around -2bps, compared to a hypothetical index based on the rating distribution as of Dec 2020.

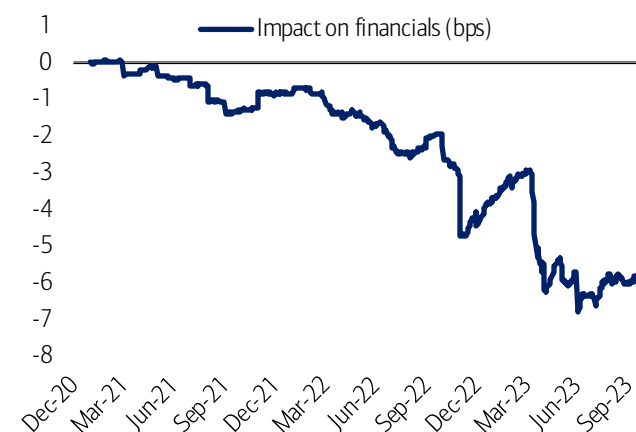


Source: BofA Global Research, ICE Data Indices, LLC.

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Figure 28: Impact of rating changes on IG index spreads for financials...

The impact of rating changes on financials spreads has been of around -6bps, compared to a hypothetical index with rating distribution as of Dec 2020.

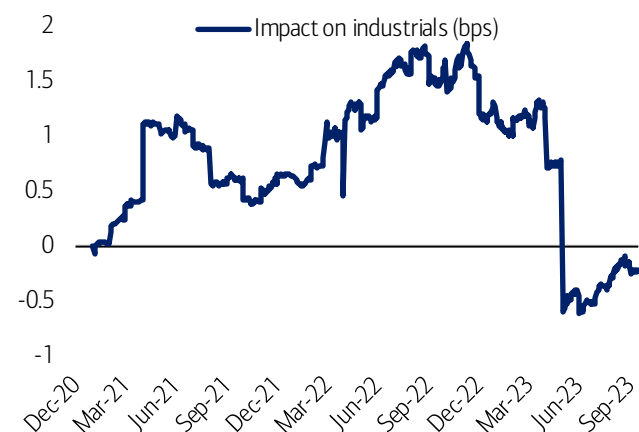


Source: BofA Global Research, ICE Data Indices, LLC.

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Figure 29: ... and for industrials

The impact on industrials spreads was more recent, around -2bps, compared to a hypothetical index with rating distribution as of Dec 2020.



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

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Previously published here

[Situation Room: IG spread curve: how low can it go? 18 September 2023](#)

IG spread curve: how low can it go?

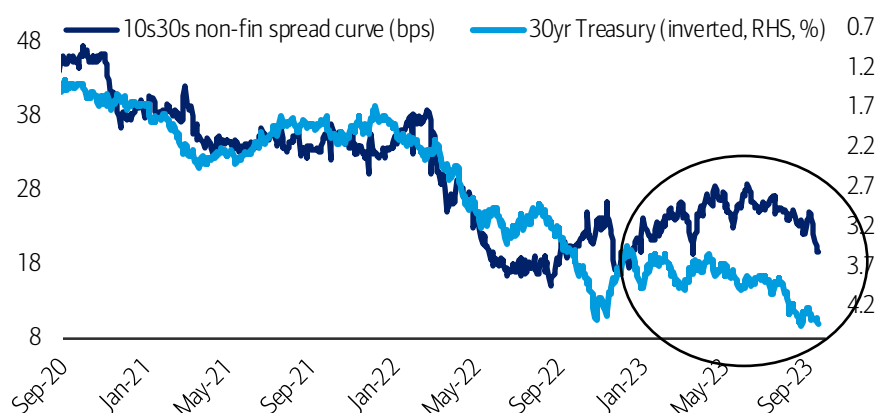
The answer is: ever lower (flatter). The biggest current mismatch between a lackluster supply and the strong demand is in the back-end of the IG corporate spread curve. Hence, not surprisingly, the non-financial 10s30s IG spread curve has flattened 4bps so far in September (Figure 31). However, the big move higher in Treasury yields suggests there is more room for the spread curve to flatten. For example, since mid-December 2022 the IG 10s30s spread curve is unchanged at 20bps, while 30yr Treasury yield is 87bps higher (Figure 30).

Who is lagging?

While the average 10s30s IG spread curve flattened in September, hiding behind the average is a relatively wide underlying distribution of issuer-level curves. In fact, the difference between the 25th and 75th percentile of 10s30s IG non-financial issuer spread curves was little changed over the past few weeks and remains wide relative to the flatter average curve (Figure 32). That means spread curves some IG issuers are lagging the move flatter. Below we screen for 10s30s IG spread curves that are 1) steep and 2) still trade at a relatively high percentile since May month-end (Figure 33).

Figure 30: Unchanged 10s30s IG spread curve, higher Treasury yield year-to-date

Since mid-December 2022 the IG 10s30s spread curve is unchanged at 20bps, while 30yr Treasury yield is 87bps higher.



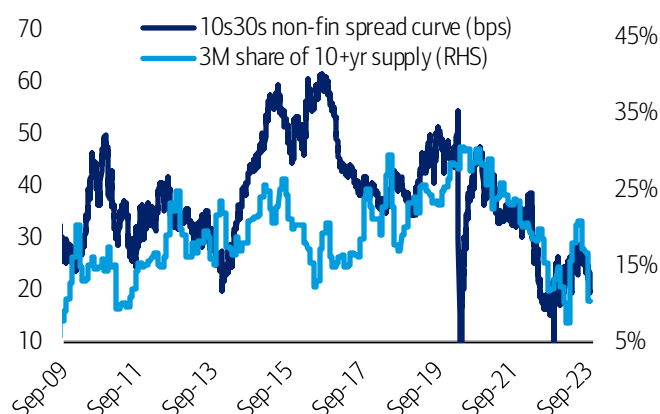
Note: the spread curves are based on issuer-matched on-the-run 10 and 30yr bonds.

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

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Figure 31: Less 30yr supply, flatter IG 10s30s spread curves

10s30s IG spread curve has tracked the share of 30yr supply relatively closely over the past five years. Both depend on the level of interest rates.



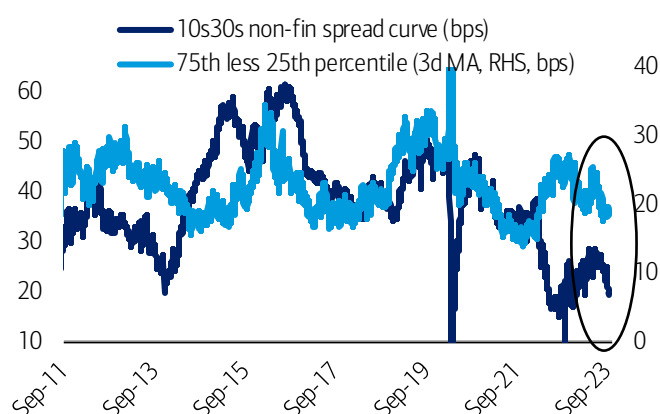
Note: the spread curves are based on issuer-matched on-the-run 10 and 30yr bonds.

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

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Figure 32: Flat curves, still high dispersion

The dispersion of IG 10s30s spread curves has not declined as the curve flattened in September.



Note: the spread curves are based on issuer-matched on-the-run 10 and 30yr bonds.

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

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Figure 33: Steepest IG curve that also flattened the least since May 31st.

Note we screen for the steepest IG 10s30s spread curves, with each bond notional of \$500mn or larger, and the curve percentile of 20 or higher. The median 10s30s IG spread curve is currently trading at 14th percentile since May 31st.

Issuer	10yr bond	30yr bond	Index rating	Sector	10yr spread (bps)	30yr spread (bps)	10s30s curve (bps)	10yr price (\$)	30yr price (\$)	10s30s curve, adjusted for \$ price	10s30s curve, share of 10yr spread	Curve percentile since May 31 st
APPLE INC	AAPL 4.3 05/10/33	AAPL 4.85 05/10/53	AA1	Technology	44	72	28	96.5	95.5	29	66.1%	23.7%
HOME DEPOT INC	HD 4 1/2 09/15/32	HD 4.95 09/15/52	A2	Retail	71	101	30	96.4	93.4	34	48.8%	28.6%
QUALCOMM INC	QCOM 5.4 05/20/33	QCOM 6 05/20/53	A2	Technology	84	126	42	101.9	104.5	39	47.9%	55.8%
IBM CORP	IBM 4 3/4 02/06/33	IBM 5.1 02/06/53	A3	Technology	97	129	33	96.0	91.1	37	37.8%	51.9%
DOW CHEMICAL CO	DOW 6.3 03/15/33	DOW 6.9 05/15/53	BBB1	Basic Materials	133	185	52	104.6	108.5	48	37.2%	23.4%
ELEC DE FRANCE	EDF 6 1/4 05/23/33	EDF 6.9 05/23/53	BBB1	Utilities	172	232	60	101.7	102.6	58	34.1%	50.0%
TARGET CORP	TGT 4.4 01/15/33	TGT 4.8 01/15/53	A2	Retail	90	114	24	94.1	89.4	29	31.5%	24.7%
ENTERPRISE PRODU	EPD 5.35 01/31/33	EPD 3.3 02/15/53	BBB1	Energy	118	127	9	98.9	66.1	31	26.9%	33.8%
MCDONALD'S CORP	MCD 4.95 08/14/33	MCD 5.45 08/14/53	BBB1	Retail	96	120	24	97.3	97.5	25	25.5%	30.0%

Figure 33: Steepest IG curve that also flattened the least since May 31st.

Note we screen for the steepest IG 10s30s spread curves, with each bond notional of \$500mn or larger, and the curve percentile of 20 or higher. The median 10s30s IG spread curve is currently trading at 14th percentile since May 31st.

Issuer	10yr bond	30yr bond	Index rating	Sector	10yr spread (bps)	30yr spread (bps)	10s30s curve (bps)	10yr price (\$)	30yr price (\$)	10s30s curve, adjusted for \$ price	10s30s curve, share of 10yr spread	Curve percentile since May 31st
ESTEE LAUDER CO	EL 4.65 05/15/33	EL 5.15 05/15/53	A1	Consumer Products	95	116	21	95.4	93.8	23	24.1%	76.3%
UNION PAC CORP	UNP 4 1/2 01/20/33	UNP 4.95 05/15/53	A3	Transportation	83	100	17	95.1	93.0	20	23.6%	28.6%
CVS HEALTH CORP	CVS 5.3 06/01/33	CVS 5 7/8 06/01/53	BBB2	Health Care	144	177	33	96.7	95.7	34	23.5%	20.4%
WILLIAMS COS INC	WMB 5.65 03/15/33	WMB 5.3 08/15/52	BBB2	Energy	155	182	26	98.9	87.7	36	23.0%	29.9%
PHILLIPS 66 CO	PSX 5.3 06/30/33	PSX 3.3 03/15/52	BBB1	Energy	132	142	10	97.4	64.9	30	22.4%	26.0%
UNITED PARCEL	UPS 4 7/8 03/03/33	UPS 5.05 03/03/53	A2	Transportation	81	97	16	98.1	94.8	18	22.1%	28.6%
ELEVANCE HEALTH	ELV 4 3/4 02/15/33	ELV 5 1/8 02/15/53	BBB1	Health Care	110	130	20	95.0	91.5	23	20.8%	28.6%
LOCKHEED MARTIN	LMT 4 3/4 02/15/34	LMT 5.2 02/15/55	A3	Aerospace/Defense	84	100	16	96.7	96.5	17	20.0%	50.0%
PFIZER INVSTMNT	PFE 4 3/4 05/19/33	PFE 5.3 05/19/53	A1	Health Care	88	105	17	96.6	97.1	17	19.6%	31.6%
DOMINION ENERGY	D 5 3/8 11/15/32	D 4.85 08/15/52	BBB2	Utilities	146	162	17	97.1	83.3	28	19.0%	24.7%
ENEL FIN INTL NV	ENELIM 7 1/2 10/14/32	ENELIM 7 3/4 10/14/52	BBB1	Utilities	194	234	40	108.7	111.7	33	17.9%	81.8%

Note: the spread curves are based on issuer-matched on-the-run 10 and 30yr bonds.

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

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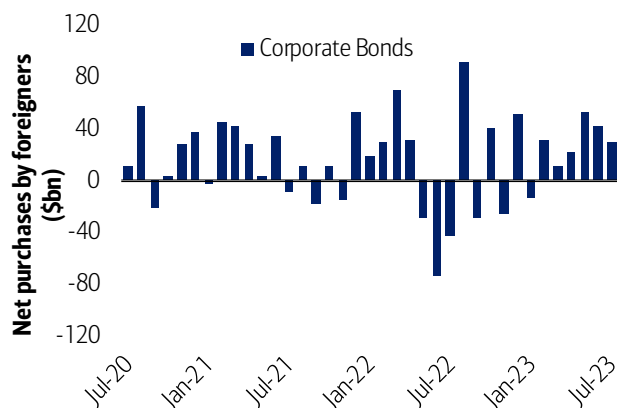
TIC update for September

According to TIC (Treasury International Capital) data released yesterday, foreign investors net bought +\$29.5bn of US corporate bonds (excluding ABS) in July, after net buying +\$41.7bn in June (Figure 34). Note that the net purchase amount is based on monthly market value of securities holdings, adjusted for the price change. In July foreign investors net bought +\$35.8bn of Treasuries, after net buying +\$123.0bn in June. In July, foreign investors net bought +\$369.9bn of stocks, after net buying +\$774.3 in June (the highest level on record). Foreign investors also net sold -\$2.2bn of Agencies and net bought +\$82.6bn of Agency MBS (Figure 35).

By region, where data includes ABS, European investors net bought +\$23.5bn, Asia net bought +\$5.9bn and the Caribbean net sold -\$1.9bn (Figure 36). Within Asia, Japan net bought +\$1.8bn, China net sold -\$0.2bn, while the rest of Asia net bought +\$4.3bn (Figure 37). 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 34: Foreign net purchases of corporate bonds (excl. ABS)

Foreign investor flows have been mixed over the past few months.



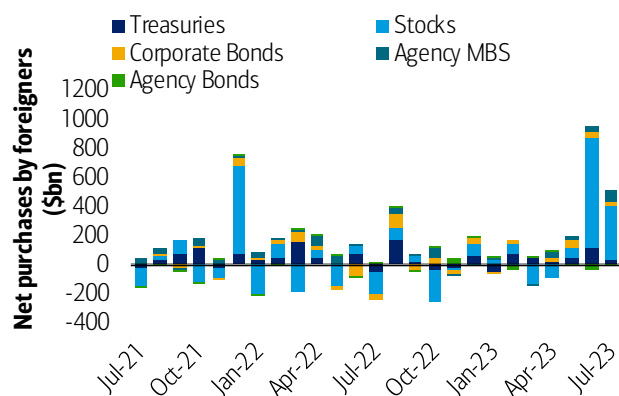
Note: net purchases are based on monthly market value of security holdings, adjusted for the price change.

Source: TIC system, BofA Global Research

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Figure 35: Monthly foreign net purchases of long-term US securities

Foreign investors were net buyers of US stocks, treasuries, corporate bonds, and agency MBS bonds in July, and they were net sellers of agency bonds.



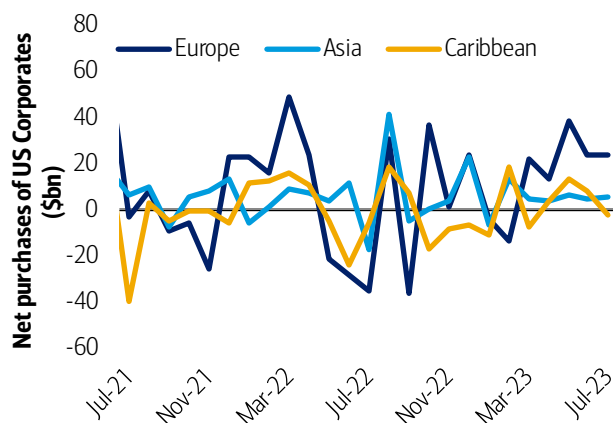
Note: net purchases are based on monthly market value of security holdings, adjusted for the price change. Agency MBS excludes prepayments.

Source: TIC system, BofA Global Research

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Figure 36: Net purchases of US corporate bonds by region (incl. ABS)

Asia and Europe were net buyers of US corporate bonds in July, while the Caribbean were net sellers.



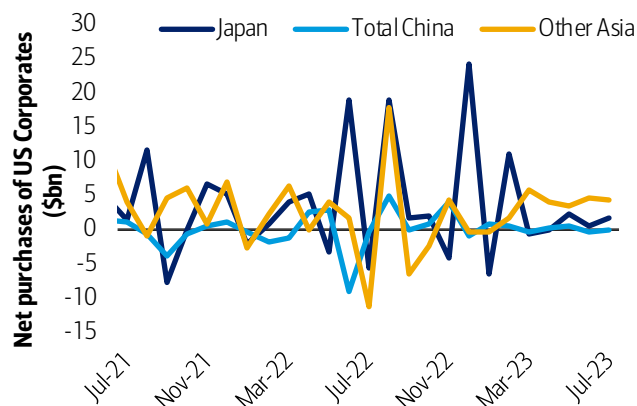
Note: net purchases are based on monthly market value of security holdings, adjusted for the price change.

Source: TIC system, BofA Global Research

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Figure 37: Net purchases of US corporate bonds by Asia (incl. ABS)

Within Asia, China was a net seller of US corporate bonds in June, while Japan and 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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Previously published here

[Situation Room: Weaker flows for bonds, big outflows from stocks 21 September 2023](#)

Flows

Weaker flows for bonds

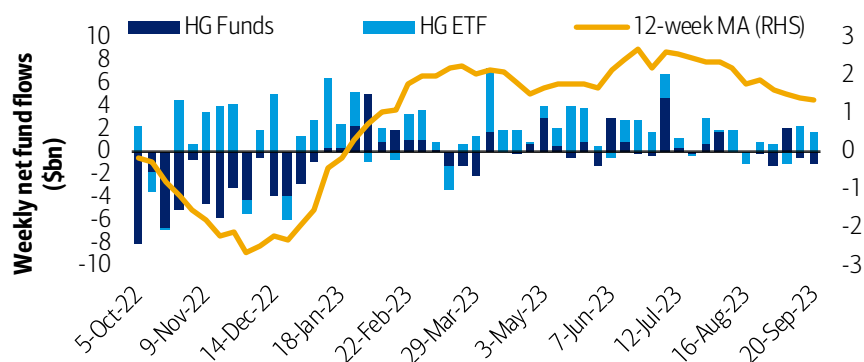
Flows to US HG bond funds and ETFs moderated to +\$0.63bn inflow this past week ending on September 20, from a +\$1.68bn inflow in the prior week. This increase was due to inflows moderating for HG ETFs (to +\$1.64bn from +\$2.21bn) and to outflows accelerating for HG Funds (to -\$1.01bn from -\$0.53bn). Outflows from short-term HG accelerated (to -\$1.22bn from -\$0.65bn), while inflows to ex. short-term moderated (to +\$1.86bn from +\$2.33bn).

Big outflows from stocks

Stocks reported their biggest outflow of the year this past week with a -\$18.96bn outflow, after recording a thirteen-week high at +\$25.30bn the previous week. Flows also turned negative for high yield (to -\$0.19bn from +\$0.98bn). Outflows from munis accelerated (to -\$0.40bn from -\$0.04bn), and so did outflows from global EM bonds (to -\$1.41bn from -\$1.11bn). On the other hand, loans reported their biggest inflow since May 2022 (to +\$0.61bn from +\$0.42bn). Finally, money markets reported a -\$10.03bn outflow this past week, following a +\$24.22bn inflow a week earlier.

Figure 38: Weekly high grade fund flows, \$bn

HG ETF +\$1.64bn, HG Funds -\$1.01

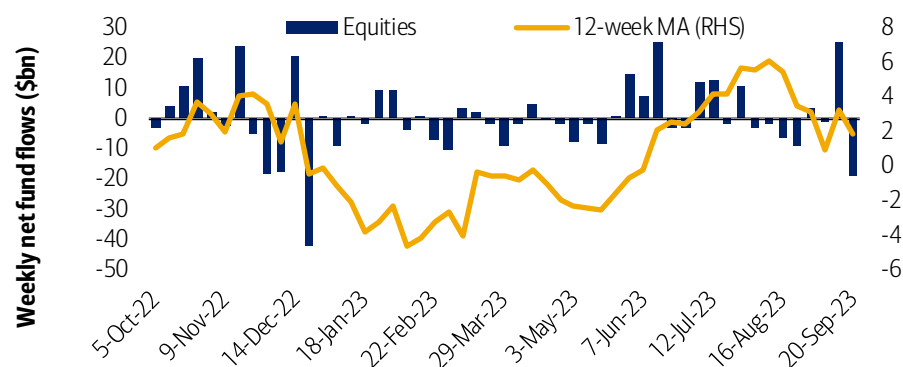


Source: EPFR Global. Note: data are for US-domiciled funds only.

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Figure 39: Weekly equity fund flows, \$bn

Equities -\$18.96bn



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

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Figure 40: 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	0.03%	4.3%	155.5
High grade: ex short-term	0.13%	8.1%	225.4
High yield: total	-0.08%	-0.2%	-0.8
High yield: ETFs only	-0.30%	-4.7%	-3.1
Loans	0.75%	-9.2%	-11.0
EM	-0.30%	-1.8%	-10.9
Munis	-0.08%	1.1%	10.2
All fixed income	0.04%	4.2%	249.3
Money markets	-0.16%	16.2%	865.7
Equities	-0.19%	-0.3%	-58.2

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.

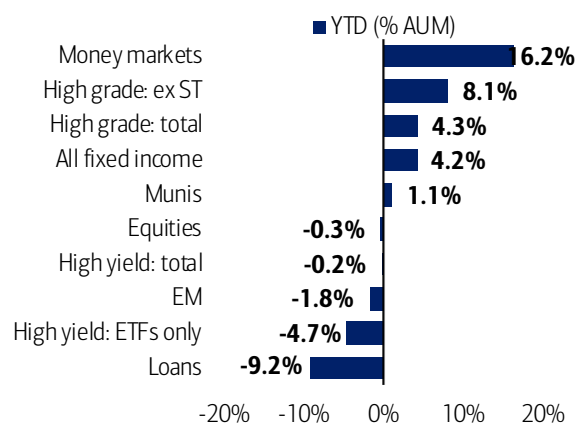
Global EM funds, US-domiciled funds only for other fund types.

Source: EPFR Global, BofA Global Research

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Figure 41: Year to date fund flows, % of AUM

HY ETFs have had the biggest outflows so far in 2023.



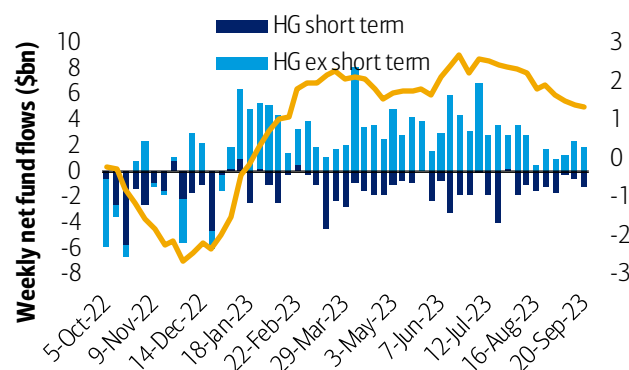
Note: Global EM funds, US-domiciled funds only for other fund types.

Source: EPFR Global, BofA Global Research

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Figure 42: Weekly high grade fund flows, \$bn

HG short-term -\$1.22bn, HG ex short-term +\$1.86

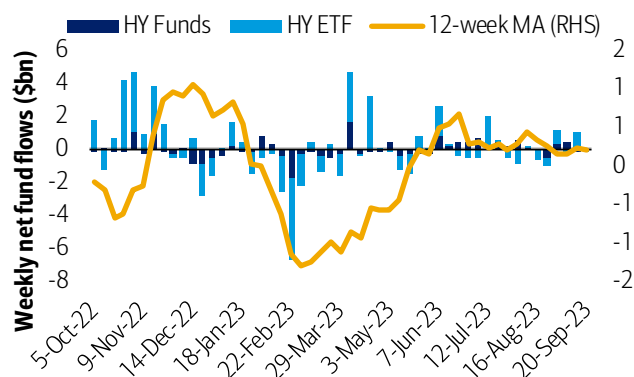


Source: EPFR Global. Note: data are for US-domiciled funds only.

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Figure 43: Weekly high yield fund flows, \$bn

HY ETFs -\$0.19bn, HY funds -\$0.01

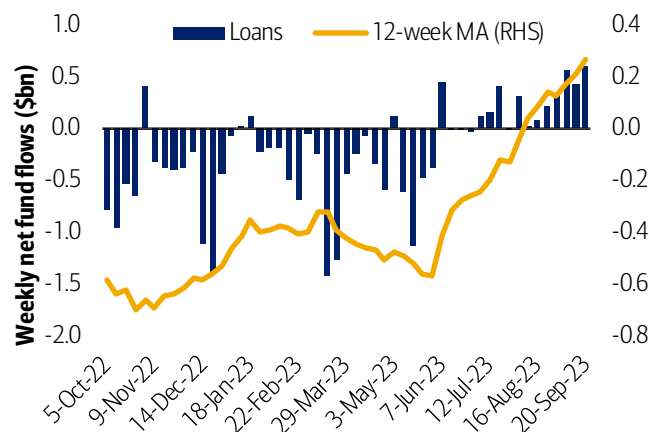


Source: EPFR Global. Note: data are for US-domiciled funds only.

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Figure 44: Weekly loan fund flows, \$bn

Leveraged loans +\$0.61bn

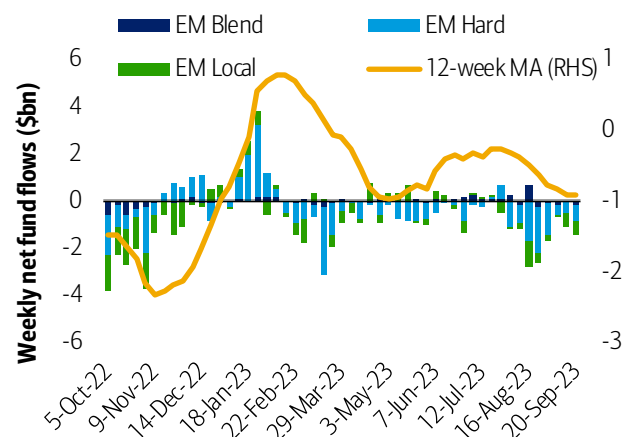


Source: EPFR Global. Note: data are for US-domiciled funds only.

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Figure 45: Weekly EM fund flows, \$bn

Global EM bonds -\$1.41bn

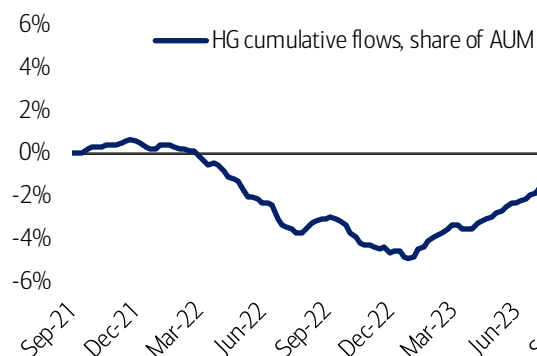


Source: EPFR Global. Note: data are for US-domiciled funds only.

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Figure 46: Cumulative % flows in HG over the last 2 years

Following large outflows in 2022, HG flows turn positive in 2023

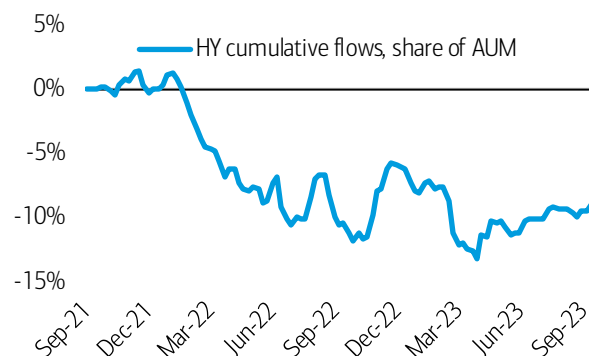


Source: EPFR Global, BofA Global Research

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Figure 47: Cumulative % flows in HY over the last 2 years

2022 and 2023 have seen consequent outflows in HY

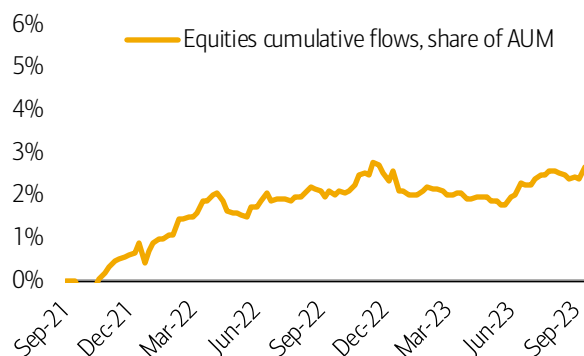


Source: EPFR Global, BofA Global Research

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Figure 48: Cumulative % flows in equities over the last 2 years

Flows moderate in equities after two years of inflows

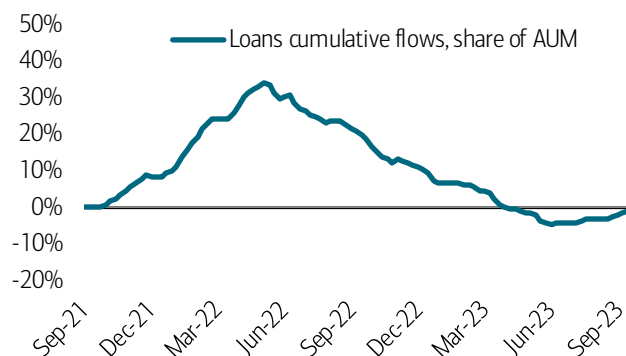


Source: EPFR Global, BofA Global Research

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Figure 49: 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

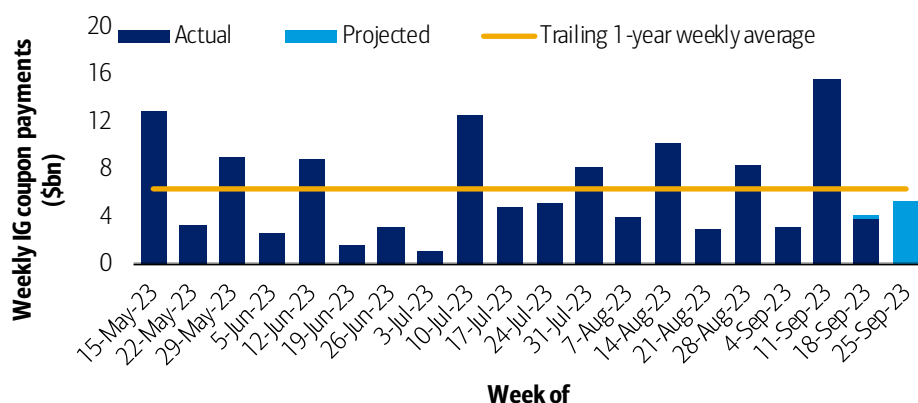
We define our high grade flows metric as a combination of “bond” and “corporate bond” fixed income funds and ETFs domiciled in the US (and investing in any currency, although the majority is invested in USD). We also exclude funds primarily focused on Government, HY, EM and MBS from the sample. The “bond” 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 \$5.3bn in coupon payments next week, below the trailing 1-year weekly average of \$6.3bn (Figure 50). In addition, \$0.2bn of calls were settled and paid this week, while \$1.2bn of calls and a \$1.3bn of tender offers are expected to become effective next week. Bond maturities: \$11.8bn this week, \$11.0bn next week.

Figure 50: Weekly US IG coupon payments

Expect \$5.3bn of coupon payments next week, below the \$6.3bn trailing 1-year weekly average.



Source: ICE Data Indices, LLC, BofA Global Research

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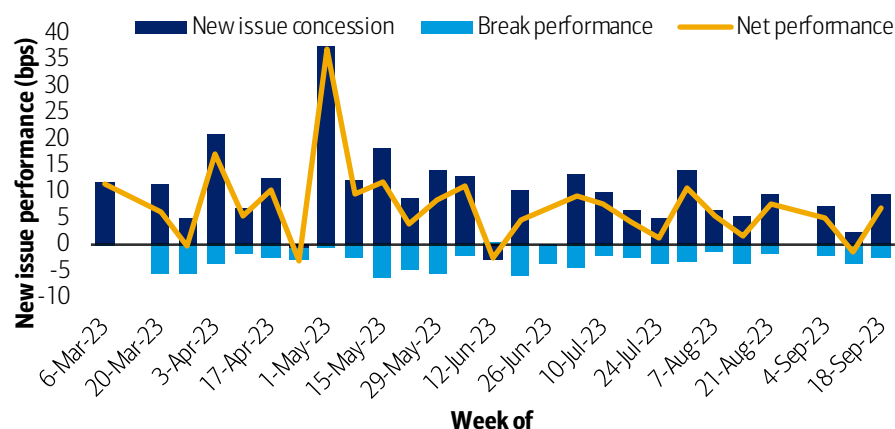
Supply

US IG gross issuance totaled \$16.7bn this week, consisted of \$10.6bn financials, \$0.8bn high-quality industrials and \$5.3bn BBB industrials. Given \$108.8bn of gross issuance, \$54.3bn of maturities, net issuance is tracking \$44.9bn MTD. The jump in interest rates should weigh on issuance volumes next week. Hence, we look for moderate issuance next week in \$15-\$20bn range.

New issue performance weakened this week. The average new issue concession increased to 9.4bps from 2.5bps last week, while the average break performance moderated to 2.6bps tighter this week from 3.9bps tighter last week. As a result, the overall new issue performance, which we measure as new issue concession plus break performance, widened to 6.9bps this week from 1.4bps tighter last week (Figure 51). This week's new issues are trading 4bps tighter on average from pricing.

Figure 51: Weekly new issue supply performance

For the week of Sep 18 2023: new issue concession = 9.4bps; break performance = -2.6bps; net performance = 6.9bps.

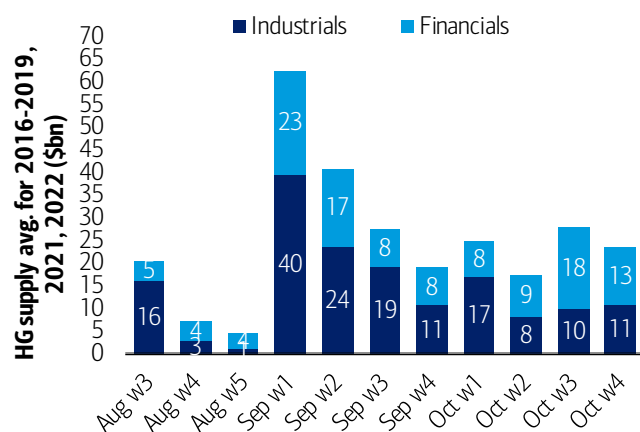


Source: BofA Global Research

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Figure 52: Weekly Supply seasonality

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

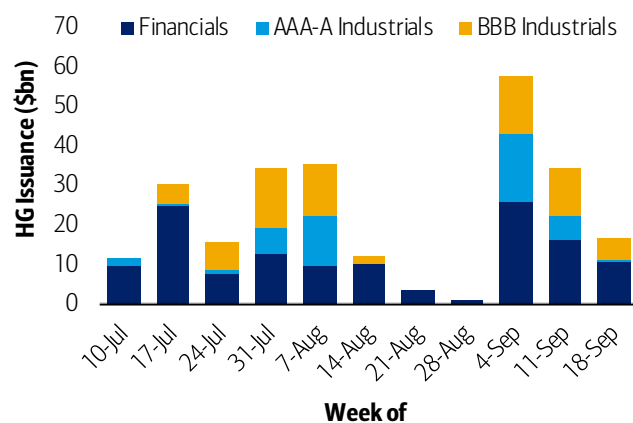


Source: Bloomberg, BofA Global Research

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Figure 53: Weekly Supply

This week's supply consisted of \$10.6bn financials, \$0.8bn high-quality industrials and \$5.3bn BBB industrials.

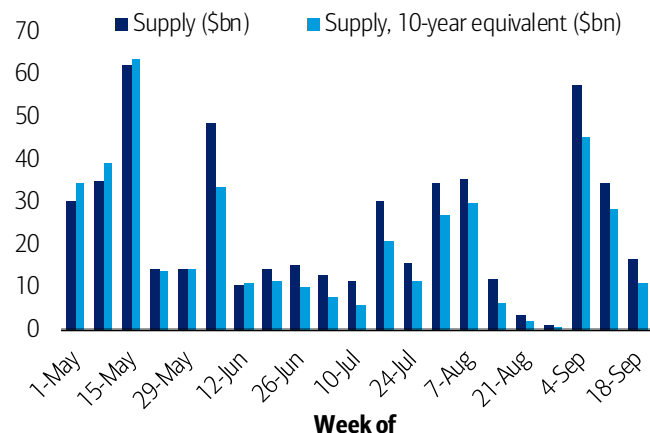


Bloomberg, BofA Global Research

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Figure 54: Weekly gross and 10-year equivalent supply volumes

10-year equivalent supply = \$11.0bn WTD

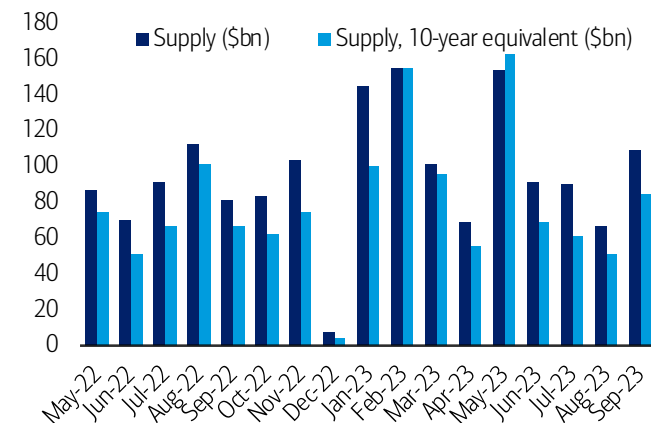


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Figure 55: Monthly gross and 10-year equivalent supply volumes

10-year equivalent supply = \$84.4bn in September



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Figure 56: 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)
2023-09-18	AER	AerCap Ireland Capital DAC / AerCap Global Aviatio	3	900	Baa2/BBB	6.1	150	3	n.a.	144
2023-09-18	AER	AerCap Ireland Capital DAC / AerCap Global Aviatio	7	850	Baa2/BBB	6.15	185	n.a.	n.a.	184
2023-09-18	BMO	Bank of Montreal	2	300	A2/A-	FRN	SOFR+95	n.a.	n.a.	n.a.
2023-09-18	BMO	Bank of Montreal	2	1,200	A2/A-	5.92	87	16	n.a.	85
2023-09-18	BMO	Bank of Montreal	5	1,000	A2/A-	5.717	127	17	n.a.	127
2023-09-18	ENBCN	Enbridge Inc	60	1,250	Baa3/BBB-	8.5	418	n.a.	n.a.	415
2023-09-18	ENBCN	Enbridge Inc	60	750	Baa3/BBB-	8.25	379	n.a.	n.a.	388
2023-09-18	ES	NSTAR Electric Co	5	150	A1/A	5.6	115	19	-7	106
2023-09-18	ES	Public Service Co of New Hampshire	10	300	A1/A+	5.35	105	9	-3	100
2023-09-18	HYNMTR	Hyundai Capital America	3	700	Baa1/BBB+	5.95	125	-1	-1	124
2023-09-18	HYNMTR	Hyundai Capital America	5	800	Baa1/BBB+	6.1	165	4	-1	164
2023-09-18	HYNMTR	Hyundai Capital America	7	500	Baa1/BBB+	6.2	183	1	n.a.	181
2023-09-18	LGENSO	LG Energy Solution Ltd	3	400	Baa1/BBB+	5.625	100	n.a.	n.a.	n.a.
2023-09-18	LGENSO	LG Energy Solution Ltd	5	600	Baa1/BBB+	5.75	130	n.a.	n.a.	n.a.
2023-09-18	LNT	Interstate Power and Light Co	10	300	Baa1/A-	5.7	145	n.a.	n.a.	132
2023-09-18	TTXCO	TTX Co	3	300	NA/A	5.5	80	n.a.	n.a.	n.a.
2023-09-18	UBS	UBS Group AG	4NC3	1,250	NA/A	6.327	160	13	-3	149
2023-09-18	UBS	UBS Group AG	6NC5	1,500	NA/A	6.246	180	14	-2	174
2023-09-18	UBS	UBS Group AG	11NC10	1,750	NA/A	6.301	200	10	-2	194
2023-09-19	DANBNK	Danske Bank A/S	3NC2	1,250	A3/A+	6.259	118	n.a.	n.a.	108
2023-09-21	INDKOR	Industrial Bank of Korea	5	600	Aa2/AA-	5.375	85	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 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

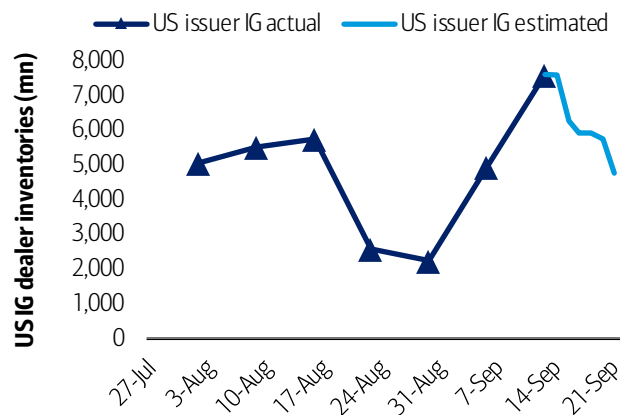
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Dealer inventories

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 57 and Figure 58. We estimate the corresponding DV01 equivalent in Figure 58. More details by sector and maturity are available in Figure 59 and Figure 60. Finally, note that the data for the current date is through about 4:40 p.m. Eastern Standard Time.

Figure 57: Estimated dealer inventories of IG corporate bonds.

We estimate IG dealer inventories of US issuer bonds declined to \$4.8bn currently from \$7.6bn on Sep-13.



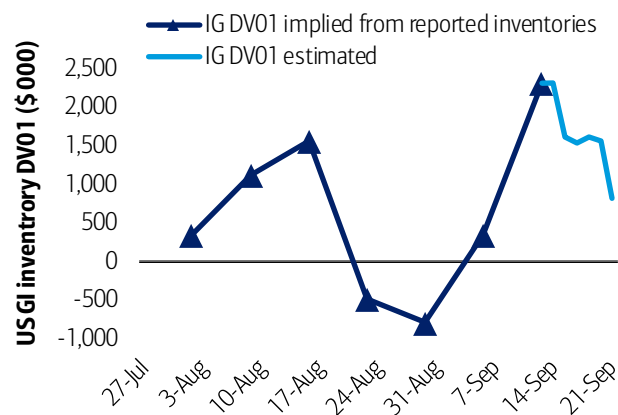
Note: data for US issuer bonds only, maturities 13M or longer. Actual dealer inventory data is from Primary Dealer Statistics survey by the NY Fed. The subsequent change in inventory is estimated based on TRACE.

Source: BofA Global Research, FINRA, TRACE, Federal Reserve

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Figure 58: Estimated dealer inventory DV01 for IG corporate bonds.

We estimate IG dealer inventory DV01 of US issuer bonds declined to \$0.8mn currently from \$2.3bn on Sep-13.



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 59: Estimated changes in IG dealer inventories by maturity and broad sector.

We estimate IG dealer inventories declined -\$1,583mn today and declined -\$3,450mn over the prior week.

Sector	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 21-Sep-23 (\$mn)			
	21-Sep	20-Sep	1 W	2 W	4 W	21-Sep	20-Sep	1 W	2 W	4 W	Buy	Sell	Dealer	Total
High grade (13M+)	-1,583	-349	-3,450	560	4,752	-1,082	-54	-1,581	1,086	2,545	10,270	11,853	6,676	28,799
<3yr	-447	-600	-1,812	-1,783	-236	-79	-111	-308	-294	-36	1,647	2,094	1,241	4,982
3-5yr	-195	261	-225	710	1,548	-78	87	-97	264	525	1,727	1,921	1,371	5,019
5-11yr	-161	6	-42	1,867	4,009	-73	18	30	1,086	2,357	3,806	3,967	2,428	10,200
11+yr	-780	-17	-1,371	-234	-567	-853	-48	-1,205	31	-300	3,091	3,871	1,636	8,598
Fin	-537	-126	-1,033	-134	950	-312	67	-473	201	375	4,026	4,563	2,543	11,132
Non-Fin	-1,046	-223	-2,416	695	3,802	-770	-121	-1,108	885	2,170	6,244	7,290	4,133	17,667
Fixed	-1,604	-275	-3,338	482	4,814	-1,072	-24	-1,499	1,053	2,557	10,147	11,751	6,620	28,518
Floating	21	-74	-112	78	-62	-10	-30	-81	34	-12	123	102	56	281
US issuers	-1,001	-175	-2,822	782	3,699	-736	-64	-1,489	772	1,883	8,121	9,122	5,490	22,733
DM Yankees	-530	-234	-656	-407	758	-331	-45	-144	202	508	1,932	2,462	1,078	5,472
EM Yankees	-52	60	28	186	294	-16	56	52	112	153	217	269	107	593

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 60: Estimated changes in IG dealer inventories by sector.

We estimate today IG dealer inventories declined -\$445mn for Banks/Brokers and declined -\$68mn for Energy.

Sector	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 21-Sep-23 (\$mn)			
	21-Sep	20-Sep	1 W	2 W	4 W	21-Sep	20-Sep	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Aerospace/Defense	15	-9	-155	-64	-102	16	8	-101	26	-30	225	210	130	565
Automobiles	-82	-22	-112	232	458	-18	-6	-18	103	181	170	252	175	597
Banks/Brokers	-445	-276	-1,010	-544	470	-234	-5	-305	39	139	2,772	3,217	1,822	7,811
Basic Materials	87	1	-152	107	207	57	-24	-72	96	171	471	384	244	1,098
Commercial Services	-24	-6	-75	39	107	-4	-7	-24	46	24	97	121	35	253
Energy	-68	-96	-144	-95	-481	-61	-96	164	43	-459	704	772	429	1,905
Finance	-23	51	-97	80	45	-17	62	8	145	140	641	664	316	1,621
Food, Bev, & Bottling	-29	66	-222	33	313	-16	68	-129	48	233	325	354	208	887
Health Care	-289	-39	-390	-173	837	-223	-39	-215	-19	734	1,099	1,388	707	3,194
Industrial Products	-54	-30	-158	47	553	-28	-21	-97	53	402	206	260	227	692

Figure 60: Estimated changes in IG dealer inventories by sector.

We estimate today IG dealer inventories declined -\$445mn for Banks/Brokers and declined -\$68mn for Energy.

Sector	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 21-Sep-23 (\$mn)			
	21-Sep	20-Sep	1 W	2 W	4 W	21-Sep	20-Sep	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Insurance	58	-1	84	191	362	8	-32	-83	29	160	418	360	240	1,018
Media & Entertainment	-37	51	-141	35	483	-3	80	-35	45	355	376	413	265	1,055
REITs	-127	100	-10	138	74	-68	43	-93	-12	-65	194	322	166	682
Retail	-18	-58	-86	239	410	-24	-15	-75	103	234	378	395	318	1,091
Technology	-159	33	-71	141	165	-171	70	-28	69	40	739	898	390	2,027
Telecom	-129	-60	-357	-62	-43	-99	-74	-271	-121	-256	383	512	186	1,082
Tobacco	-63	-4	-81	-128	-25	-48	4	-60	-104	-56	61	124	83	267
Transportation	16	16	-73	-53	-58	19	24	56	88	65	179	163	136	478
Utilities	-148	-61	-242	127	598	-124	-85	-189	279	360	740	889	506	2,135
Other	-64	-5	43	268	380	-46	-7	-13	130	172	91	155	95	340

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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