

Credit Market Strategist

Out of the frying pan into the fire

Out of the frying pan into the fire

The tariff pause this week reduces the tail risk of a US recession and supports our updated 90 – 130bps IG spread target for 2025 (vs. 118bps currently). The spike in volatility this week widened bid-ask and flattened 5s10s IG spread curve. That should normalize as the volatility subsides following the decline in tariff uncertainties.

The new problem is the potential demand / supply mismatch in the Treasury market. The continued selloff in Treasury yields should make it harder for IG investors to buy until the Treasury market finds a bottom. The headlines on potential Fed support suggest the bottom could be found sooner rather than later. Our tracker shows relatively stable institutional and foreign demand for IG, but mutual fund / ETF flows could remain weak following very large outflows this week.

The Trump put finally arrives

This week the Trump administration announced a 90-day pause on reciprocal tariffs for all countries except China. The announcement reinforces our view that the administration will not drive the US economy into a recession.

Buy cheap single-As

BBB industrials have outperformed single-A industrials during the volatile period since April 2nd. Normally the spread ratio is higher during periods of market stress and recession concerns, including in 2016, 2019 and 2022. Rotating into the relatively cheap single-As should be an attractive recession hedge.

More volatility, less supply

Volatility spiked. The silver lining for IG credit is less M&A, more conservative balance sheet policies, and less supply. We cut our 2025 supply outlook by \$110bn to \$1.58tr.

IG 1Q-25 earnings preview: weaker

Bottom-up consensus calls for US HG public issuer earnings to grow +3.3% YoY in 1Q, a notable slowdown from the +19.2% YoY increase in the prior 4Q-2024 quarter.

M&A volumes up in March

The pipeline of announced deals with potential IG funding implications increased very slightly to \$229bn in March from \$224bn in February.

IG market technicals

Supply: \$6bn of issuance this week, expect \$10-35bn next week. **Flows:** -\$6.99bn outflow this past week ending on April 2nd. **Dealer inventories:** +\$1,618 past week ended Thu. Details inside.

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

13 April 2025

Credit Strategy
United States

BofA

Data
Analytics

Yuri Seliger

Credit Strategist
BofA
+1 646 855 7209
yuri.seliger@bofa.com

Sohyun Marie Lee

Credit Strategist
BofA
+1 646 855 7217
sohyun.lee@bofa.com

Recent credit strategy research

Publication	Name
Situation Room	Flight to safety flows in bonds
Situation Room	The Trump put finally arrives
Situation Room	More volatility, less supply
Situation Room	Buy cheap single-As
Monthly HG	Mar '25: Tariff and growth
Market Review	shocks
Credit Market	Credit Market Strategist: Jan '25
Strategist	Credit Investor Survey: Bullish on America
Credit Market	Summer '24 snapshot of the US
Strategist	IG market

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Refer to important disclosures on page 27 to 29.

12816723

Timestamp: 13 April 2025 11:17AM EDT

US IG key views

- **US IG spread view.** We are constructive on spreads given that we avoid a recession in the base case, the direct impact of tariffs on IG is small, stagflation means not much impact on nominal US GDP growth. Supply volumes could be impacted by the heavy maturities in April and May. On the flip side, less M&A and more conservative balance sheet management should subtract from supply. IG credit quality continues to improve based on ratings. We expect IG spreads to trade in 90 – 130ps range this year.
- **Quality.** BBBs are almost fully compressed to single-As, which is inconsistent with the recently wider spreads and elevated risks to US growth. We suggest investors increase allocation to single-As Industrials to position for decompression (see [Situation Room: Buy cheap single-As 07 April 2025](#)).
- **Sectors.** We seek to outperform in a relatively tight spread environment by being overweight yieldier sectors. At the same time, we hedge growth and tariff risks by positioning in non-cyclical and more US domestic sectors. For more details, see [Credit Market Strategist: Sector outlook 21 March 2025](#).
- **Curve.** 5s10s IG spread curve flattened as investors sold front-end bonds to raise cash. 5yr bonds now screen cheap on the curve.
- **Sector recommendation matrix.**

Exhibit 1: High Grade Sector Views Summary

US IG credit strategy sector views matrix

Overweight	View	Market weight	View	Underweight	View
Aerospace/Defense	Over	Automobiles	Market	Basic Materials	Under
Banks/Brokers	Over	Food, Bev, & Bottling	Market	Metals & Mining	Market
Energy	Over	Life Insurance	Market	Chemicals	Under
Oil & Gas	Over	Media & Entertainment	Market	Consumer Products	Under
Pipelines	Over	Tobacco	Market	Industrial Products	Under
Health Care	Over			Retail	Under
Railroads	Over			Discounters	Under
REITs	Over			Non-Discounters	Under
Telecom	Over			Technology	Under
Utilities	Over				

Source: BofA Global Research

BofA GLOBAL RESEARCH



Out of the frying pan into the fire

The tariff pause this week reduces the tail risk of a US recession and supports our updated 90 – 130bps IG spread target for 2025 (vs. 118bps currently). The spike in volatility this week widened bid-ask and flattened 5s10s IG spread curve. That should normalize as the volatility subsides following the decline in tariff uncertainties.

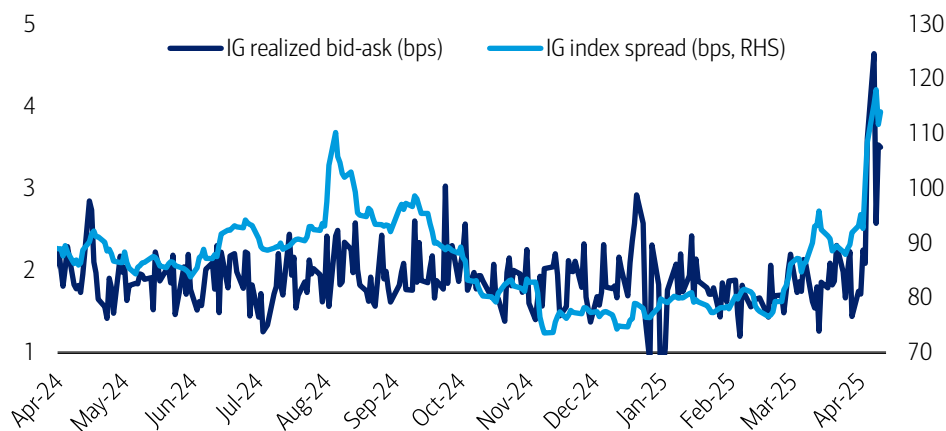
The new problem is the potential demand / supply mismatch in the Treasury market. The continued selloff in Treasury yields should make it harder for IG investors to buy until the Treasury market finds a bottom. The headlines on potential Fed support suggest the bottom could be found sooner rather than later. Our tracker shows relatively stable institutional and foreign demand for IG, but mutual fund / ETF flows could remain weak following very large outflows this week.

Strained liquidity

Our rates strategists wrote that “US Treasury liquidity conditions meaningfully thinned to near a point of requiring official sector intervention” this week (see [Global Rates Weekly: The art of the repeal](#)). Not surprisingly the bid-ask in the IG corporate bond market also widened and remained elevated on Thursday (Exhibit 2). Trading shifted notably to more recent new issues (Exhibit 3, Exhibit 4).

Exhibit 2: IG bond bid-ask widened this week

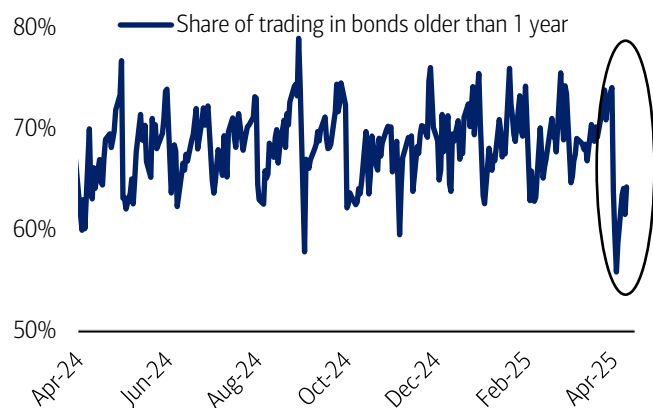
IG realized bid-ask (based on dealer buy and sell average spreads on the same bond on the same day) peaked at 4.6bps on April 7, up from about 2bps typical rate over the prior 12M.



Source: BofA Global Research, FINRA TRACE

Exhibit 3: Liquidity weakened for off-the-run bonds ...

The share of trading for bonds older than one year dropped from 74% on March 31st to 56% on April 3rd.

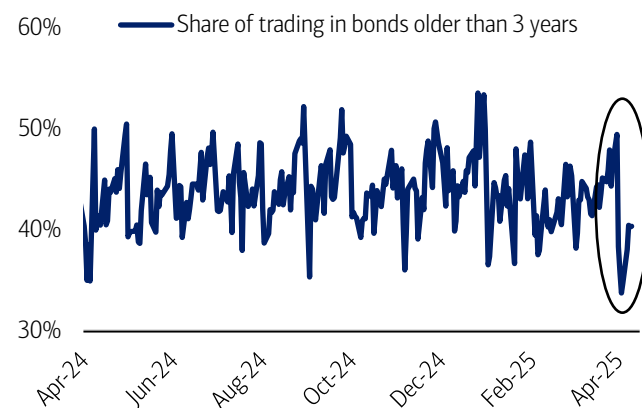


Source: BofA Global Research, FINRA TRACE

BofA GLOBAL RESEARCH

Exhibit 4: ... as trading volumes for older bonds declined.

The share of trading for bonds older than 3 year dropped from 50% on March 31st to 33% on April 3rd.



Source: BofA Global Research, FINRA TRACE

BofA GLOBAL RESEARCH

BofA GLOBAL RESEARCH



Tracking demand

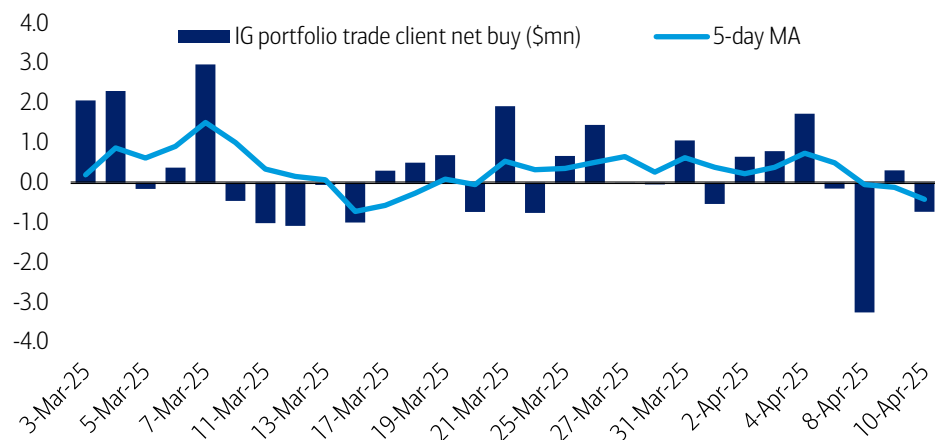
Demand weakened, driven by retail. Looking at portfolio trades as an indicator of institutional demand shows one big day of net selling on April 8 (Exhibit 5). Investors also used portfolio trades to rotate out of 1-3yr and 5-10yr and into the back-end (Exhibit 6). The selling was concentrated in high quality, suggesting investors were mostly raising cash and not getting out of IG in general (Exhibit 7).

Our foreign demand tracker shows a mixed picture. Some net selling for a few days after April 2nd, and then buying this week. On net foreign investor neither sold nor bought much (Exhibit 8).

The big outflows this week came from retail investors. The daily outflows reached about \$4bn on Monday and Tuesday, before slowing on Wednesday. Note that better flows on Wednesday were due to ETFs, while outflows from funds continued (Exhibit 9, Exhibit 10). Fund flows tend to chase returns, and following the big backup in rates the returns are now consistent with HG fund outflows going forward (Exhibit 11).

Exhibit 5: Investors only heavily sold bonds through PTs on April 8th

Away from April 8th net buying was relatively balanced for IG portfolio trades.

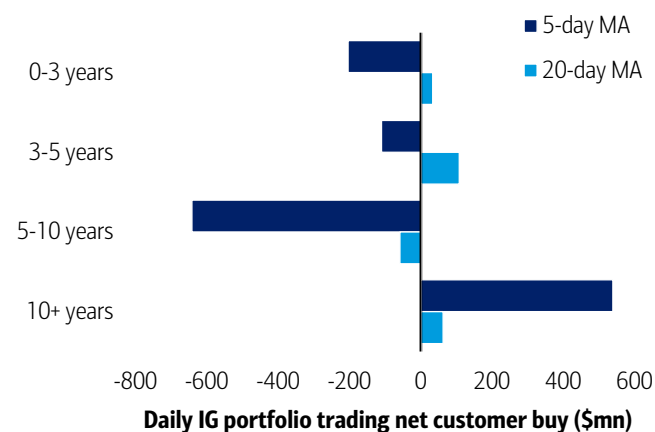


Source: BoFA Global Research, FINRA TRACE.

BoFA GLOBAL RESEARCH

Exhibit 6: IG portfolio trades by maturity

IG investors sold 0-10yr bonds, bought 10+yr bonds through PTs.

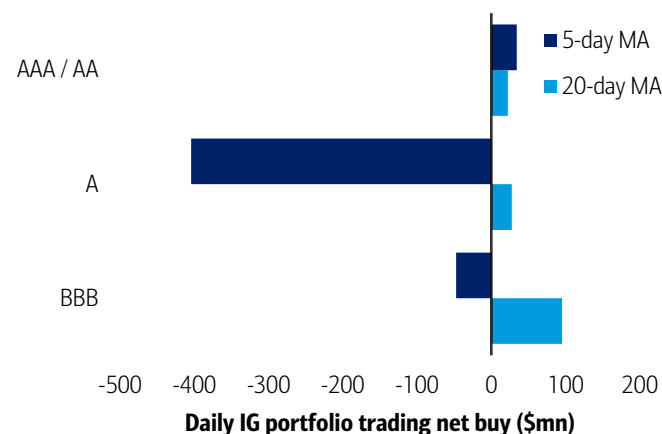


Source: BoFA Global Research, FINRA TRACE.

BoFA GLOBAL RESEARCH

Exhibit 7: IG portfolio trades by rating

IG investors net sold A-rated bonds through portfolio trades this past week.



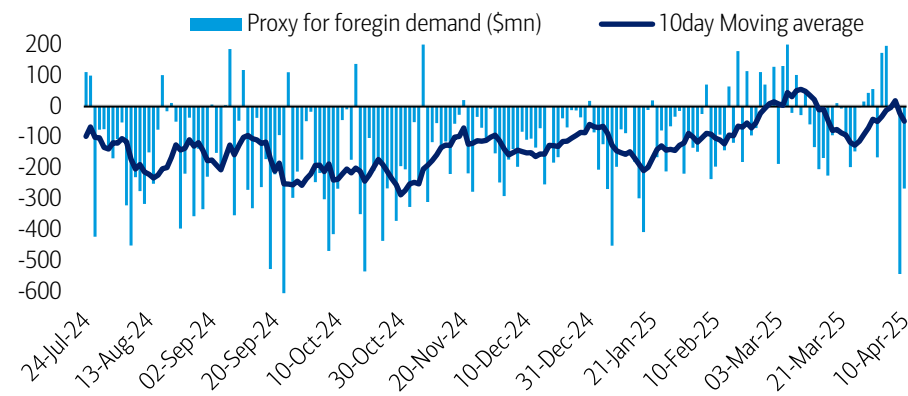
Source: BoFA Global Research, FINRA TRACE.

BoFA GLOBAL RESEARCH



Exhibit 8: Demand from foreign investors was about flat this week

Our proxy shows potential selling from foreign investors immediately after April 2nd and then some buoying this week.

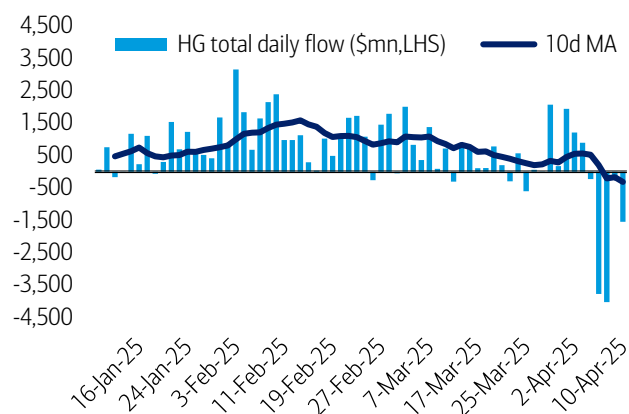


Note: Overnight and morning net buying by investors is correlated with demand from foreign investors due to different time zones. Negative numbers indicate foreign buying.

Source: BofA Global Research, TRACE

Exhibit 9: Big outflows from HG on April 7 and 8

Daily outflows from HG were around \$4bn on April 7 and 8

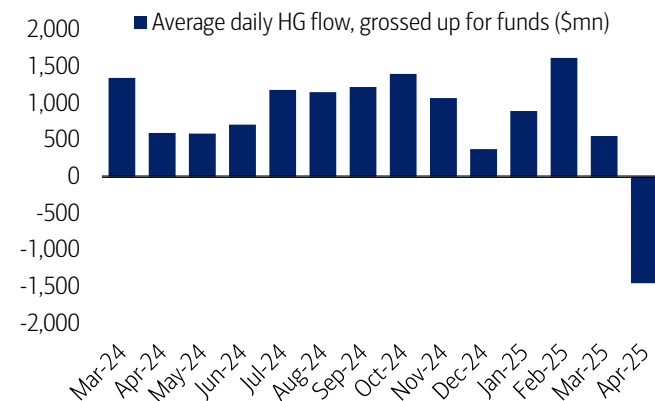


Source: EPFR Global

BofA GLOBAL RESEARCH

Exhibit 10: Wear HG flows so far in April

The average daily flow to HG funds / ETFs has turned negative so far in April.

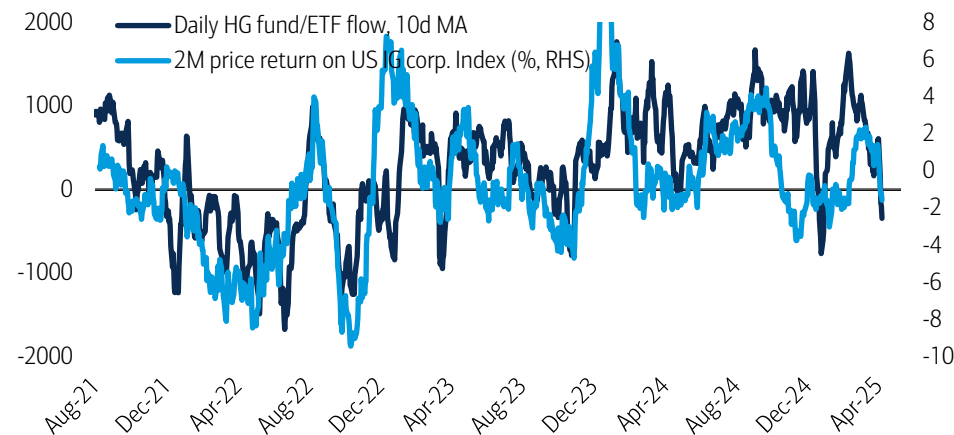


Source: EPFR Global

BofA GLOBAL RESEARCH

Exhibit 11: Bond returns are currently consistent with outflows from HG funds

The recent increase in yields and lower bond returns are consistent with outflows from HG funds and ETFs.



Source: EPFR Global

BofA GLOBAL RESEARCH



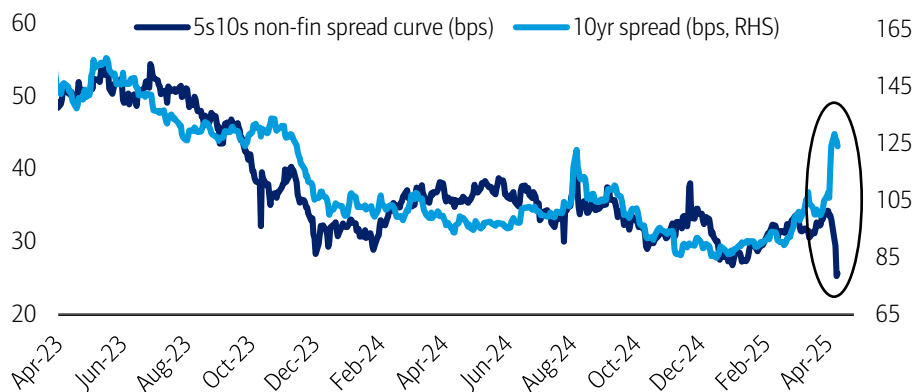
The victim of the volatility: 5yr spreads

IG 5yr spreads are tighter and lower beta compared to the 10yr. That means 5s10s IG spread curve tends to steepen when spreads widen. The opposite happened this week, with the curve instead flattened significantly (Exhibit 12). That suggests investors were likely using the 5yr point to raise cash. The 5yr spreads are now cheap and should outperform once the volatility subsides.

In contrast the price action in the 10s30s IG spread curves remained orderly. The 10s30s curve flattened in line with the increase in 30yr Treasury yields on stronger yield-sensitive demand (Exhibit 13).

Exhibit 12: 5s10s IG spread curve flattened this week

5s10s IG non-financial spread curve tends to steepen when spreads widen. The opposite happened last week.



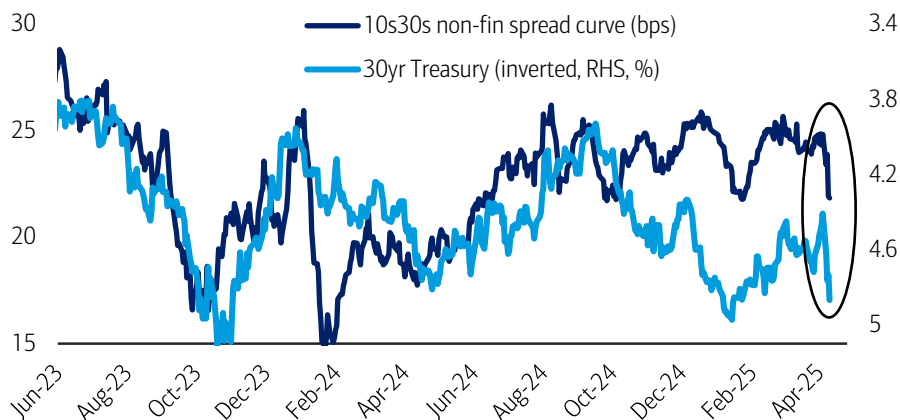
Note: the curves are based on issuer-matched on-the-run bonds.

Source: BofA Global Research, ICE Data Indices, LLC

BofA GLOBAL RESEARCH

Exhibit 13: 10s30s IG spread curve flattened in line with higher Treasury yields

Unlike the 5s10s IG spread curve, 10s30s price action was orderly this week despite the volatility.



Note: the curves are based on issuer-matched on-the-run bonds.

Source: BofA Global Research, ICE Data Indices, LLC

BofA GLOBAL RESEARCH

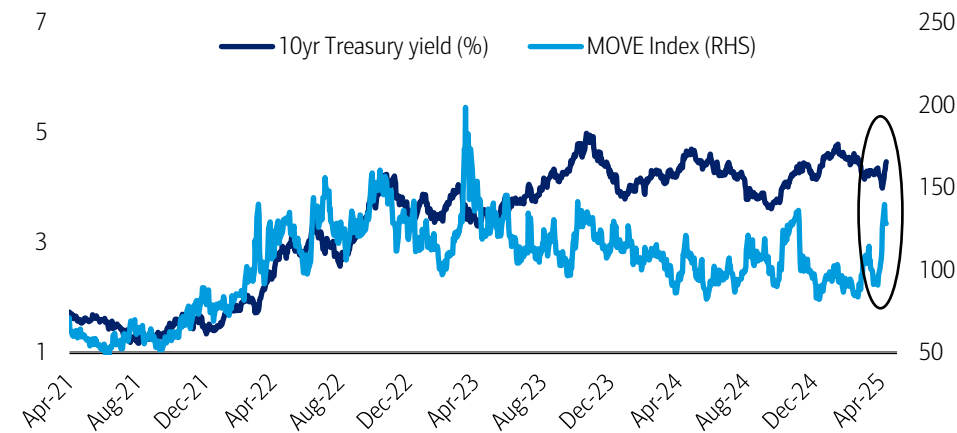


Rates vol = less demand for bonds

Higher rates risks should be bad for demand in addition to the outflows from funds / ETFs. Unexpectedly the Treasury yield curve bear steepened following the April 2nd tariff announcement. Treasuries also cheapened vs. swaps, suggesting weaker demand (Exhibit 15, Exhibit 16). While higher yields are generally attractive, investors generally need some stability before they are comfortable buying. Currently such stability is missing, given the implied rates volatility near the highest levels since 2022 (Exhibit 14).

Exhibit 14: Higher rates, but also much higher rates vol

The increase in implied rates vol was high relative to the increase in rates. That should be negative for demand.

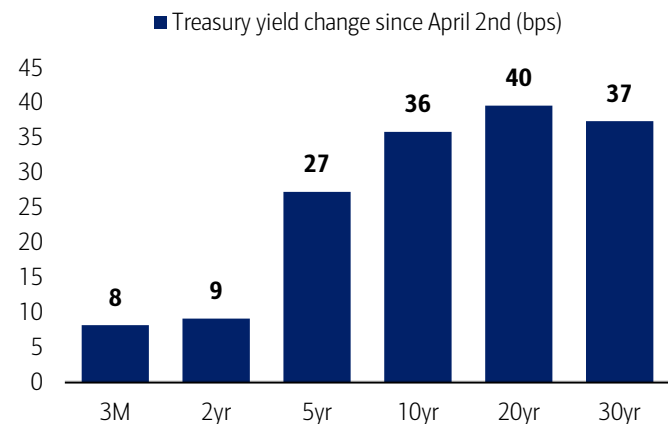


Source: Bloomberg.

BofA GLOBAL RESEARCH

Exhibit 15: Treasury yield curve bear steepened since April 2nd

10yr Treasury yields is 36bps higher since April 2nd, while 2yr yield is 9bps higher.

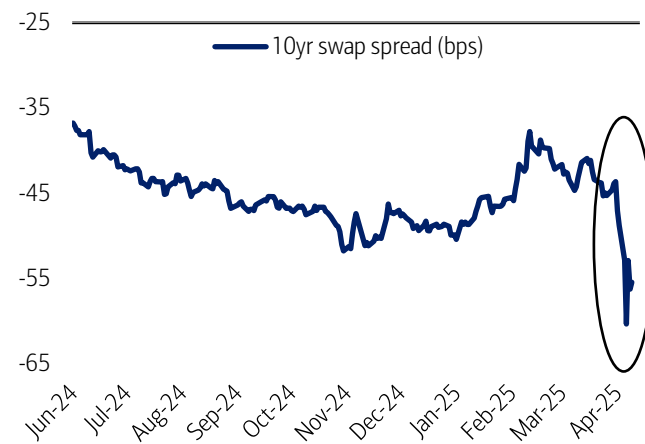


Source: Bloomberg.

BofA GLOBAL RESEARCH

Exhibit 16: 10yr swap spread turned more negative

10yr swap spread declined by 12bps since April 2nd.



Source: Bloomberg.

BofA GLOBAL RESEARCH

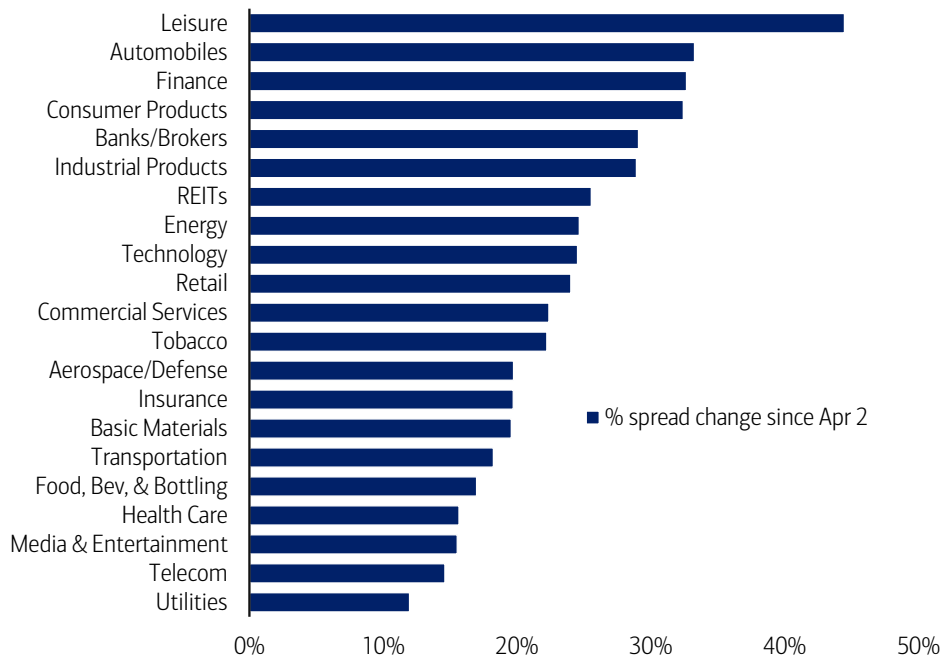
Relative value after the selloff

The less cyclical / more domestic sectors such as Utilities, Telecom, Media, Health Care and Food / Bev have finally outperformed this week (Exhibit 17). That means these defensive sectors are not as cheap as they were only a week ago. However, given the outlook for weaker growth they likely still have more room to outperform. The relative value is still relatively far from the recession fears period in 2022 / 2023 (Exhibit 18).

However, European Yankees continue to trade relatively cheap relative to US issuer spreads (Exhibit 19, Exhibit 20). Hence we still think European Yankees provide a nice hedge to US tariff and growth risks.

Exhibit 17: Less cyclical / more domestic IG sectors outperformed since April 2nd

Utilities, Telecom, Media, Health Care and Food have outperformed since April 2nd.

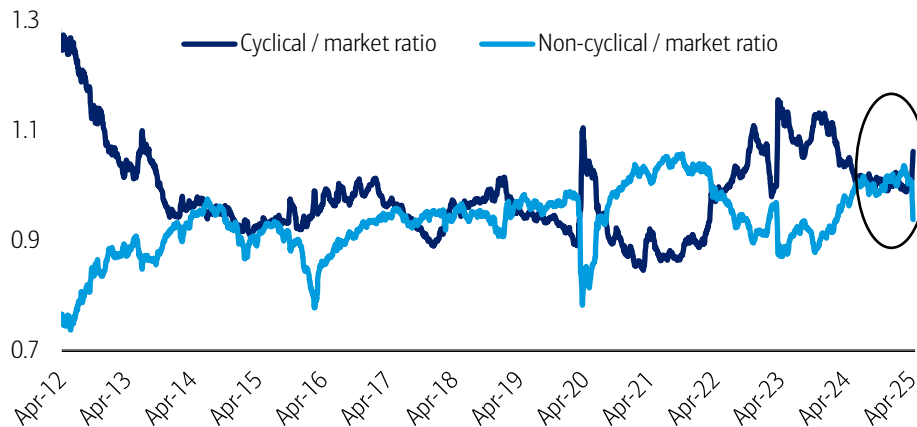


Source: BofA Global Research, ICE Data indices, LLC

BofA GLOBAL RESEARCH

Exhibit 18: Cyclical sectors have finally underperformed

Still, cyclical sector widening remains notably below the levels in 2022 / 2023.



Non-cyclical sectors: Transportation, Utilities, Health Care, Aerospace / Defense. Cyclical sectors: Autos, Banks/Brokers, Finance, Basic Materials. Note that we exclude Energy from the cyclical sectors.

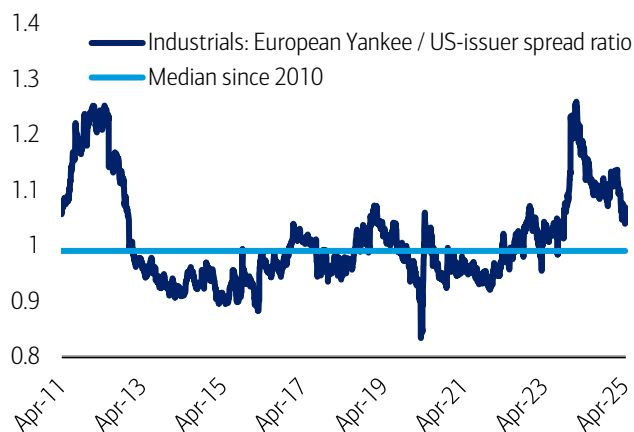
Source: BofA Global Research, ICE Data Indices, LLC

BofA GLOBAL RESEARCH



Exhibit 19: European Yankee spreads remain cheap ...

The ratio of European issuer spreads to US issuer spreads for Industrial issuers remains above the historical median.

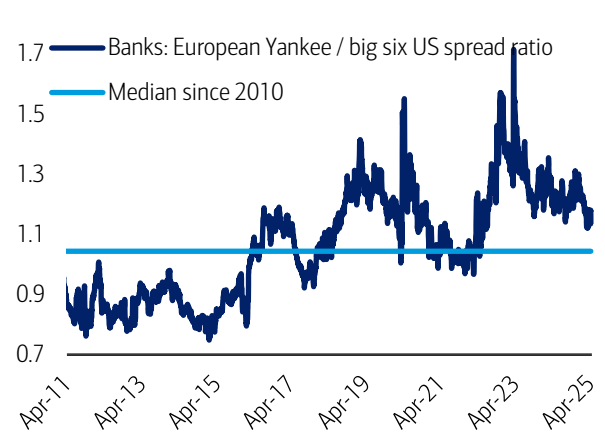


Source: BofA Global Research, ICE Data Indices, LLC

BofA GLOBAL RESEARCH

Exhibit 20: ... relative to US issuers spreads

The ratio of European issuer spreads to US issuer spreads for Banks issuers remains above the historical median.



Source: BofA Global Research, ICE Data Indices, LLC

BofA GLOBAL RESEARCH

Based on:

[Situation Room: The Trump put finally arrives 09 April 2025](#)

The Trump put finally arrives

Today the Trump administration announced a 90-day pause on reciprocal tariffs for countries that have not retaliated. That presumably includes all countries except China. During the pause the tariff rate will drop to 10%. At the time of writing, it's unclear whether sectoral tariffs (such as tariffs on autos) are included in the pause.

Outlook unchanged: constructive on IG spreads

We argued that the administration will likely not allow tariffs to drive the US economy into a recession due to political costs (see [Credit Market Strategist: It gets worse before it gets better](#)). Today's announcement reinforces that view. However, markets would still need to navigate elevated uncertainties and slower growth. As a result, we continue to prefer non-cyclical sectors, Yankees over US-domiciled issuers and single-A over BBB industrials (see [Situation Room: Buy cheap single-As](#)). Our IG spread target for 2025 is 90 to 130bps.

Previously published here

[Situation Room: Buy cheap single-As 07 April 2025](#)

Buy cheap single-As

BBB industrials have outperformed single-A industrials during the volatile period since April 2nd (Exhibit 21). As a result, the BBB / A Industrial spread ratio has dropped to near the lowest levels on record (Exhibit 22). This move is very unusual. Normally the spread ratio is higher during periods of market stress and recession concerns, including in 2016, 2019 and 2022 (Exhibit 23).

A cheap recession hedge

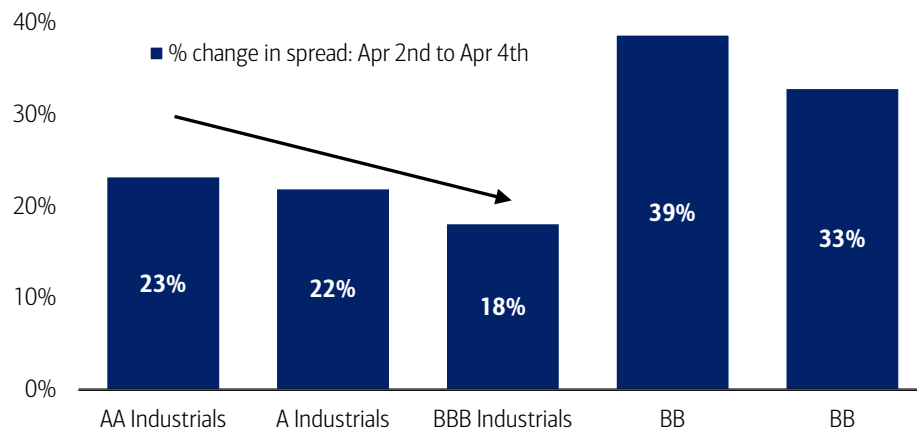
We think rotating into the relatively cheap single-As should be an attractive recession hedge. The historically low BBB/A spread ratio suggests single-As should outperform (on a beta-adjusted basis) in most scenarios, and especially in the scenario that spreads remain near current wide levels.

Cheap A / rich BBB issuer screen

We screen for larger A-rated issuers that have widened the most (in terms % of spread) since February 28 (Exhibit 24). Similarly, we screen for larger BBB-rated industrial issuers with the smallest percentage spread change since February 28 (Exhibit 25).

Exhibit 21: High quality spreads have underperformed since the “Liberation Day”.

AA and A-rated Industrial spreads are 23 and 22% wider since April 2nd, compared to just 18% wider for BBB-rated industrials.

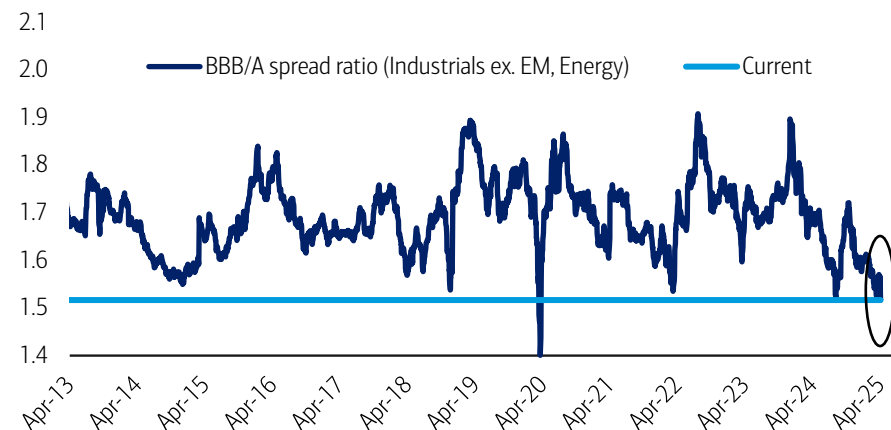


Source: ICE Data Indices, LLC

BofA GLOBAL RESEARCH

Exhibit 22: BBB/A spread ratio for non-financials is near record lows

The last time spreads were this compressed was in August 2024 and during Covid spread volatility.



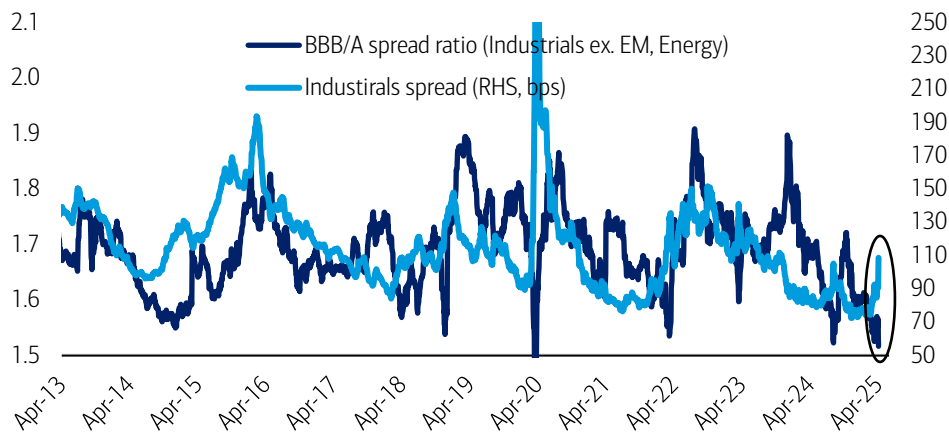
Source: BofA Global Research, ICE Data Indices, LLC

BofA GLOBAL RESEARCH



Exhibit 23: Wider spreads -> decompression

Wider spreads typically lead to decompression, or a higher BBB/A spread ratio. So far this year wider spreads instead coincided with more compression.



Source: BofA Global Research, ICE Data Indices, LLC

BofA GLOBAL RESEARCH

Exhibit 24: Cheap single-A screen

Single-A rated Industrial issuers with the largest % spread change since Feb 28 (at least \$5bn in index notional).

Ticker	Sector	Rating	Index notional (\$bn)	Spread on Feb 28 (bps)	Spread on Apr 4 (bps)	Spread change (bps)	Spread Change (%)
PCAR	Automobiles	A	5.1	26	49	22	84%
TOYOTA	Automobiles	A	33.1	40	72	32	79%
BMW	Automobiles	A	14.2	59	99	39	67%
HYNMTR	Automobiles	A	24.0	76	124	48	63%
HNDA	Automobiles	A	16.8	56	91	35	62%
MBGGR	Automobiles	A	16.1	69	105	36	53%
NKE	Retail	A	8.0	52	79	27	52%
ECL	Basic Materials	A	7.1	48	72	24	50%
CAT	Industrial Products	A	19.1	42	62	20	49%
NTT	Telecom	A	8.4	46	68	22	49%
DTRGR	Industrial Products	A	10.4	77	115	37	48%
DE	Industrial Products	A	32.9	41	60	19	45%
MMM	Industrial Products	A	9.2	62	90	28	45%
DGELN	Food, Bev, & Bottling	A	8.5	62	89	27	45%
TGT	Retail	A	12.1	58	83	25	43%
UNANA	Consumer Products	A	10.1	38	54	16	41%
ADBE	Technology	A	6.2	36	51	15	41%
CARGIL	Food, Bev, & Bottling	A	7.9	61	85	25	41%
EL	Consumer Products	A	7.3	81	114	33	41%
NFLX	Media & Entertainment	A	9.0	51	72	21	41%

Source: BofA Global Research, ICE Data Indices, LLC

BofA GLOBAL RESEARCH

Exhibit 25: Rich BBB screen

BBB-rated Industrial issuers with the smallest % spread change since Feb 28 (at least \$5bn in index notional).

Ticker	Sector	Rating	Index notional (\$bn)	Spread on Feb 28 (bps)	Spread on Apr 4 (bps)	Spread change (bps)	Spread Change (%)
UBER	Commercial Services	BBB	6.7	88	96	9	10%
BAYNGR	Health Care	BBB	15.7	151	170	19	13%
BCECN	Telecom	BBB	6.6	114	132	18	15%
ELV	Health Care	BBB	28.2	97	112	15	16%
CVS	Health Care	BBB	51.8	121	141	20	16%

Exhibit 25: Rich BBB screen

BBB-rated Industrial issuers with the smallest % spread change since Feb 28 (at least \$5bn in index notional).

Ticker	Sector	Rating	Index notional (\$bn)	Spread on Feb 28 (bps)	Spread on Apr 4 (bps)	Spread change (bps)	Spread Change (%)
INTC	Technology	BBB	43.6	123	144	21	17%
CNC	Health Care	BBB	15.7	142	165	24	17%
COXENT	Media & Entertainment	BBB	11.2	131	154	23	17%
RCICN	Telecom	BBB	14.5	119	141	22	19%
CAH	Health Care	BBB	7.0	88	105	17	19%
CDW	Commercial Services	BBB	5.0	103	123	20	19%
FDX	Transportation	BBB	5.8	88	105	17	19%
CARR	Industrial Products	BBB	8.1	83	99	16	20%
CI	Health Care	BBB	25.7	93	111	18	20%
BA	Aerospace/Defense	BBB	45.0	131	157	27	20%
BALN	Aerospace/Defense	BBB	9.6	79	95	16	20%
T	Telecom	BBB	85.1	97	118	20	21%
FOXA	Media & Entertainment	BBB	6.6	110	134	23	21%
RTX	Aerospace/Defense	BBB	34.7	82	99	17	21%
HCA	Health Care	BBB	22.7	113	137	24	21%

Source: BofA Global Research, ICE Data Indices, LLC

BofA GLOBAL RESEARCH

Previously published here

[Situation Room: More volatility, less supply 08 April 2025](#)

More volatility, less supply

Volatility has spiked. The silver lining for IG credit is less M&A, more conservative balance sheet policies, and less supply. In our 2025 supply outlook we penciled in a \$50bn increase in M&A supply and a \$25bn rise in opportunistic issuance / re-leveraging (see report: [Credit Market Strategist: 2025 US IG supply outlook](#)). Despite a strong start to the year, M&A issuance will now likely be lower. Higher uncertainty should lead companies to lower opportunistic issuance relative to last year rather than increasing it (Exhibit 26). As a result, we cut our 2025 supply outlook by \$110bn to \$1.58tr, up 3% from \$1.52tr issued in 2024.

Tracking M&A issuance

M&A IG supply reached \$76bn in 1Q, up from \$66bn in 1Q-2024. However, the pipeline of announced deals is a bit lower YoY, and new M&A activity will likely slow from here. That should drive M&A supply down to about \$175bn in 2025 from \$185bn in 2024 (Exhibit 29).

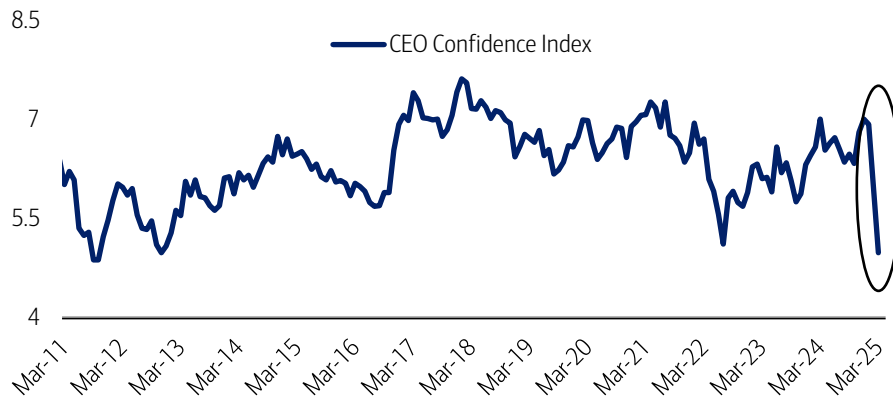
M&A volumes up in March

M&A announcements jumped to \$322bn in March, the highest since December 2021. However there was also \$54.7bn of M&A-related IG issuance in March, the highest since February 2024. Therefore on net, the pipeline of announced deals with potential IG funding implications was close to unchanged in March, but we note that the pipeline has declined YoY and over the past 24 months.



Exhibit 26: Lower CEO confidence -> less M&A and re-leveraging

Companies should be more careful with their balance sheets given the more difficult outlook.

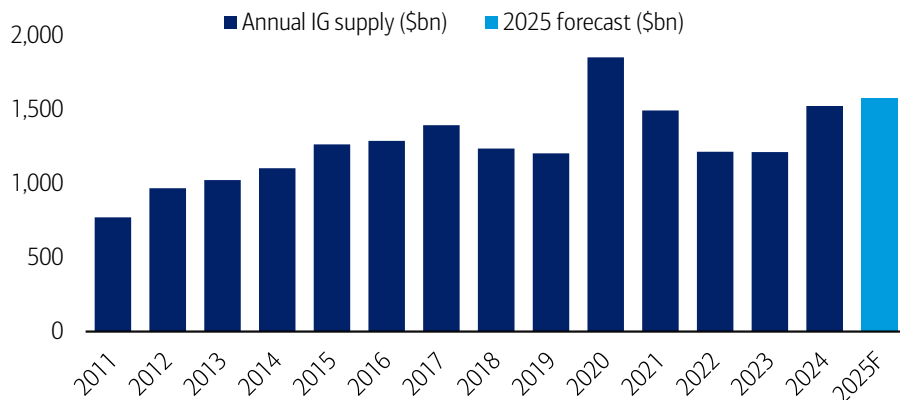


Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 27: IG 2025 supply forecast: \$1.58tr

We lower our 2025 supply forecast from \$1.69tr to \$1.58tr on less M&A and more conservative balance sheet management.

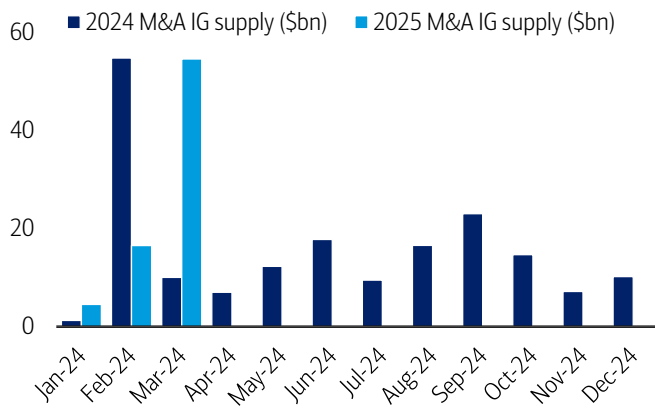


Source: BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 28: M&A supply reached \$76bn in 1Q-2025

That's up from \$66bn in 1Q-2024

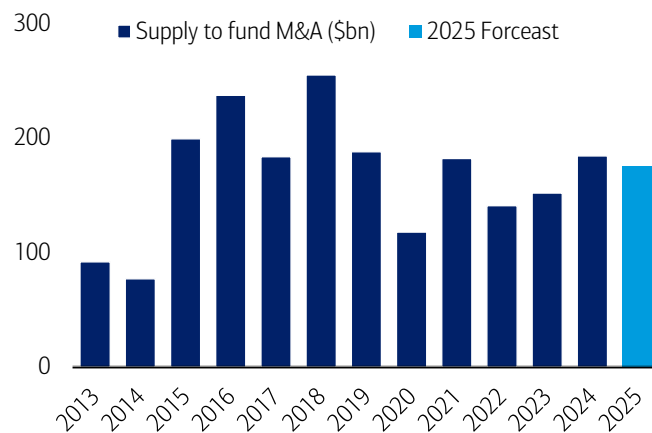


Source: BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 29: M&A supply will likely be lower in 2025

We are looking for M&A supply to slow to about \$175bn in 2025 from \$185bn in 2024.



Source: BofA Global Research

BofA GLOBAL RESEARCH

Previously published here

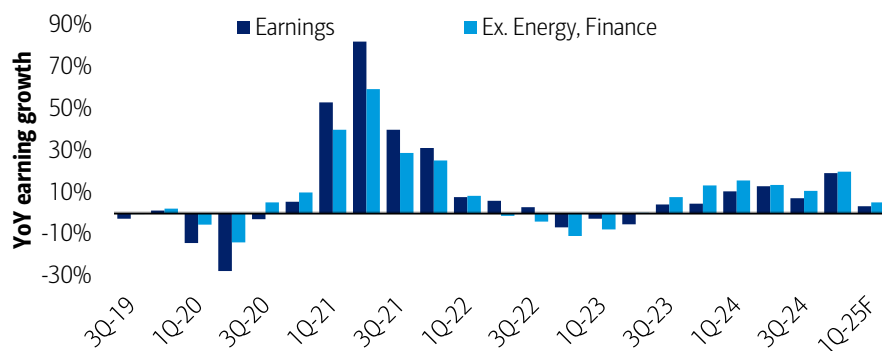
[Situation Room: The Trump put finally arrives 09 April 2025](#)

IG 1Q-25 earnings preview: weaker

The big six US banks / brokers will kick off the 1Q reporting season this Friday, April 11th. Bottom-up consensus calls for US HG public issuer earnings to grow +3.3% YoY in 1Q, a notable slowdown from the +19.2% YoY increase in the prior 4Q-2024 quarter. Excluding the more volatile Energy and Finance sectors, earnings growth is expected to be slightly higher, increasing +5.2% YoY in 1Q-25, down from the +19.8% YoY reading in 4Q-24 and +10.7% YoY in 3Q-24. Finally, bottom-up consensus calls for +0.8% YoY 1Q earnings growth ex. Energy, Finance and the Magnificent 7.

Exhibit 30: Earnings growth for US IG issuers

YoY earnings growth is expected to slow down in 1Q (+5.2%) ex. Energy and Finance.



Note: 1Q-25 based on the actual results when available and consensus estimates otherwise.

Source: BofA Global Research, FactSet

BofA GLOBAL RESEARCH

Consensus calls for YoY revenue growth to weaken for the full universe (to +3.8% YoY in 1Q from +4.6% YoY in 4Q), as well as ex. Energy and Finance (+4.3% YoY in 1Q from +5.0% YoY in 4Q).

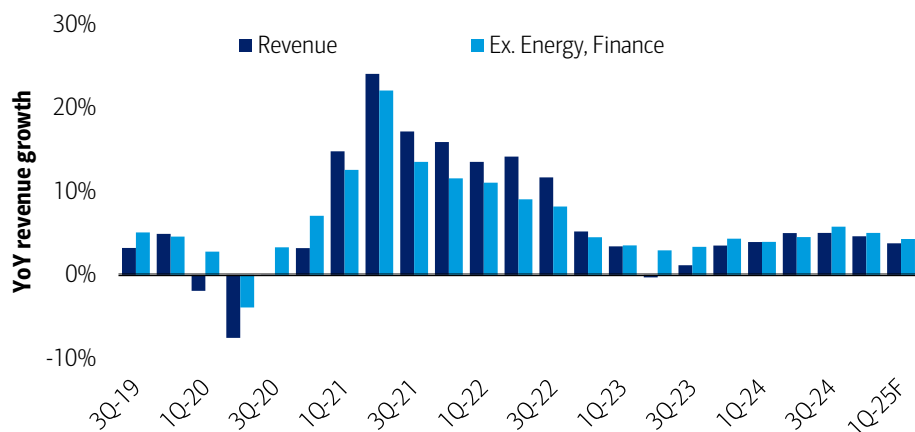
Positive surprises

Based on pre-COVID averages, actual results surprise to the upside by 3.7% for earnings and +0.7% for revenues. For the prior 4Q-2024 earnings season, earnings surprise was stronger (+6.3%), while revenue surprise was +0.6%, slightly below the pre-COVID average (Exhibit 32, Exhibit 33).



Exhibit 31: Revenue growth for US IG issuers

Consensus is calling for YoY revenue growth to weaken for the full universe (to +3.8% YoY in 1Q from +4.6% YoY in 4Q) as well as ex. Energy and Finance (to +4.3% YoY in 1Q from +5.0% YoY in 4Q).



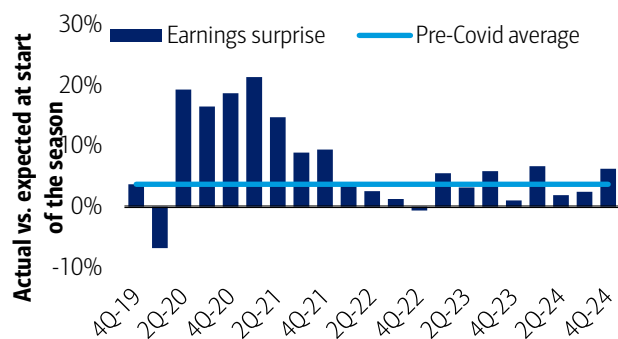
Note: 1Q-25 based on the actual results when available and consensus estimates otherwise.

Source: BofA Global Research, FactSet

BofA GLOBAL RESEARCH

Exhibit 32: Earnings surprise for US IG issuers

Earnings surprise was above the +3.7% pre-Covid average in 4Q-2024.

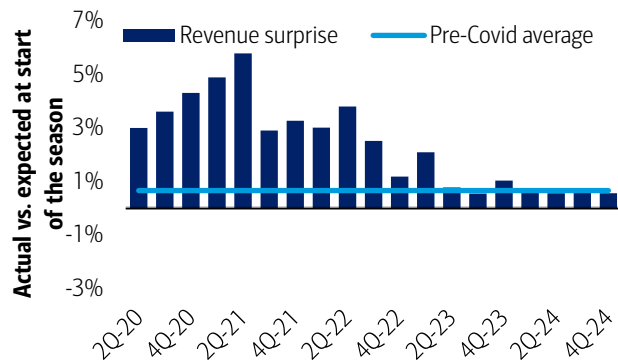


Source: BofA Global Research, FactSet

BofA GLOBAL RESEARCH

Exhibit 33: Revenue surprise for US IG issuers

Sales beat expectations by 0.6% in 3Q-2024.



Source: BofA Global Research, FactSet

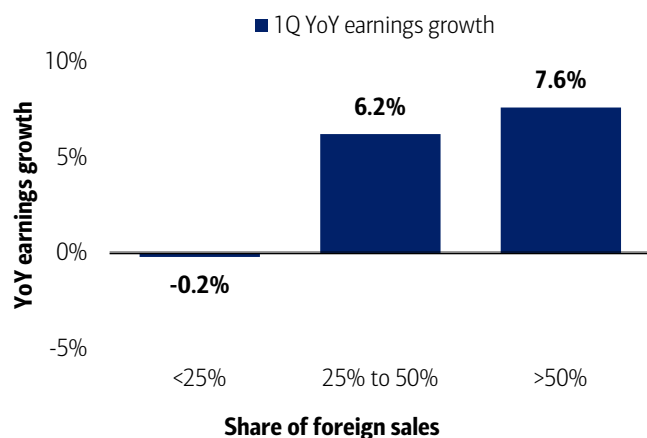
BofA GLOBAL RESEARCH

Foreign over domestic

The strongest earnings growth in 1Q-25 (+7.6%) is expected for the more global issuers (>50% share of foreign sales, ex. Finance, Energy, Utilities); the weakest earnings growth (-0.2%) is expected for the more domestic issuers (<25% foreign sales).

Exhibit 34: 1Q-25 consensus earnings growth by foreign sales

Expected 1Q earnings growth is expected to be the weakest for domestic issuers (-0.2%).



Note: 1Q-25 based on the actual results when available and consensus estimates otherwise.

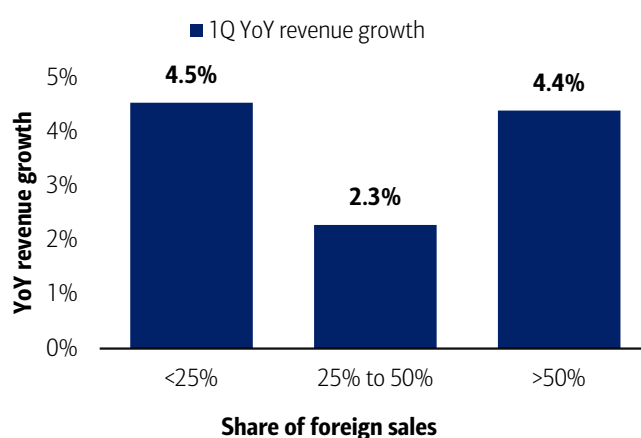
Excluding Finance, Energy, Utilities.

Source: BofA Global Research, FactSet.

BoFA GLOBAL RESEARCH

Exhibit 35: 1Q-25 consensus sales growth by foreign sales

Expected 1Q sales growth is 4.5% YoY for the more domestic issuers, 2.3% for issuers with intermediate foreign exposure, 4.4% for more global issuers.



Note: 1Q-25 based on the actual results when available and consensus estimates otherwise.

Excluding Finance, Energy, Utilities. Source: BofA Global Research, FactSet.

BoFA GLOBAL RESEARCH

Results by sector

Sectors with the weakest expected YoY earnings growth include Automobiles (-41%), Basic Materials (-19%), and Industrial Products (-13%). The strongest YoY earnings growth is expected for Technology (17%), Other (14%), and Utilities (10%, Exhibit 36).

Exhibit 36: 1Q-2025 results by sector for US public IG issuers

The table lists earnings and sales growth by sector.

Sector	Earnings growth (YoY)	Sales growth (YoY)	Share of bond index value	Share of the sector that has reported
Aerospace/Defense	6.9%	-0.3%	1.2%	0%
Automobiles	-42.8%	-5.4%	1.1%	0%
Banks/Brokers	6.9%	4.3%	11.4%	1%
Basic Materials	-16.9%	0.0%	1.5%	2%
Consumer Products	-7.4%	-4.7%	0.6%	0%
Energy	-11.1%	1.3%	4.7%	0%
Finance	4.9%	6.2%	2.3%	0%
Food, Bev, & Bottling	-11.4%	2.0%	2.0%	12%
Health Care	5.4%	7.6%	6.9%	0%
Industrial Products	-12.6%	-6.8%	1.8%	0%
Insurance	-8.0%	-0.7%	2.7%	0%
Media & Entertainment	5.4%	6.6%	2.8%	0%
REITs	8.6%	2.8%	1.9%	0%
Retail	8.6%	3.1%	2.9%	7%
Technology	16.8%	11.8%	5.6%	19%
Telecom	2.2%	2.1%	2.3%	0%
Transportation	-5.7%	1.3%	2.0%	9%
Utilities	10.8%	8.2%	6.1%	0%
Other	14.3%	3.6%	2.7%	3%
Total US HG public co's	3.7%	3.9%	62.4%	3%
Total ex. Financials	4.0%	4.1%	44.0%	4%
Total ex. Energy	4.9%	4.2%	57.7%	3%
Total ex. Fin. & Energy	5.4%	4.4%	39.3%	5%
Yankee and private co's	n.a.	n.a.	37.6%	n.a.
HQ ex. Financials, Utilities	5.5%	5.9%	15.7%	1%
BBB ex. Financials, Utilities	-0.1%	1.6%	21.9%	7%

Note: based on the actual results when available and consensus estimates otherwise.

Source: BofA Global Research, FactSet.

BoFA GLOBAL RESEARCH

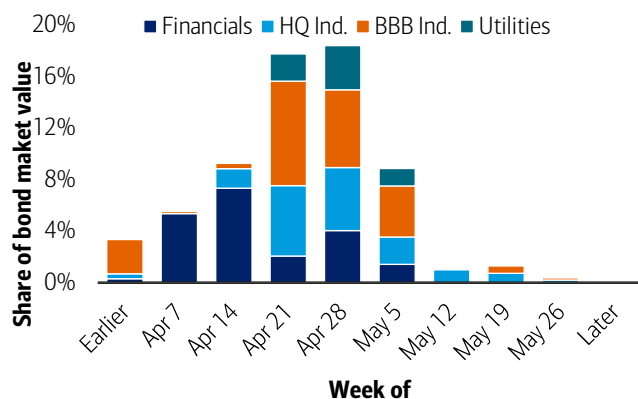


Timing of the earnings season

This week eight issuers accounting for 5.5% of the US IG corporate bond index market value are scheduled to release 1Q results. The pace then accelerates to 38 issuers (9.3% of the bond index) during the week of April 14, 147 issuers (17.8% of the index) during the week of April 21 and the peak 216 issuers (18.4% of the index) during the week of April 28. In terms of sectors, reporting will be skewed early in the season for financials, late for utilities, and mid-season for high quality industrials. The earnings season will be mostly over following the week of May 5th (Exhibit 37, Exhibit 38).

Exhibit 37: Weekly reporting: by the share of the US IG bond index

The weeks of April 21 and April 28 are the busiest of the season.

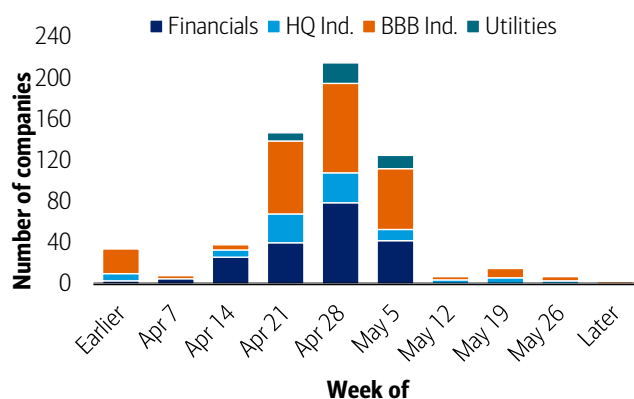


Source: BofA Global Research, Bloomberg.

BofA GLOBAL RESEARCH

Exhibit 38: Weekly reporting: by the number of companies

The number of companies reporting peaks for the week of Feb 4.



Source: BofA Global Research, Bloomberg.

BofA GLOBAL RESEARCH

Previously published here

[Situation Room: More volatility, less supply 08 April 2025](#)

M&A volumes up in March

North American M&A announcements jumped to \$322bn in March, the highest since December 2021, from \$134bn in February (Exhibit 39). There was also \$54.7bn of M&A-related IG issuance in March, up from \$16.6bn in February and the highest since February 2024 (Exhibit 41).

Deal pipeline stable

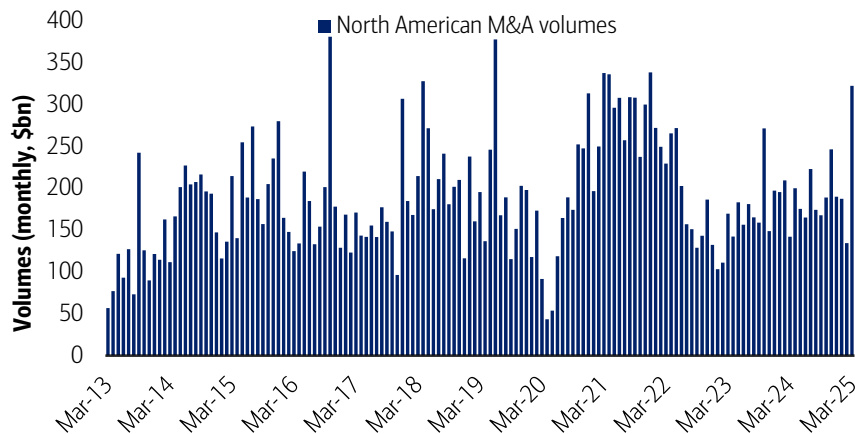
The pipeline of announced deals with potential IG funding implications increased very slightly to \$229bn in March from \$224bn in February.

The trend has been for the pipeline to decline over the past 24 months, down from \$304bn average in 2023 and \$346bn average in 2022 (Exhibit 40). Although the relationship tends to be a bit noisy, the current pipeline implies M&A-related supply over the next eight months of \$103bn, below the \$118bn over the prior eight months (Exhibit 42, Exhibit 43).

See details of the current deal list in the Pipeline of M&A deals with IG issuance implications section.

Exhibit 39: Monthly North American M&A volumes

North American M&A announcements jumped to \$322bn in March, from \$134bn in February.

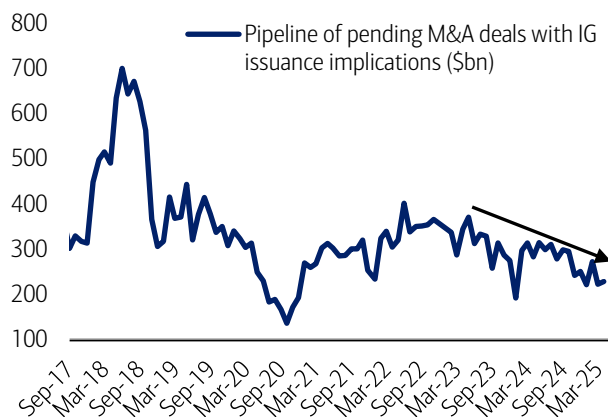


Note: limited to pending and closed deals only. Cancelled deals are excluded.

Source: Bloomberg

Exhibit 40: Pipeline of pending M&A deals with IG funding implications

The pipeline of pending M&A deals with US IG funding implications decreased very slightly to \$229bn in March from \$224bn in February.

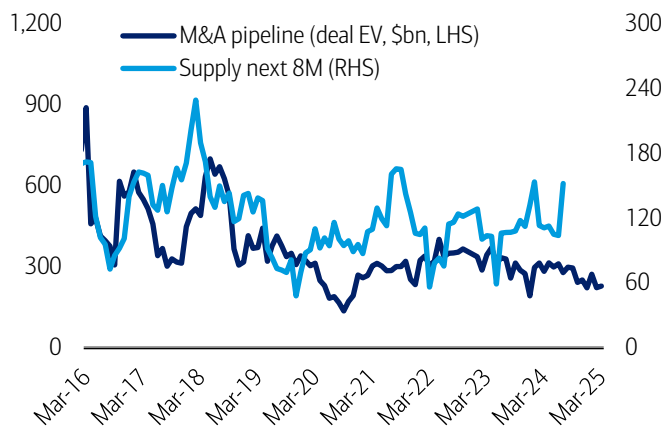


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 42: M&A pipeline vs IG supply

IG supply is historically correlated with the volume of pending M&A deals in the pipeline.



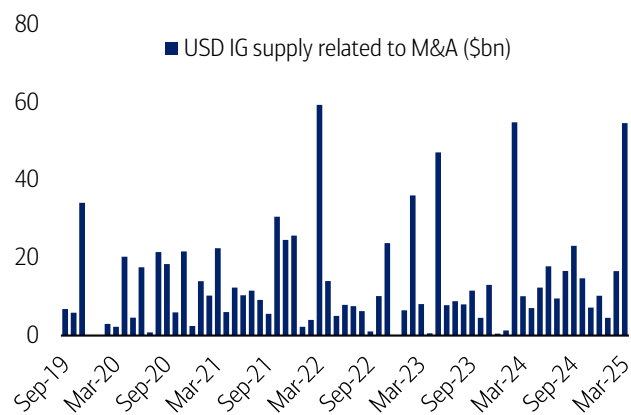
Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

BofA GLOBAL RESEARCH

Exhibit 41: US IG M&A related supply

US IG M&A-related supply totaled \$54.7bn in March, up from \$16.6bn in February, \$4.5bn in January and \$10.2bn in December.

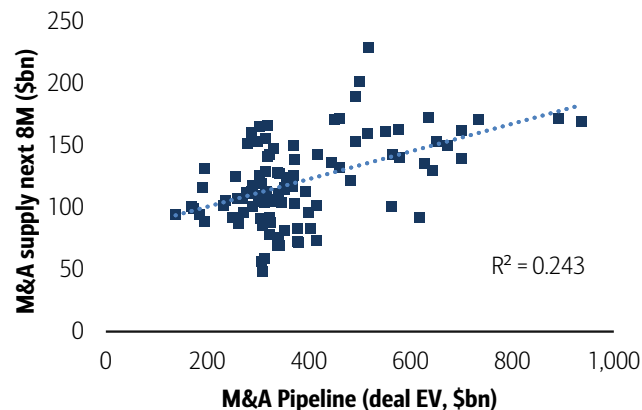


Source: BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 43: Implied M&A supply next 8m: \$103bn

The R-squared of the regression is 0.24.



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH



Pipeline of M&A deals with IG issuance implications

Our criteria for inclusion in the list of announced deals listed consists of deals at least \$1bn in size (in terms of EV) announced by USD high grade issuers. We further restrict the list to deals with a cash component, suggesting to us that the company may choose to fund all or portion of that cash component in the high grade bond market. Finally, the list excludes deals that have already been funded in the corporate bond market, deals that have been rejected by regulators and those that have closed.

Exhibit 44: M&A deals with potential high grade bond funding needs

A list of pending M&A deals with potential IG bond funding implications.

Deal announcement date	Acquirer Ticker	Acquirer Name	Target Ticker	Target Name	Announced deal value (\$bn)	Expected completion date
3/18/2025	GOOGL US	Alphabet Inc	1852172D US	Wiz Inc	32.0	12/31/2026
1/10/2025	CEG US	Constellation Energy Corp	CPN US	Calpine Corp	29.0	1/10/2026
9/5/2024	VZ US	Verizon Communications Inc	FYBR US	Frontier Communications Parent Inc	19.6	3/31/2026
2/5/2024	3651071Z DC	Novo Holdings A/S	CTLT US	Catalent Inc	16.2	12/18/2024
3/4/2025	158443Z UH	Abu Dhabi National Oil Co	0339293Q CN	NOVA Chemicals Corp	13.4	n.a.
2/5/2024	NOVOB DC	Novo Nordisk A/S	N.A., N.A., N.A.	Manufacturing sites/Bloomington	11.0	12/18/2024
10/31/2024	SIE GR	Siemens AG	ALTR US	Altair Engineering Inc	9.5	3/27/2025
10/20/2020	000660 KS	SK Hynix Inc	n.a.	Memory-chip unit/Intel Corp	9.0	3/28/2025
3/25/2024	NOVOB DC	Novo Nordisk A/S	1509704D GR	Cardior Pharmaceuticals GmbH	1.1	6/30/2024
8/15/2024	ROP US	Roper Technologies Inc	1940188D US	Transact Campus Inc	1.6	9/30/2024
10/30/2024	EQNR NO	Equinor ASA	n.a.	Northern Marcellus gas unit/US	1.3	1/2/2025
9/24/2024	MQG AU	Macquarie Group Ltd	DESR US	Desri Inc	1.7	1/13/2025
10/2/2024	PEP US	PepsiCo Inc	1687478D US	Garza Food Ventures LLC	1.2	1/17/2025
11/14/2024	OVV US	Ovintiv Inc	n.a.	Karr Wapiti & Zama properties/Paramount Resources Ltd	2.4	1/31/2025
1/8/2025	FLO US, N.A., N.A.	Private Investor	1756575D US	Simple Mills Inc	0.8	2/21/2025
1/13/2025	GSK LN	GSK PLC	2121787D US	IDRx Inc	1.0	2/24/2025
4/25/2024	IBM US	International Business Machine	HCP US	HashiCorp Inc	5.9	2/28/2025
10/24/2024	AYI US	Acuity Inc	0317606Z US	QSC LLC	1.2	2/28/2025
6/28/2024	NOKIA FH	Nokia Oyj	INFN US	Infinera Corp	2.1	3/3/2025
4/22/2024	CSGP US	CoStar Group Inc	MTTR US	Matterport Inc	1.9	3/3/2025
1/14/2025	WAB US	Westinghouse Air Brake Technologies Corp	n.a.	Inspection Technologies division/Evident Corp	1.8	3/31/2025
2/12/2025	TEL US	TE Connectivity PLC	2295658Z US	Richard's Manufacturing Co Inc	2.3	4/1/2025
1/6/2025	PSX US	Phillips 66	2540276D US,	EPIC Y-Grade GP LLC, EPIC Y-Grade LP	2.2	4/1/2025
1/2/2025	BN CN	Brookfield Corp	NEOEN FP	Neoen SA	2.9	4/4/2025
3/24/2025	ROP US	Roper Technologies Inc	1577658D US	CentralReach LLC	1.7	5/31/2025
11/4/2024	BCE CN	BCE Inc	1798928D US	Northwest Fiber LLC	5.0	6/30/2025
5/28/2024	TMUS US	T-Mobile US Inc	n.a.	Wireless operations/US Cellular Corp	4.4	6/30/2025
9/18/2024	RCI/B CN	Rogers Communications Inc	3371Q CN	Maple Leaf Sports & Entertainment Ltd	3.5	6/30/2025
3/4/2025	HON US	Honeywell International Inc	0201182D US	Sundyne Corp	2.2	6/30/2025
3/13/2025	FER SM	Ferrovial SE	1513Z CN	407 International Inc	1.9	6/30/2025
3/4/2025	AJG US	Arthur J Gallagher & Co	937560Z US	Woodruff-Sawyer & Co	1.2	6/30/2025
1/30/2025	WELL US	Welltower Inc	NHHS US	NorthStar Healthcare Income Inc	1.1	6/30/2025
1/10/2025	RPRX US	Royalty Pharma PLC	0573678D US	RP Management LLC	1.1	6/30/2025
8/17/2024	3097Z US	Koch Industries Inc	5718Z US	Iconectiv LLC	1.0	6/30/2025
10/24/2024	KDP US	Keurig Dr Pepper Inc	2024076D US	Ghost LLC	1.0	6/30/2025
3/19/2025	MUV2 GR	Muenchener Rueckversicherungs-Gesellschaft AG in Muenchen	2324746D US	Next Insurance Inc	2.6	9/30/2025
2/25/2025	TMO US	Thermo Fisher Scientific Inc	n.a.	Purification & Filtration business/Solventum Corp	4.1	12/31/2025
4/30/2024	SESG FP	SES SA	371586Z BM	Intelsat Holdings SA	3.1	12/31/2025
2/3/2025	20326Z US,	Warburg Pincus LLC, Berkshire Partners LLC	TGI US	Triumph Group Inc	2.9	12/31/2025
3/10/2025	NOW US	ServiceNow Inc	1711117D US	Moveworks Inc	2.9	12/31/2025
3/13/2025	8015 JP	Toyota Tsusho Corp	RDUS US	Radius Recycling Inc	1.4	12/31/2025
3/2/2025	WELL US	Welltower Inc	n.a.	Portfolio of luxury senior living properties/Canada	1.3	12/31/2025
1/30/2025	57884Z US	Nationwide Mutual Insurance Co	n.a.	Group Health business/Allstate Corp	1.3	12/31/2025
2/17/2025	SHW US	Sherwin-Williams Co/The	n.a.	Suvinil paint brand/BASF SE	1.2	12/31/2025
9/13/2023	TMUS US	T-Mobile US Inc	n.a.	600MHz spectrum/Comcast Corp	3.3	n.a.

Exhibit 44: M&A deals with potential high grade bond funding needs

A list of pending M&A deals with potential IG bond funding implications.

Deal announcement date	Acquirer Ticker	Acquirer Name	Target Ticker	Target Name	Announced deal value (\$bn)	Expected completion date
4/24/2024	2137Z US	Massachusetts Mutual Life Insurance Co	2231444D US	ATLAS SP Partners LP	2.0	n.a.
3/17/2025	PEP US	PepsiCo Inc	1784909D US	VNGR Beverage LLC	2.0	n.a.
11/21/2022	NSC US	Norfolk Southern Corp	2210036D US	Cincinnati Southern Railway Co	1.6	n.a.
4/16/2024	MSFT US	Microsoft Corp	1770871D UH	Group 42 Holding Ltd	1.5	n.a.
10/25/2023	STLA US	Stellantis NV	9863 HK	Zhejiang Leapmotor Technologies Ltd	1.1	n.a.
				Retained spectrum licenses/United States Cellular Corp		
10/18/2024	VZ US	Verizon Communications Inc	n.a.	Curie Therapeutics Inc	1.0	n.a.
5/2/2024	NOVN SW	Novartis AG	1946509D US		1.0	n.a.

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Flows

Previously published here

[Situation Room: Flight to safety flows in bonds 10 April 2025](#)

Flight to safety flows in bonds

HY and loans reported the largest weekly outflows in at least five years, while the outflow from HG was the largest since 2022. That was offset by a large +\$15.95bn inflow into government bond funds.

Flows turned negative for US HG bond funds and ETFs this past week ending on April 09, with a -\$6.99bn outflow, down from a +\$3.30bn inflow in the prior week. Flows turned negative for HG ETFs (to -\$3.10bn, the biggest outflow since July 2020, from +\$0.98bn) as well as for HG Funds (to -\$3.89bn, from +\$2.31bn). Flows turned negative for both short-term HG (to -\$2.81bn, from +\$1.92bn) and ex. short-term (to -\$4.18bn, from +\$1.38bn).

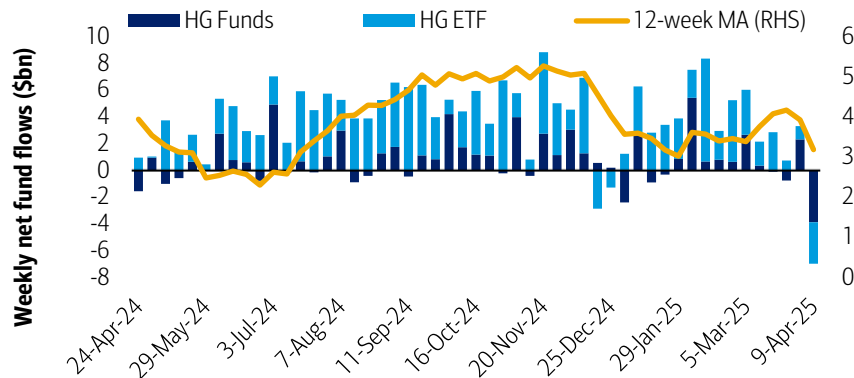
Large outflows from HY, loans

Flows turned positive for equities this past week (to +\$33.26bn from -\$10.05bn), while flows turned negative for HY (to -\$10.00bn, the biggest outflow since July 2020, from +\$0.34bn). Outflows accelerated for loans (to -\$5.49bn, the biggest outflow since July 2020, from -\$0.49bn) and for munis (to -\$2.34bn, the biggest outflow since December 2022, from -\$0.44bn). Flows were also negative for global EM bonds (to -\$3.63bn, from +\$1.16bn). Finally, money markets reported a -\$37.44bn outflow this past week (the biggest outflow in 3 months), following a +\$5.58bn inflow a week earlier.



Exhibit 45: Weekly high grade fund flows, \$bn

HG ETF -\$3.10bn, HG Funds -\$3.89

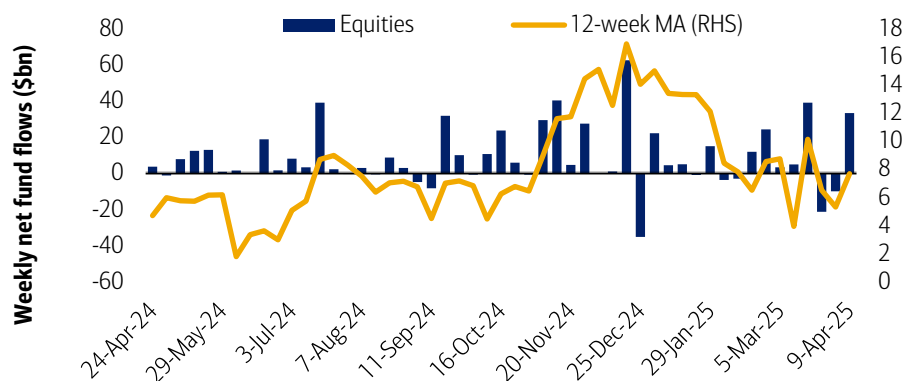


Source: EPFR Global. Note: data are for US-domiciled funds only.

BofA GLOBAL RESEARCH

Exhibit 46: Weekly equity fund flows, \$bn

Equities +\$33.26bn



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

BofA GLOBAL RESEARCH

Exhibit 47: 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	-0.29%	1.3%	57.3
High grade: ex short-term	-0.23%	1.1%	37.9
High yield: total	-3.21%	0.2%	0.8
High yield: ETFs only	-6.43%	0.2%	0.2
Loans	-3.79%	6.1%	10.4
EM	-0.70%	-0.6%	-3.9
Munis	-0.39%	0.8%	8.5
All fixed income	-0.24%	1.8%	128.5
Money markets	-0.50%	2.0%	147.3
Equities	0.26%	0.3%	69.5

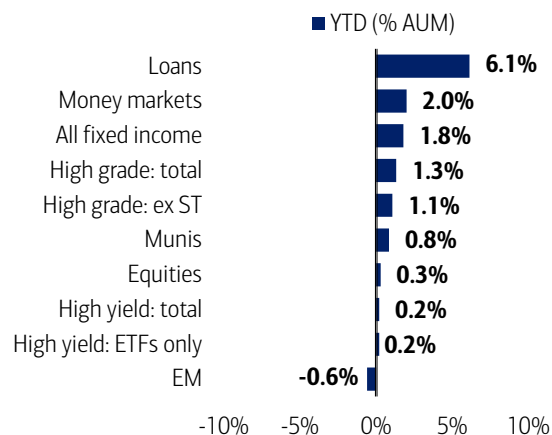
Note: Last week flow as % of AUM is based on AUM for weekly reporting funds / ETFs only. YTD flow as % of AUM is based on AUM for the full fund/ETF universe as of December 31 2020. Global EM funds, US-domiciled funds only for other fund types.

Source: EPFR Global, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 48: Year to date fund flows, % of AUM

Loans has had the biggest inflows so far in 2025.



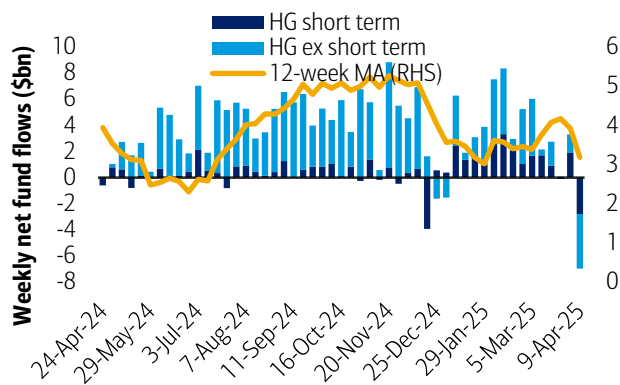
Note: Global EM funds, US-domiciled funds only for other fund types.

Source: EPFR Global, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 49: Weekly high grade fund flows, \$bn

HG short-term -\$2.81bn, HG ex short-term -\$4.18

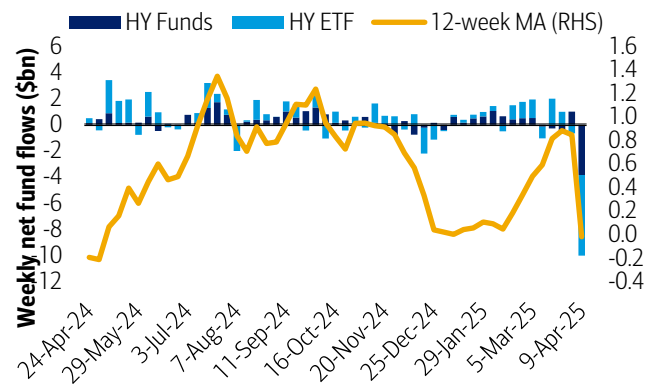


EPFR Global. Note: data are for US-domiciled funds only.

BofA GLOBAL RESEARCH

Exhibit 50: Weekly high yield fund flows, \$bn

HY ETFs -\$6.17bn, HY funds -\$3.83

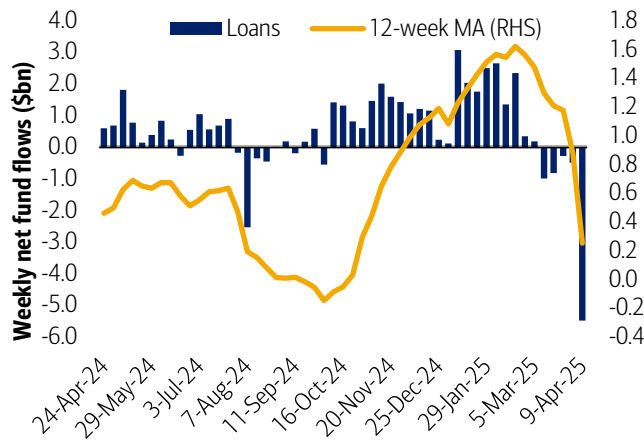


EPFR Global. Note: data are for US-domiciled funds only.

BofA GLOBAL RESEARCH

Exhibit 51: Weekly loan fund flows, \$bn

Leveraged loans -\$5.49bn

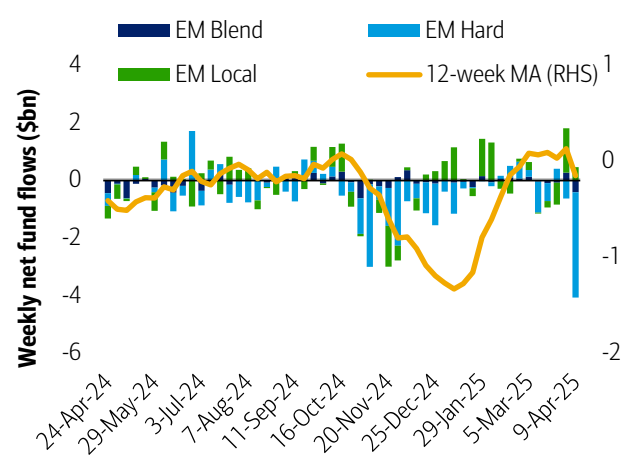


EPFR Global. Note: data are for US-domiciled funds only.

BofA GLOBAL RESEARCH

Exhibit 52: Weekly EM fund flows, \$bn

Global EM bonds -\$3.63bn

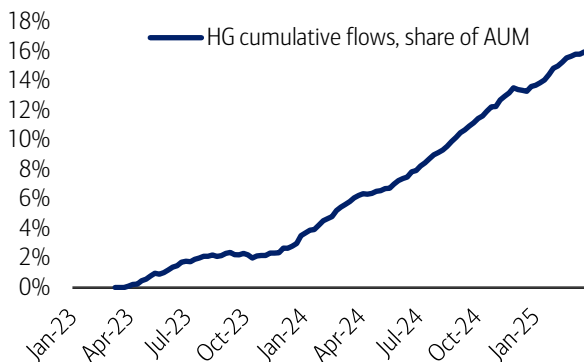


EPFR Global. Note: data are for US-domiciled funds only.

BofA GLOBAL RESEARCH

Exhibit 53: Cumulative % flows in HG over the last 2 years

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

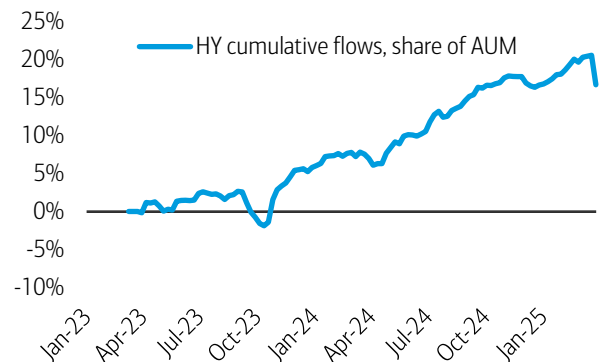


Source: EPFR Global, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 54: Cumulative % flows in HY over the last 2 years

2022 and 2023 have seen consequent outflows in HY



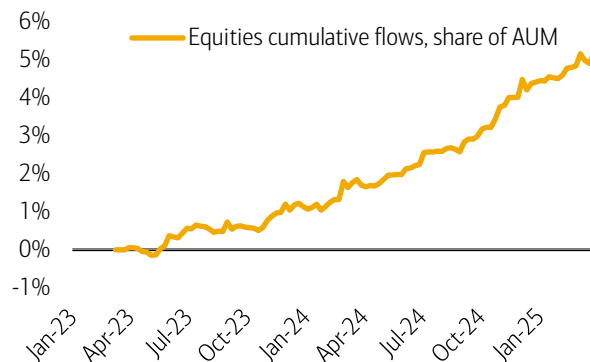
Source: EPFR Global, BofA Global Research

BofA GLOBAL RESEARCH



Exhibit 55: Cumulative % flows in equities over the last 2 years

Flows moderate in equities after two years of inflows

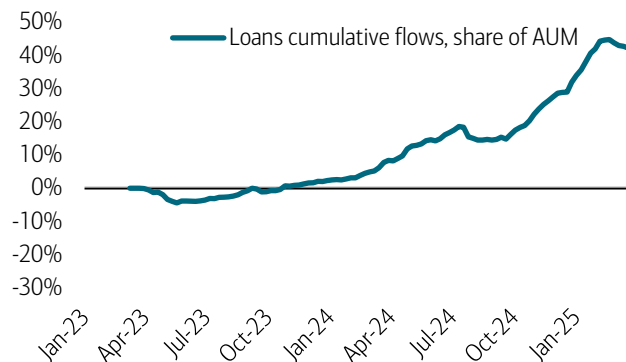


Source: EPFR Global, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 56: 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

BofA GLOBAL RESEARCH

Appendix: defining high grade

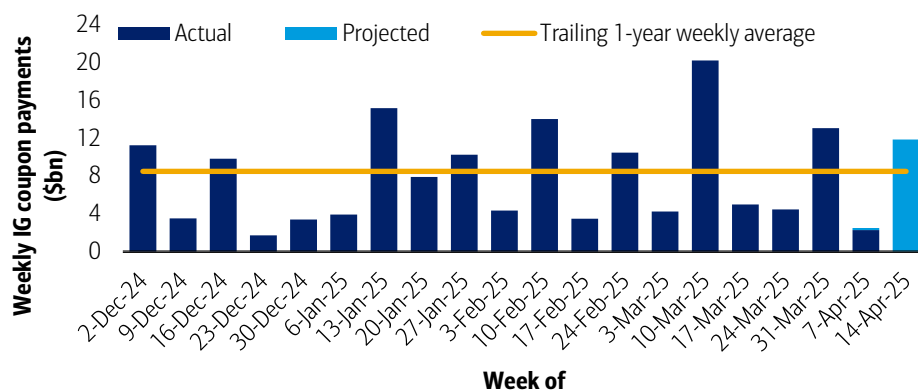
We define our high grade flows metric as a combination of “bond” and “corporate bond” fixed income funds and ETFs domiciled in the US (and investing in any currency, although the majority is invested in USD). We also exclude funds primarily focused on Government, HY, EM and MBS from the sample. The “bond” 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 \$11.9bn in coupon payments next week, above the trailing 1-year weekly average of \$8.5bn (Exhibit 57).

Exhibit 57: Weekly US IG coupon payments

Expect \$11.9bn of coupon payments next week, above the \$8.5bn trailing 1-year weekly average.



Source: ICE Data Indices, LLC, BofA Global Research

BofA GLOBAL RESEARCH

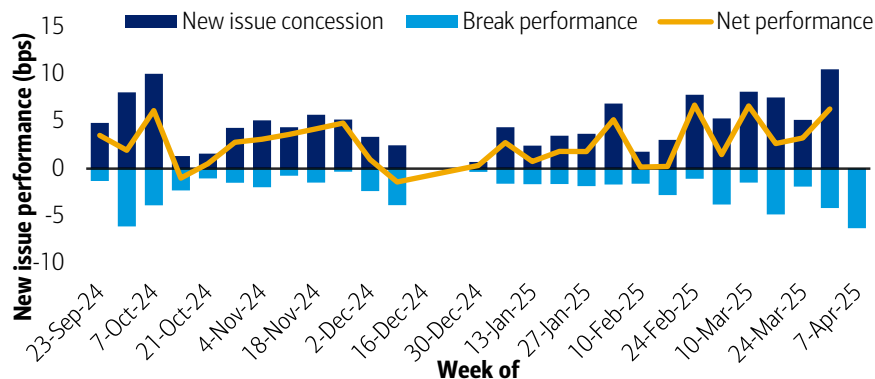


Supply

US IG gross issuance was \$6.0bn this week (Exhibit 60). Market volatility could continue to impact issuance volumes. On the other hand, backlog has likely formed by now and banks may look to issue post earnings. As a result, we look for issuance in a wide \$10 - \$35bn range, depending on market conditions.

Exhibit 58: Weekly new issue supply performance

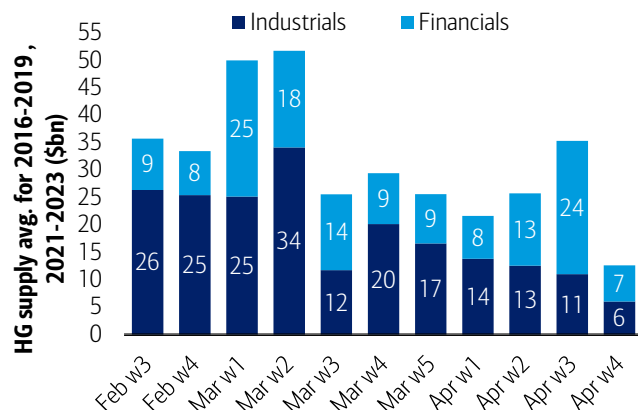
Break performance improved this week.



Source: BofA Global Research

Exhibit 59: Weekly Supply seasonality

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



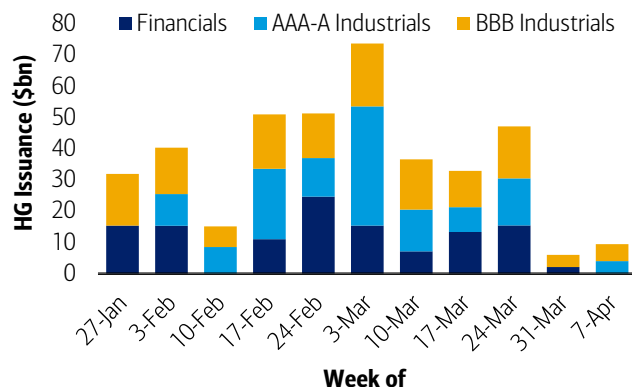
Source: Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

BofA GLOBAL RESEARCH

Exhibit 60: Weekly Supply

This week's supply consisted of \$0.0bn financials, \$4.0bn high-quality industrials and \$5.5bn BBB industrials.



Bloomberg, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 61: 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 (\$mn)	Moody's/S&P	Cpn (%)	Px Spd	NIC	* Brk Perf	Cur Spd
2025-04-08	PAYX	Paychex Inc	5	1,500	Baa1/BBB+	5.1	125	n.a.	n.a.	116
2025-04-08	PAYX	Paychex Inc	7	1,500	Baa1/BBB+	5.35	135	n.a.	-2	123
2025-04-08	PAYX	Paychex Inc	10	1,200	Baa1/BBB+	5.6	145	n.a.	-4	128
2025-04-10	AZO	AutoZone Inc	5	500	Baa1/BBB	5.125	115	n.a.	-5	110
2025-04-10	DGELN	Diageo Investment Corp	5	750	A3/A-	5.125	110	n.a.	-11	99
2025-04-10	DGELN	Diageo Investment Corp	10	750	A3/A-	5.625	130	19	-13	117
2025-04-10	JAPTOB	Japan Tobacco Inc	3	800	A2/A+	4.85	105	n.a.	-6	99
2025-04-10	JAPTOB	Japan Tobacco Inc	5	900	A2/A+	5.25	125	n.a.	-6	119
2025-04-10	JAPTOB	Japan Tobacco Inc	10	800	A2/A+	5.85	150	n.a.	-6	144
2025-04-10	KEYS	Keysight Technologies Inc	5	750	Baa1/BBB	5.35	140	n.a.	-6	134

Note: We calculate new issue concessions (NIC, bps) 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. Current spread of each new issue is abbreviated as Cur Spd (bps).

Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

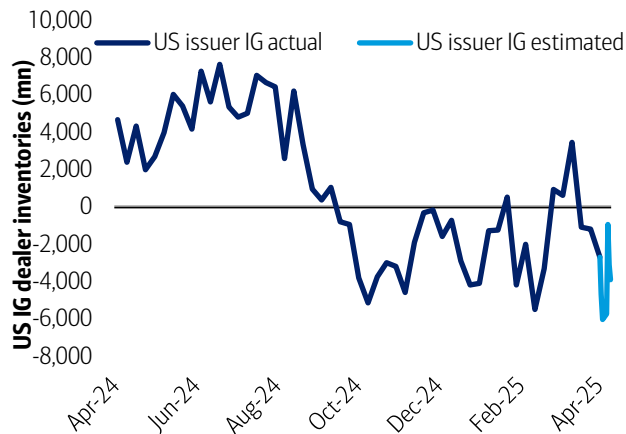


Dealer inventories

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 Exhibit 62 and Exhibit 63. More details by sector and maturity are available in Exhibit 64 and Exhibit 65.

Exhibit 62: Estimated dealer inventories of IG corporate bonds.

We estimate IG dealer inventories of US issuer bonds declined to -\$3.9bn currently from -\$2.7bn on Apr-02.



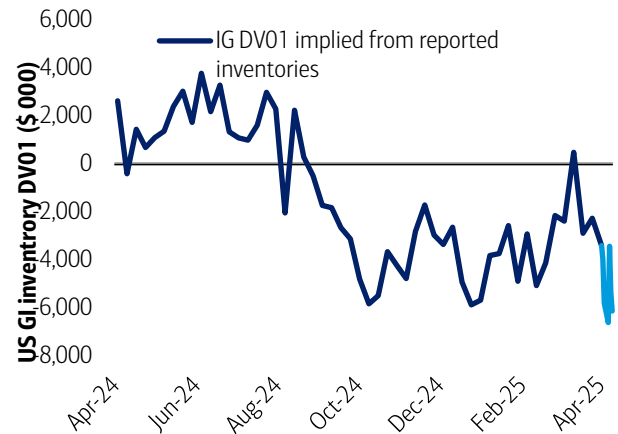
Note: data for US issuer bonds only, maturities 13M or longer. Actual dealer inventory data is from Primary Dealer Statistics survey by the NY Fed. The subsequent change in inventory is estimated based on TRACE and IG ETFs.

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

BofA GLOBAL RESEARCH

Exhibit 63: Estimated dealer inventory DV01 for IG corporate bonds.

We estimate IG dealer inventory DV01 of US issuer bonds declined to -\$6.1mn currently from -\$3.4bn on Apr-02.



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 and IG ETFs.

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

BofA GLOBAL RESEARCH

Exhibit 64: Estimated changes in IG dealer inventories by maturity and broad sector.

We estimate IG dealer inventories increased -\$396mn today and declined \$1,618mn over the prior week.

Sector	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 10-Apr-25 (\$mn)			
	10-Apr	9-Apr	1 W	2 W	4 W	10-Apr	9-Apr	1 W	2 W	4 W	Buy	Sell	Dealer	Total
High grade (TRACE + ETFs)	-396	-2,184	1,618	-1,585	-2,688	-656	-2,272	-2,686	-3,475	-1,535	14,798	14,488	12,197	41,483
ETF flow	705	-328	-3,068	-1,229	-2,107	566	-203	-1,710	-473	-941	-	-	-	-
TRACE net dealer buy	310	-2,512	-1,450	-2,813	-4,796	-90	-2,475	-4,396	-3,949	-2,476	14,798	14,488	12,197	41,483
<3yr	96	167	1,401	488	-3,574	11	3	190	-78	-833	1,984	1,888	1,427	5,299
3-5yr	288	-190	-13	-1,389	-2,293	119	-87	-117	-674	-1,072	3,073	2,785	2,448	8,305
5-11yr	488	-620	1,800	1,257	2,954	274	-457	1,010	654	1,816	6,086	5,599	5,051	16,736
11+yr	-562	-1,870	-4,639	-3,169	-1,883	-494	-1,935	-5,480	-3,851	-2,388	3,655	4,217	3,271	11,142
Fin	102	-198	1,702	1,849	104	-189	-527	-41	103	-100	5,159	5,056	3,972	14,187
Non-Fin	207	-2,314	-3,152	-4,662	-4,900	99	-1,948	-4,355	-4,052	-2,375	9,639	9,432	8,225	27,296
Fixed	310	-2,512	-1,521	-2,678	-4,650	-90	-2,475	-4,386	-3,841	-2,392	14,798	14,488	12,197	41,483
Floating	0	0	71	-136	-145	0	0	-10	-107	-84	0	0	0	0
US issuers	-92	-2,489	-2,276	-3,348	-4,006	-208	-2,135	-3,879	-3,117	-1,015	11,735	11,827	10,029	33,591
DM Yankees	292	-5	755	383	-1,093	40	-308	-508	-883	-1,510	2,840	2,548	2,051	7,439
EM Yankees	110	-18	70	152	303	79	-32	-10	52	50	223	113	117	453

Note: data for maturities 13M or longer. Changes in inventories are estimated based on TRACE and IG ETF flows.

Source: BofA Global Research, FINRA, TRACE, Bloomberg.

BofA GLOBAL RESEARCH

Exhibit 65: Estimated changes in IG dealer inventories by sector.

We estimate today IG dealer inventories increased \$118mn for Banks/Brokers and increased \$102mn for Energy.

Sector	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 10-Apr-25 (\$mn)			
	10-Apr	9-Apr	1 W	2 W	4 W	10-Apr	9-Apr	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Aerospace/Defense	66	-69	121	-4	-104	55	-65	-129	-163	-235	320	253	176	749
Automobiles	33	12	-85	-359	-155	35	-4	-162	-229	-109	388	356	486	1,230
Banks/Brokers	118	-67	1,596	2,471	1,836	-156	-364	64	517	747	3,480	3,361	2,769	9,610
Basic Materials	-96	-112	-583	-823	-848	-52	-114	-484	-579	-585	377	474	516	1,367
Commercial Services	-114	-36	-172	-216	-119	-71	-35	-186	-222	-92	253	367	147	768
Energy	102	-367	-446	-739	-983	3	-287	-558	-469	-508	1,651	1,549	1,280	4,480
Finance	-45	-164	-190	-155	-1,206	-21	-115	-144	-122	-491	821	866	599	2,286
Food, Bev, & Bottling	-42	-455	-883	-1,050	-1,734	13	-357	-748	-848	-917	653	694	781	2,129
Health Care	190	-225	161	-67	437	81	-175	-165	-238	529	1,528	1,337	1,200	4,065
Industrial Products	-52	63	251	71	-562	-42	38	97	-11	-379	203	255	182	641
Insurance	-25	28	52	-412	-379	-37	-19	-21	-202	-224	330	355	282	968
Media & Entertainment	152	-247	-92	213	-13	112	-160	-51	149	58	562	410	408	1,380
REITs	54	6	244	-56	-147	26	-29	59	-89	-133	527	474	322	1,323
Retail	-36	-120	-162	-40	55	-46	-58	-260	-78	266	464	500	454	1,418
Technology	26	-220	40	270	1,183	35	-141	-33	358	1,166	1,366	1,340	1,095	3,801
Telecom	31	-219	-366	-338	235	23	-165	-345	-238	161	426	395	248	1,069
Tobacco	20	-22	77	-37	-198	1	-3	14	-28	-100	189	170	185	543
Transportation	-97	-6	63	62	3	-80	-31	-22	-31	1	220	317	198	735
Utilities	71	-255	-1,066	-1,662	-2,000	50	-349	-1,279	-1,450	-1,591	887	816	701	2,405
Other	-48	-35	-11	58	-97	-18	-41	-45	25	-40	150	199	167	516

Note: data for maturities 13M or longer. Changes in inventories are estimated based on TRACE.

Source: BofA Global Research, FINRA, TRACE.

BofA GLOBAL RESEARCH

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



Disclosures

Important Disclosures

BofA Global Research Credit Opinion Key

BofA Global Research provides recommendations on an issuer's bonds (including corporate and sovereign external debt securities), loans, capital securities, equity preferreds and CDS as described below. Convertible securities are not rated. An issuer level recommendation may also be provided for an issuer as explained below. BofA Global Research credit recommendations are assigned using a three-month time horizon.

Issuer Recommendations: If an issuer credit recommendation is provided, it is applicable to bonds and capital securities of the issuer except bonds and capital securities specifically referenced in the report with a different credit recommendation. Where there is no issuer credit recommendation, only individual bonds and capital securities with specific recommendations are covered. Loans, CDS and equity preferreds are rated separately and issuer recommendations do not apply to them.

BofA Global Research credit recommendations are assigned using a three-month time horizon:

Overweight: Spreads and/or excess returns are likely to outperform the relevant and comparable market over the next three months.

Marketweight: Spreads and/or excess returns are likely to perform in-line with the relevant and comparable market over the next three months.

Underweight: Spreads and/or excess returns are likely to underperform the relevant and comparable market over the next three months.

BofA Global Research uses the following rating system with respect to **Credit Default Swaps (CDS)**:

Buy Protection: Buy CDS, therefore going short credit risk.

Neutral: No purchase or sale of CDS is recommended.

Sell Protection: Sell CDS, therefore going long credit risk.

Due to the nature of strategic analysis, the issuers or securities recommended or discussed in this report are not continuously followed. Accordingly, investors must regard this report as providing stand-alone analysis and should not expect continuing analysis or additional reports relating to such issuers and/or securities.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

BofA Securities fixed income analysts regularly interact with sales and trading desk personnel in connection with their research, including to ascertain pricing and liquidity in the fixed income markets.

Other Important Disclosures

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

This report may refer to fixed income securities or other financial instruments that may not be offered or sold in one or more states or jurisdictions, or to certain categories of investors, including retail investors. Readers of this report are advised that any discussion, recommendation or other mention of such instruments is not a solicitation or offer to transact in such instruments. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor for information relating to such instruments.

Rule 144A securities may be offered or sold only to persons in the U.S. who are Qualified Institutional Buyers within the meaning of Rule 144A under the Securities Act of 1933, as amended. SECURITIES OR OTHER FINANCIAL INSTRUMENTS DISCUSSED HEREIN MAY BE RATED BELOW INVESTMENT GRADE AND SHOULD THEREFORE ONLY BE CONSIDERED FOR INCLUSION IN ACCOUNTS QUALIFIED FOR SPECULATIVE INVESTMENT.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

The securities or other financial instruments discussed in this report may be traded over-the-counter. Retail sales and/or distribution of this report may be made only in states where these instruments are exempt from registration or have been qualified for sale.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

This report, and the securities or other financial instruments discussed herein, may not be eligible for distribution or sale in all countries or to certain categories of investors, including retail investors.

Information relating to Affiliates of BofAS, MLPF&S and Distribution of Affiliate Research Reports:

Refer to [BofA Global Research policies relating to conflicts of interest](#).

"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by the Financial Sector Conduct Authority; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofam.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.



This information has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSCF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.

This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

This report may contain a trading idea or recommendation which highlights a specific identified near-term catalyst or event impacting a security, issuer, industry sector or the market generally that presents a transaction opportunity, but does not have any impact on the analyst's particular "Overweight" or "Underweight" rating (which is based on a three month trade horizon). Trading ideas and recommendations may differ directionally from the analyst's rating on a security or issuer because they reflect the impact of a near-term catalyst or event.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned in this report. Investors in such securities and instruments effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

Copyright and General Information:

Copyright 2025 Bank of America Corporation. All rights reserved. iQDatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. This document and its content is provided solely for informational purposes and cannot be used for training or developing artificial intelligence (AI) models or as an input in any AI application (collectively, an AI tool). Any attempt to utilize this document or any of its content in connection with an AI tool without explicit written permission from BofA Global Research is strictly prohibited. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities.

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS or any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research



policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to sustainability in this material is limited as discussed herein and is not intended to provide a comprehensive view on any sustainability claim with respect to any issuer or security.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.