

Credit Market Strategist

The return of re-leveraging

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We look for 2024 to be the year when US IG non-financial, mostly single-A or better issuers gradually begin to add leverage. That will end the 2022 – 2023 deleveraging cycle and high-quality issuer outperformance. Reasons for adding debt in 2024 include: 1) less need to improve balance sheets as recession fears fade, 2) slower economic growth encourages the use of leverage to improve EPS, 3) lower borrowing costs as the Fed cuts rates make debt cheaper. As a result, we continue to prefer BBB-rated industrials, which also still trade relatively cheap, although the gap is shrinking. We also screen for potential re-leveraging candidates inside.

Event risk is off investor radar screen

Now is a good time to begin focus on re-leveraging risk, as it's currently not on investor radar screens. In our latest US Credit Investor Survey from September just 8% of investors listed re-leveraging risk as one of their biggest concerns. That was the second smallest concern in the survey (see Credit Market Strategist: Sep'23 Credit Investor Survey: Living the rate shock), and down from a recent peak of 28% in May 2021. That was despite that the share worried about recession dropped significantly. Recession concerns should be even lower now following the December dovish Fed pivot.

The impact on returns

On a beta-adjusted basis, we estimate single-A industrials underperformed BBB-rated industrials by 7bps per quarter during the re-leveraging period in 2016-2019. In contrast, single-A outperformed by 20bps during the deleveraging period over the past two years.

December IG ratings: Downgrades driven by two issuers

Net ratings change for IG bonds turned negative in December at -\$45bn (upgrades less downgrades, notional * notches), concentrated in just two issuers: PFE and BMY.

A slower start to January IG supply

The \$45bn priced over the first two days of Jan is consistent with about \$146bn for the month – lower vs. our expectations.

M&A volumes increased in December

M&A announcements increased to \$198bn in December from \$147bn in November.

IG market technicals

Supply: \$56.1bn of issuance this week, expect \$30-35bn next week. **Flows**: +\$5.00bn inflow this past week ending on January 3. **Weekly technicals**: expect \$4,6bn of coupon payments, \$0.1bn of calls and \$0.4bn tender offer to become effective next week. Bond maturities: \$1.4bn this week, \$20.6bn next week. **Dealer inventories**: +\$6,336mn past week ended Thu. Details inside.

We published the weekly data and charts in Thursday **Situation Room**.

Credit Strategy United States

05 January 2024

_{BofA} Data

Analytics



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Recent credit strategy research

Publication	Name
Situation Room	Stronger HG inflows
Situation Room	A slower start to January IG
	<u>supply</u>
Situation Room	December IG ratings:
	Downgrades driven by two
	<u>issuers</u>
Monthly HG	Dec '23: Pricing a soft landing
Market Review	
Credit Market	Credit Market Strategist: Sep '23
Strategist	Credit Investor Survey
Credit Market	Summer 2023 snapshot of US
Strategist	<u>IG market</u>

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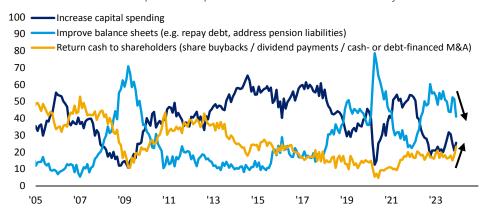
Refer to important disclosures on page 24 to 26.

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We look for 2024 to be the year when US IG non-financial, mostly single-A or better issuers gradually begin to add leverage. That will end the 2022 – 2023 deleveraging cycle and high-quality issuer outperformance. Reasons for adding debt in 2024 include: 1) less need to improve balance sheets as recession fears fade (Exhibit 1), 2) slower economic growth encourages the use of leverage to improve EPS, 3) lower borrowing costs as the Fed cuts rates make debt cheaper. As a result, we continue to prefer BBB-rated industrials, which also still trade relatively cheap, although the gap is shrinking. We also screen for potential re-leveraging candidates inside.

Exhibit 1: What would you most like to see companies do with cash flow?

41% of FMS investors want corporates to improve balance sheets – the lowest since May 2022.



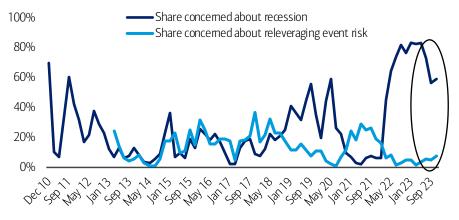
Source: BofA Global Fund Manager Survey

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Exhibit 2: US credit investors are not worried about event risk, even as recession fears decline While the share worried about recession dropped from the peak of 83% in May 2023, the share worried about re-leveraging risk remains low at just 8% in our latest September US Credit Investor Survey.

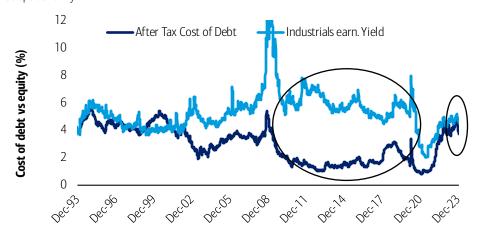


Source: BofA US Credit Investor Survey

A gradual change

While we are beginning to see more re-leveraging transactions (see <u>Situation Room: Soft landing = re-leveraging</u>), we expect the trend to be gradual for three reasons: 1) borrowing costs remain high, 2) companies have elevated cash balances, and 3) regulatory environment remains challenging for M&A. In terms of borrowing costs, the decade from 2010 to 2020 enjoyed a period of record low relative cost of debt. We estimate the after-tax cost of debt was about 400bps below than the cost of equity for IG industrial issuers during that period. Currently that cost differential has compressed to just 80bps, following the Fed hiking cycle (Exhibit 3). Fed rate cuts could lower borrowing costs, but they are unlikely to reach the pre-Covid levels this year.

Exhibit 3: Debt is now not nearly as cheap vs. equity compared to 2010 – 2020 decade.The after-tax cost of debt averaged 400bps below the cost of equity during 2010 – 2020, compared to just 80bps currently.



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

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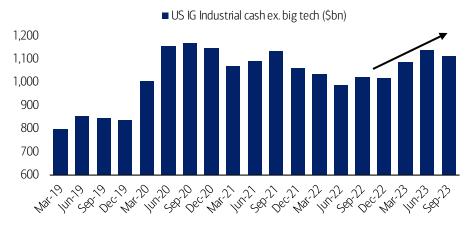
Elevated cash levels

Elevated cash levels suggest that initially companies will be funding shareholder friendly actions more with cash rather than new debt. Companies made some progress in taking down cash raised to fight Covid in 2020 by mid-2022. Industrial cash ex. big tech dropped to +18% vs. pre-Covid levels in 2Q-2022, down from the peak +40% in 3Q-2020. However, subsequently the combination of recession fears and strong re-opening earnings drove cash levels back up to +33% vs. pre-Covid levels by 3Q-2023 (Exhibit 4).



Exhibit 4: Industrial issuer cash levels increased in 2H-2022 and 2023.

Vs. pre-Covid cash levels increased +40% by 3Q-2020, then dropped to +18% by 2Q-2022, before rebounding to +33% by 3Q-2023.



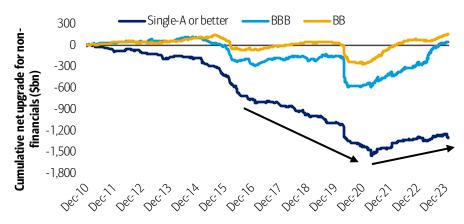
Source: BofA Global Research, Bloomberg.

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The impact on returns

Event risk has a sizeable impact on excess returns. We can see that by comparing two periods: re-leveraging following the 2015 commodity crisis during 2016 – 2019 and deleveraging during 2022 – 2023 post the Fed hiking cycle (Exhibit 5). On a beta-adjusted basis, we estimate single-A industrials underperformed BBB-rated industrials by 7bps per quarter during the re-leveraging period. In contrast, single-A outperformed by 20bps on average during the deleveraging period over the past two years (Exhibit 6).

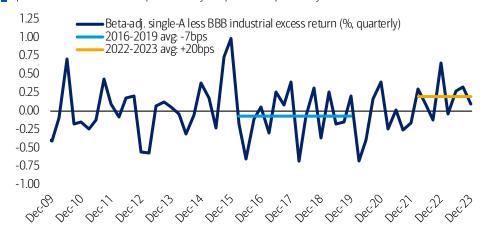
Exhibit 5: Ratings for single-A industries weakened since 2010, then improved during 2022-2023. Higher debt costs and recession fears stopped the re-leveraging cycle that started after the global financial crisis.



Source: BofA Global Research, Bloomberg.

Exhibit 6: Single-As underperformed in 2016-2019, outperformed in 2022-2023.

On a beta-adjusted basis, we estimate single-A industrials underperformed BBB-rated industrials by 7bps per quarter in 2016-2019 and outperformed by 20bps over the past two years.



Note: we estimate the beta of single-A to BBB quarterly excess returns for industrial issuers has been 0.58 for the period 2010 – 2023.

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

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Simple screen

We screen for issuers at a higher risk of re-leveraging in Exhibit 10. These are US industrials, ex. Energy, rated single-A or better with underperforming equity prices and tighter spreads over the past two years. These companies are under more pressure to improve equity performance and have room to add debt as well. Specifically, we screen for issuers with tighter spreads since Jan-2022 – the period over which the US IG industrial index spread is little changed – and negative equity return over the same period. Those are the 18 issuers in the bottom-left quadrant in Exhibit 9, out of the total sample of 53.

Exhibit 7: Industrial index spread is about flat since Jan-2022 IG US Industrial index spread was 101bps on Jan 4 2024 and 108bps on Jan 4 2022.

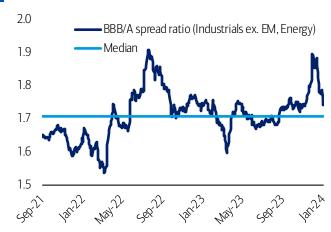


Source: ICE Data Indices, LLC

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Exhibit 8: BBBs are still a bit chip vs single-As

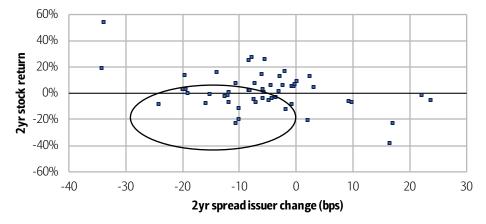
The BBB/single-A industrial spread ratio is still higher than the historical median level.



Source: BofA Global Research, ICE Data Indices, LLC

Exhibit 9: Distribution of equity and credit performance for US IG industrial issuers since Jan-22.

Issuers with underperforming equities (negative equity return over the past 2yr) and room to add debt (tighter credit spread over the past 2yr) should be at a higher risk of re-leveraging.



Note: restricted to 53 US public industrial issuers ex. Energy, rated single-A or better, with index notional of at least \$5bn.

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

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Exhibit 10: Re-leveraging risk screen

The screen for high-quality industrial issuers (ex. Energy) with 1) tighter spreads and 2) negative equity return over the past two years.

Ticker	Issuer	Sector	Average rating	2yr spread change (bps)	2yr equity return (%)
ABT	Abbott Laboratories	Health Care	AA3	-24	-8.5
AMAT	Applied Materials Inc	Technology	A2	-15	-1.3
AMZN	Amazon.com Inc	Retail	AA3	-5	-5.9
CMCSA	Comcast Corp	Media & Entertainment	A3	-7	-4.5
DHR	Danaher Corp	Health Care	A3	-16	-7.6
DIS	Walt Disney Co	Media & Entertainment	A3	-11	-23.2
ECL	Ecolab Inc	Basic Materials	A3	-7	-7.2
GOOGL	Alphabet Inc	Media & Entertainment	AA2	-12	-1.9
HD	Home Depot Inc	Retail	A2	-12	-7.1
INTC	Intel Corp	Technology	A2	-3	-2.9
JNJ	Johnson & Johnson	Health Care	AAA	-19	-0.3
KMB	Kimberly-Clark Corp	Consumer Products	A2	-6	-4.4
MDT	Medtronic PLC	Health Care	A3	-1	-8.7
NKE	NIKE Inc	Retail	A1	-10	-20.0
PG	Procter & Gamble	Consumer Products	AA3	-12	-2.5
QCOM	QUALCOMM Inc	Technology	A2	-2	-12.2
TXN	Texas Instruments Inc	Technology	A1	-4	-3.8
UPS	United Parcel Service Inc	Transportation	A2	-10	-11.8

Note: This screen is not a recommended list either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decision.

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

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Situation Room: A slower start to January IG supply 03 January 2024

A slower start to January IG supply

Investors were concerned about particularly heavy IG new issue supply in January given the favorable market conditions of lower Treasury yields and tighter credit spreads. Instead, the \$44bn priced during the first two business days of 2024 was below \$54bn issued over the same period in 2023 (Exhibit 11). The deal count was also notable lower



at 25 deals in 2024 vs. 32 during the same period in 2023 (Exhibit 12). Given the very heavy supply volumes to start the year, supply over the first two business days of January is reasonably correlated with supply for the full month (Exhibit 13). The \$45bn priced over the past two days is consistent with about \$146bn for the month, which is near the lower bound of our \$150 - \$160bn forecast (see Monthly HG Market Review: Dec '23: Pricing a soft landing). Less heavy issuance should be supportive of IG spreads.

IG supply stats to start the year

At \$44bn issuance over the first two business days of the year in 2024 is the third largest since 2010, behind 2023 (\$54bn) and 2020 (\$45bn). Similarly, the number of deals is also the third largest behind 2023 and 2020. Finally, the share of financial supply has been relatedly low for this period at 48% in 2024. That's down from 71% in 2023 and 87% in 2022 (Exhibit 14).

Exhibit 11: \$44bn of IG supply was priced in the first two business days of '24, below \$54bn in '23. The IG issuance of the first two business days of January was third largest on record, below 2023 (\$54bn) and 2020 (\$45bn).



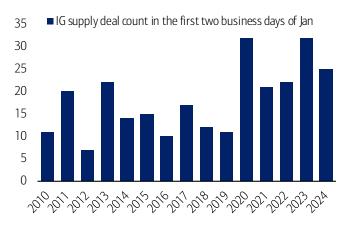
Source: BofA Global Research

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Exhibit 12: Lower number of deals to start the year

The number of U. deals so far in 2024 was 25 helew 22 during to

The number of IG deals so far in 2024 was 25, below 32 during the same period of 2023.

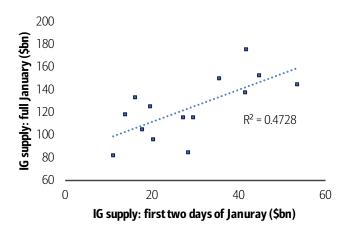


Source: BofA Global Research

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Exhibit 13: January supply vs. the first two business days

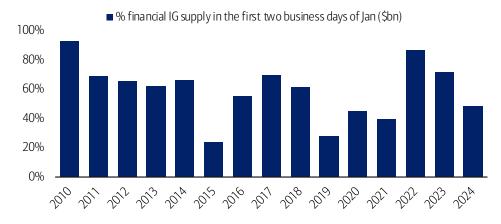
IG supply during the first two business days of January is correlated with issuance during the full month of January.



Source: BofA Global Research

Exhibit 14: Lower share of financial supply to start 2024

The share of financial IG supply during the first two business days of 2024 was 48%, below 71% for the same period in 2023 and 87% in 2022.



Source: BofA Global Research

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<u>Situation Room: December IG ratings: Downgrades driven by two issuers 02 January 2024</u>

December IG ratings: Downgrades driven by two issuers

Net ratings change for IG bonds turned negative in December at -\$45bn (upgrades less downgrades, notional * notches). That was the biggest net downgrade since March 2021, and a decline from +\$43bn of net upgrade in November 2023. However, the downgrades in December were concentrated in just two issuers: Pfizer Inc. (PFE, -\$29bn) and Bristol-Myers Squibb (BMY, -\$24.2bn). Excluding these two issuers the December rating change was a net +\$8.4bn upgrade. Hence the net downgrade in December was likely a one-off, and rating actions for IG issuers should turn moderately positive in 1Q-2024.

No holiday for rating agencies in December

Gross rating activity for IG corporate issuers (upgrades + downgrades) remained robust in December at \$139bn, close to \$138bn median over the prior 12 months (Exhibit 19). The share of rating upgrades dropped to 34% in December – the lowest since August 2022 – and down from 66% in November (Exhibit 20).

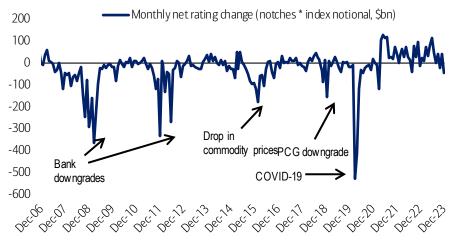
Outlook: modest upgrades in early 2024

The outlook calls for a moderating pace of rating upgrades going over the next three months. The share of IG index bonds on a positive outlook or watch was 1.7% at the end of December, above 1.5% median since 2010 (Exhibit 21). The share on a negative outlook / watch remained low at 2.2% in November (Exhibit 22).



Exhibit 15: The pace of net rating upgrades turned negative in December

US IG net upgrades slowed in the second half of 2023.



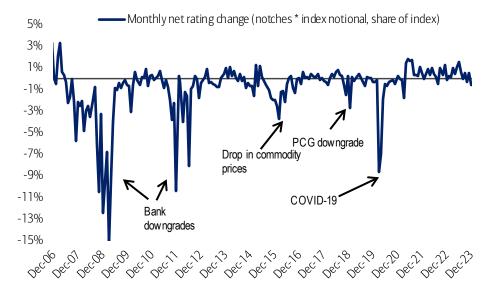
Note: net rating change equals upgrades less downgrades. Based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO.

Source: BofA Global Research, Bloomberg.

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Exhibit 16: Net upgrades weakened to -0.6% of index notional in December

Net monthly upgrades have averaged +0.4% of the index notional over the prior 12 months.



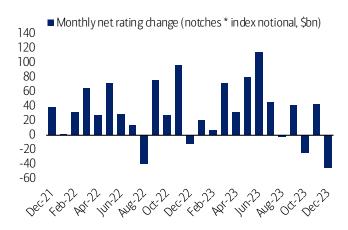
Note: net rating change equals upgrades less downgrades. Based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO.

Source: BofA Global Research, Bloomberg.



Exhibit 17: Downgrades exceeded upgrades in December

Net upgrades declined to -\$45bn in December from +\$43bn in November, with \$37bn being the monthly median over the past 12 months.



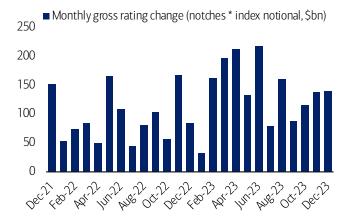
Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO

Source: BofA Global Research

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Exhibit 19: Gross rating actions remained robust in December

Gross rating increased to \$139bn in December from November from \$137bn in November.



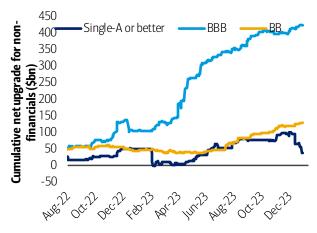
Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO

Source: BofA Global Research

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Exhibit 18: Cumulative net upgrade for non-financials by rating (\$bn)

Non-financials BBBs have experienced strong net upgrades so far in 2023

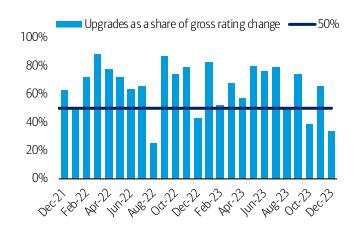


Source: BofA Global Research, Bloomberg.

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Exhibit 20: More downgrades in December

Upgrades accounted for 34% of total rating actions in December, down from 66% in November and 67% LTM median.



Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO

Source: BofA Global Research

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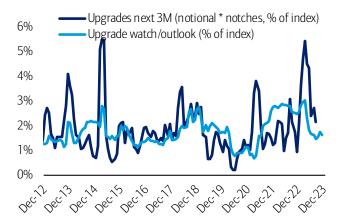
Rating watches/outlooks point to more upgrades

Our tracker for IG corporate bonds on a positive watch or outlook was at 1.7% of the index in November (\$134bn), up from 1.6% in November (\$130bn). The current level is slightly above the historical median, suggesting rating agencies are signaling moderately stronger than usual pace of upgrades over the next three months (Exhibit 21). The tracker for IG corporate bonds on a negative watch / outlook remains at a very low levels of 2.2% (\$180bn), but above the record low of 1.8% of the index notional (\$145bn) in July (Exhibit 22).



Exhibit 21: Positive watch/outlook is now back to normal levels

The volume of IG corporate bonds on positive watch/outlook remained steady in December.



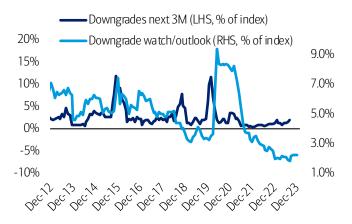
Note: watch/outlook is computed as 0.66 * notional for a watch and 0.33 * notional for an outlook. Upgrades are tracking rating changes only (ignoring outlook and watch changes).

Source: BofA Global Research

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Exhibit 22: Negative watch/outlook remains low

The volume of IG corporate bonds on negative watch/outlook remained low in December 2023.



Note: watch/outlook is computed as 0.66 * notional for a watch and 0.33 * notional for an outlook. Downgrades are tracking rating changes only (ignoring outlook and watch changes).

Source: BofA Global Research

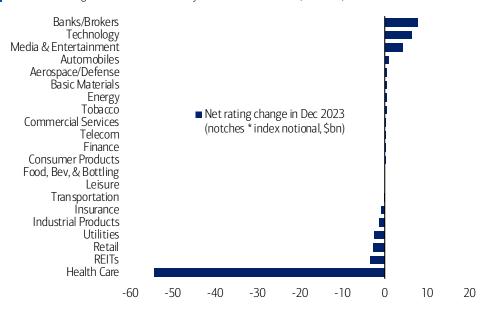
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Sector/issuer level

Sectors with most upgrades in December included Banks/Brokers (+\$7.9bn), Technology (+\$6.4bn) and Media & Entertainment (+\$4.3bn). Sectors with most net downgrades in November were Health Care (-\$54.3bn), REITs (-\$3.5bn) and Retail (-\$2.7bn). We list issuers with the biggest November upgrades and downgrades in Exhibit 24 and Exhibit 25 below.

Exhibit 23: December 2023 net rating changes by sector (notional * notches, \$bn)

December downgrades were dominated by the Health Care sector (-\$54.3bn).



Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO

Source: BofA Global Research



Exhibit 24: Issuers with largest ratings upgrades in Dec-23

Top 15 issuers by rating upgrades.

Ticker	Sector	lssuer notional (\$bn)	Rating change: notches	Rating change: notional * notches, \$bn
DB	Banks/Brokers	21.0	0.3	6.8
NFLX	Media & Entertainment	8.5	0.5	4.3
PCG	Utilities	35.3	0.1	3.9
CARR	Industrial Products	8.3	0.4	3.7
NXPI	Technology	10.2	0.3	3.4
PAA	Energy	6.3	0.3	2.1
FCX	Basic Materials	5.5	0.3	1.8
KLAC	Technology	5.2	0.3	1.7
BRKHEC	Utilities	35.6	0.0	1.6
JEF	Banks/Brokers	5.7	0.2	1.3
VMW	Technology	7.0	0.2	1.2
STLA	Automobiles	3.2	0.3	1.1
SHW	Basic Materials	7.9	0.1	0.9
PH	Industrial Products	6.6	0.1	0.7
HWM	Aerospace/Defense	2.9	0.2	0.6

Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO.

Source: BofA Global Research

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Exhibit 25: Issuers with largest ratings downgrades in Dec-23 Top 15 issuers by rating downgrades.

Ticker	Sector	lssuer notional (\$bn)	Rating change: notches	change: notional * notches, \$bn
PFE	Health Care	56.9	-0.5	-29.2
BMY	Health Care	29.2	-0.8	-24.2
ENELIM	Utilities	18.5	-0.3	-6.3
MMM	Industrial Products	11.0	-0.5	-5.5
BXP	REITs	9.9	-0.3	-3.3
WBA	Retail	4.4	-0.6	-2.8
AON	Insurance	9.6	-0.2	-1.8
OXY	Energy	14.6	-0.1	-1.6
AALLN	Basic Materials	7.7	-0.2	-1.4
EXC	Utilities	33.2	0.0	-1.2
LNT	Utilities	6.9	-0.1	-1.0
CMI	Industrial Products	2.8	-0.3	-0.9
PDM	REITs	1.0	-0.5	-0.5
FMC	Basic Materials	3.0	-0.2	-0.5
NORBK	Banks/Brokers	2.5	-0.2	-0.4
	PFE BMY ENELIM MMM BXP WBA AON OXY AALLN EXC LNT CMI PDM FMC	PFE Health Care BMY Health Care ENELIM Utilities MMM Industrial Products BXP REITs WBA Retail AON Insurance OXY Energy AALLN Basic Materials EXC Utilities LNT Utilities CMI Industrial Products PDM REITs FMC Basic Materials	Ticker Sector (\$bn) PFE Health Care 56.9 BMY Health Care 29.2 ENELIM Utilities 18.5 MMM Industrial Products 11.0 BXP REITs 9.9 WBA Retail 4.4 AON Insurance 9.6 OXY Energy 14.6 AALLN Basic Materials 7.7 EXC Utilities 33.2 LNT Utilities 6.9 CMI Industrial Products 2.8 PDM REITs 1.0 FMC Basic Materials 3.0	Ticker Sector (\$bn) notches PFE Health Care 56.9 -0.5 BMY Health Care 29.2 -0.8 ENELIM Utilities 18.5 -0.3 MMM Industrial Products 11.0 -0.5 BXP REITs 9.9 -0.3 WBA Retail 4.4 -0.6 AON Insurance 9.6 -0.2 OXY Energy 14.6 -0.1 AALLN Basic Materials 7.7 -0.2 EXC Utilities 33.2 0.0 LNT Utilities 6.9 -0.1 CMI Industrial Products 2.8 -0.3 PDM REITs 1.0 -0.5 FMC Basic Materials 3.0 -0.2

Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO.

Source: BofA Global Research

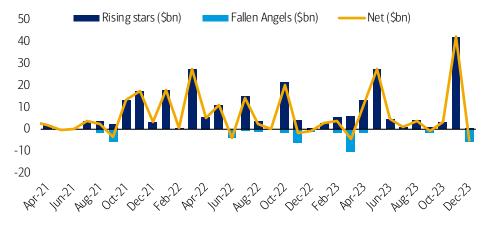
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Rising stars and fallen angels

Based on ICE BofA indices ex. EM \$0.5bn of bonds were upgraded from HY to IG in December (rising stars), down from the big \$42.3bn in November, driven by Ford. On the other hand, \$5.6bn were downgraded from IG to HY (fallen angels) in December (Exhibit 26, Exhibit 27, Exhibit 28).

Exhibit 26: Monthly rising star and fallen angel volumes

\$0.5bn of rising stars, \$5.6bn fallen angels in December (ex. EM).



Note: excluding EM issuers.

Source: BofA Global Research, ICE Data Indices, LLC

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Exhibit 27: December rising stars

The table lists issuers upgraded to IG from HY during the month (ex. EM)

						Avg. Yield	Avg. OAS
Ticker	Sector	Rating	N Bonds	Par, \$mn	Avg. Price	(%)	(bps)
ICLR	Health Care	BBB3	1	500	93.44	5.68	154

Source: BofA Global Research, ICE Data Indices, LLC



Exhibit 28: December fallen angels

The table lists issuers downgraded to HY from IG during the month (ex. EM)

Ticker	Sector	Rating	N Bonds	Par, \$mn	Avg. Price	Avg. Yieid (%)	Avg. UAS (bps)
WBA	Retail	BB1	7	4,403	85.58	5.93	181
VNO	REITs	BB1	3	1,200	88.99	6.84	251

Source: BofA Global Research, ICE Data Indices, LLC

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Methodology

To track these rating changes in a comprehensive way we normalize for the magnitude of the ratings change. Specifically, we report the product of the change in ratings, measured in notches (averaging across Moody's, S&P and Fitch, if available) and the bond notional. Effectively that means rating changes measured in 1-notch equivalents. We also include the watch as 2/3 of a notch and outlook as 1/3 of a notch.

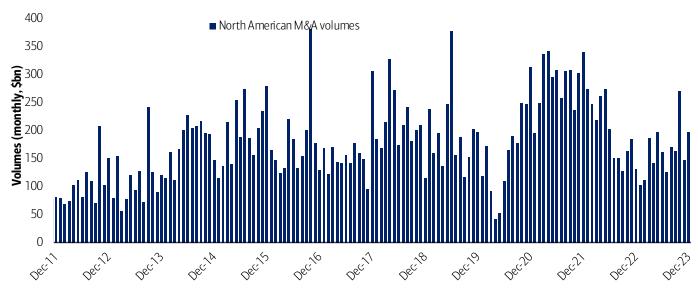
For example, suppose a \$500mn bond rated by Moody's and S&P is downgraded one notch by Moody's only. In that case the average rating change is $\frac{1}{2}$ a notch and would result in a \$250mn downgrade amount in the analysis above. If both Moody's and S&P downgrade by one notch, the average rating change would be one notch and the downgrade amount would be \$500mn. Finally, if Moody's placed the bond on a negative watch the average ratings change would be $(\frac{2}{3})$ / $2 = \frac{1}{3}$, with the corresponding downgrade amount of \$167mn.

M&A volumes increased in December

North American M&A announcements increased to \$198bn in December from \$147bn in November (Exhibit 29). However, the pipeline of announced deals with potential IG funding implications remained moderate at \$331bn, similar to \$346bn in November (deal NAV, Exhibit 30). There was zero M&A-related IG issuance in December, down from \$13.0bn in November (Exhibit 31). See details of the current deal list in the Pipeline of M&A deals with IG issuance implications section.

Exhibit 29: Monthly North American M&A volumes

North American M&A announcement volume increased to \$198bn in December from \$147bn in November.



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

Source: Bloomberg



Exhibit 29: Monthly North American M&A volumes

North American M&A announcement volume increased to \$198bn in December from \$147bn in November.

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Exhibit 30: Pipeline of pending M&A deals with IG funding implications The pipeline of pending M&A deals with US IG funding implications decreased moderately to \$331bn in December.

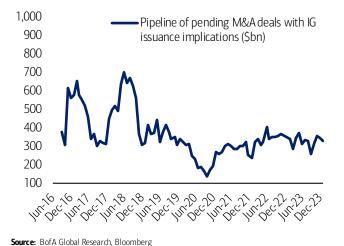
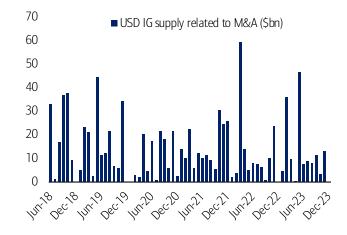


Exhibit 31: US IG M&A related supply

There was no US IG M&A-related supply in December, down from to \$13.0bn in November.



Source: BofA Global Research

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Our criteria for inclusion in the list of announced deals listed in 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.

Pipeline of M&A deals with IG issuance implications

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Exhibit 32: M&A deals with potential high grade bond funding needs

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

Deal					Announced	•
announcemen	-					completion
date	Ticker	Acquirer Name	Target Ticker	Target Name	(\$bn)	date
28-Jul-23	BIIB US	Biogen Inc	RETA US	Reata Pharmaceuticals Inc	6.3	Sep-23
12-Apr-23	EMR US	Emerson Electric Co	NATI US	National Instruments Corp	8.2	Oct-23
16-Aug-23	DINO US	HF Sinclair Corp	HEP US	Holly Energy Partners LP	3.7	Dec-23
28-Aug-23	DHR US	Danaher Corp	ABCM US	Abcam PLC	5.7	Dec-23
6-Nov-23	KMI US	Kinder Morgan Inc	1772913D US	South Texas Midstream LLC	1.8	Dec-23
14-Oct-22	KR US	Kroger Co/The	ACI US	Albertsons Cos Inc	25.4	Jan-24
27-Dec-23	WMB US	Williams Cos Inc/The	n.a.	Portfolio of 6 underground nat	2.0	Jan-24
5-Aug-22	AMZN US	Amazon.com Inc	IRBT US	iRobot Corp	1.6	Feb-24
12-Dec-23	CHH US	Choice Hotels International In	WH US	Wyndham Hotels & Resorts Inc	9.2	Mar-24
11-Dec-23	OXY US	Occidental Petroleum Corp	0754348D US	CrownRock LP	10.8	Mar-24
1-Nov-23	AME US	AMETEK Inc	1829130D US	ASP Navigate Acquisition Corp	1.9	Mar-24
23-Oct-23	FTV US	Fortive Corp	2264920D GR	EA Elektro-Automatik Holding G	1.5	Mar-24
30-Oct-23	O US	Realty Income Corp	SRC US	Spirit Realty Capital Inc	9.0	Mar-24
4-Dec-23	ROG SW	Roche Holding AG	0343535Z US	Carmot Therapeutics Inc	2.7	Mar-24
1-Nov-23	AME US	AMETEK Inc	1829130D US	ASP Navigate Acquisition Corp	1.9	Mar-24
9-Oct-23	BMY US	Bristol-Myers Squibb Co	MRTX US	Mirati Therapeutics Inc	3.2	Mar-24
26-Jun-23	UNH US	UnitedHealth Group Inc	AMED US	Amedisys Inc	3.7	Jun-24
20-Dec-23	AON US	Aon PLC	1468826D US	NFP Corp	13.4	Jun-24
22-Dec-23	BMY US	Bristol-Myers Squibb Co	KRTX US	Karuna Therapeutics Inc	11.1	Jun-24
6-Dec-23	ABBV US	AbbVie Inc	CERE US	Cerevel Therapeutics Holdings	7.4	Jun-24

Exhibit 32: M&A deals with potential high grade bond funding needs

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

Deal					Announced	Expected
announcemen	t Acquire	r			deal value	completion
date	Ticker	Acquirer Name	Target Ticker	Target Name	(\$bn)	date
26-Dec-23	BMY US	Bristol-Myers Squibb Co	RYZB US	RayzeBio Inc	3.2	Jun-24
18-Dec-23	IBM US	International Business Machine	2 3208542Q US, 1649684D U	JS Software AG USA Inc, Streamsets Inc/CA	2.1	Jun-24
7-Aug-23	CPB US	Campbell Soup Co	SOVO US	Sovos Brands Inc	2.7	Jun-24
13-Jun-23	BG US	Bunge Global SA	1882583D NA	Viterra Ltd	17.8	Jun-24
17-Aug-23	BA/LN	BAE Systems PLC	n.a.	Aerospace unit/Ball Corp	5.6	Jun-24
12-Sep-23	SKG LN	Smurfit Kappa Group PLC	WRK US	Westrock Co	20.9	Jun-24
17-Oct-23	TMO US	Thermo Fisher Scientific Inc	OLK US	Olink Holding AB	3.1	Jun-24
30-Nov-23	ABBV US	AbbVie Inc	IMGN US	ImmunoGen Inc	9.0	Jun-24
23-Oct-23	CVX US	Chevron Corp	HES US	Hess Corp	59.4	Jun-24
8-Dec-23	HON US	Honeywell International Inc	n.a.	Global Access Solutions Busine	5.0	Sep-24
21-Sep-23	CSCO US	Cisco Systems Inc	SPLK US	Splunk Inc	28.0	Sep-24
14-Nov-23	GLEN LN	Glencore PLC	2226102D CN	Elk Valley Resources Ltd	6.9	Sep-24
2-Nov-23	DIS US	Walt Disney Co/The	3276470Z US	Hulu LLC	9.0	Dec-24
5-Sep-23	ENB CN	Enbridge Inc	508695Q US	Public Service Co of North Carolina Inc	14.0	Dec-24
15-Jan-22	4614Z US	Mars Inc	1618192D US	NomNomNow Inc	1.0	n.a.
21-Nov-22	NSC US	Norfolk Southern Corp	2210036D US	Cincinnati Southern Railway Co	1.6	n.a.
13-Sep-23	TMUS US	T-Mobile US Inc	n.a.	600MHz spectrum/Comcast Corp	3.3	n.a.
25-Oct-23	STLA US	Stellantis NV	9863 HK	Zhejiang Leapmotor Technology	8.5	n.a.

Source: BofA Global Research, Bloomberg

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Previously published here:

Situation Room: Stronger HG inflows 04 January 2024

Flows

Stronger HG inflows

In a strong start to the year inflows into US HG bond funds and ETFs accelerated to +\$5.00bn this past week ending on January 3^{rd} , up from a +\$3.15bn inflow in the prior week. This was the biggest weekly inflow since July. Similar to 2023, most of the inflow was coming from HG ETFs (to +\$4.28bn from +\$2.90bn the prior week), rather than HG funds (to +\$0.72bn from +\$0.24bn). Short-term HG continued to report small outflows (to -\$0.26n from -\$0.45bn), while inflows improved ex. short-term (to +\$5.26bn from +\$3.60bn).

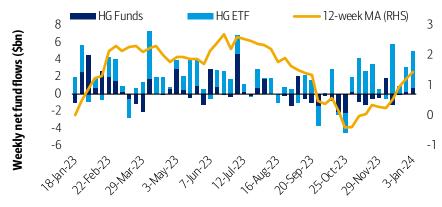
Weaker flows away from HG

Away from HG bonds flows were generally weaker in the first week of 2024. Hence flows weakened for equities (to +\$4.46bn from +14.64bn), HY (to -\$0.90bn from +\$0.28bn), loans (to -\$0.04bn from +\$0.34bn), global EM bonds (to +\$0.09bn from +\$0.40bn) and munis (to -\$0.82bn from -\$0.07bn). On the other hand, money markets reported a big +64.09bn inflow this past week, following a +\$13.73bn inflow a week earlier.



Exhibit 33: Weekly high grade fund flows, \$bn

HG ETF +\$4.28bn, HG Funds +\$0.72

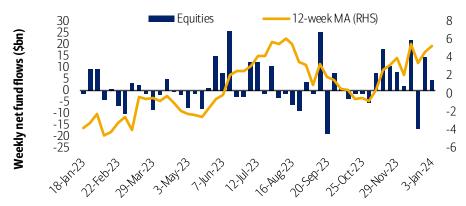


Source: EPFR Global. Note: data are for US-domiciled funds only.

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Figure 1: Weekly equity fund flows, \$bn

Equities +\$4.46bn



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

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Figure 2: Fund flows summary

YTD fund flows summary by asset class

	Last week (% of AUM for weekly reporting	YTD (% of AUM for all	· · · · · · · · · · · · · · · · · · ·
Asset class	funds/ETFs)	funds/ETFs)	YTD (\$bn)
High grade: total	0.24%	0.1%	5.0
High grade: ex short-term	0.33%	0.2%	5.3
High yield: total	-0.36%	-0.3%	-0.9
High yield: ETFs only	-1.42%	-1.5%	-1.1
Loans	-0.05%	0.0%	0.0
EM	0.02%	0.0%	0.1
Munis	-0.16%	-0.1%	-0.8
All fixed income	0.16%	0.1%	5.8
Money markets	1.00%	1.0%	64.1
Equities	0.04%	0.0%	4.5

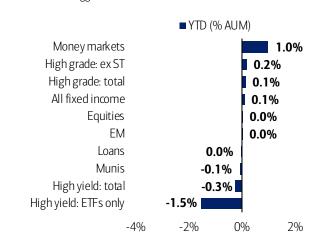
Note: Last week flow as % of AUM is based on AUM for weekly reporting funds / ETFs only. YTD flow as % of AUM is based on AUM for the full fund/ ETF universe as of December 31 2020. Global EM funds, US-domiciled funds only for other fund types.

Source: EPFR Global, BofA Global Research

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Exhibit 34: Year to date fund flows, % of AUM

Loans have had the biggest outflows so far in 2023.



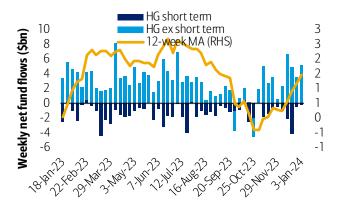
Note: Global EM funds, US-domiciled funds only for other fund types.

Source: EPFR Global, BofA Global Research



Exhibit 35: Weekly high grade fund flows, \$bn

HG short-term -\$0.26bn, HG ex short-term +\$5.26

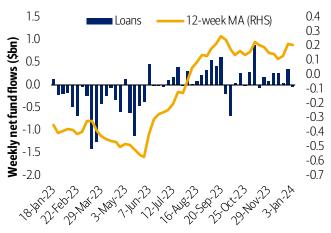


Source: EPFR Global. Note: data are for US-domiciled funds only

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Exhibit 37: Weekly loan fund flows, \$bn

Leveraged loans -\$0.04bn



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

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Exhibit 39: Cumulative % flows in HG over the last 2 years

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

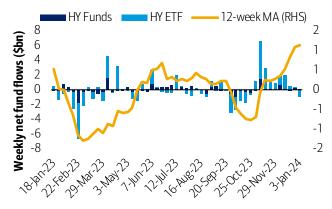


Source: EPFR Global, BofA Global Research

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Exhibit 36: Weekly high yield fund flows, \$bn

HY ETFs -\$1.06bn, HY funds +\$0.15

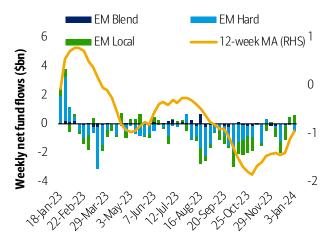


Source: EPFR Global. Note: data are for US-domiciled funds only

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Exhibit 38: Weekly EM fund flows, \$bn

Global EM bonds +\$0.09bn

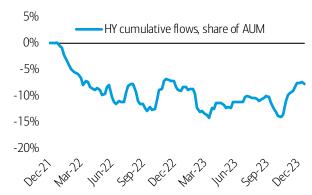


Source: EPFR Global. Note: data are for US-domiciled funds only

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Exhibit 40: Cumulative % flows in HY over the last 2 years

2022 and 2023 have seen consequent outflows in HY

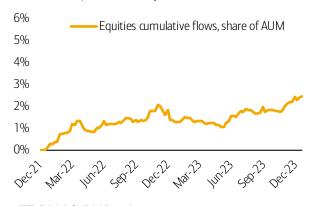


Source: EPFR Global, BofA Global Research



Exhibit 41: 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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Exhibit 42: Cumulative % flows in loans over the last 2 years

After large inflows until mid-2021, loans subject to large outflows ever since



Source: EPFR Global, BofA Global Research

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Appendix: defining high grade

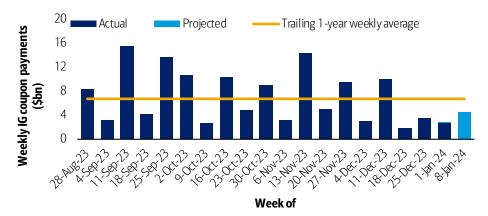
We define our high grade flows metric as a combination of "bond" and "corporate bond" fixed income funds and ETFs domiciled in the US (and investing in any currency, although the majority is invested in USD). We also exclude funds primarily focused on Government, HY, EM and MBS from the sample. The "bond" category refers to the broad high grade market, which includes Treasuries, mortgages and agencies in addition to corporate bonds. This category accounts for the majority of AUM and flows. On the other hand the dedicated corporate bond funds and ETFs are much smaller in terms of assets under management. We also include the "total return" bond category in our tracking of high grade flows. Finally note that "short-term" maturity refers to duration of 0 to 4 years.

Weekly technicals

The US IG corporate bond market is expected to generate \$4.6bn in coupon payments next week, below the trailing 1-year weekly average of \$6.7bn (Exhibit 43). In addition, \$0.2bn of tender offer were settled and paid this week, while \$0.1bn of calls and a \$0.4bntender offer are expected to become effective next week. Bond maturities: \$1.4bn this week, \$20.6bn next week.

Exhibit 43: Weekly US IG coupon payments

Expect \$4.6bn of coupon payments next week, below the \$6.7bn trailing 1-year weekly average.



Source: ICE Data Indices, LLC, BofA Global Research



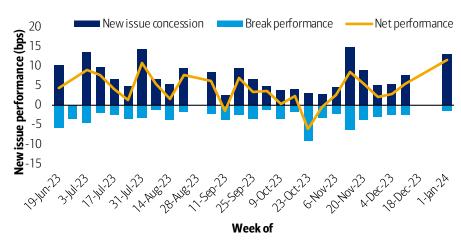
Supply

US IG gross issuance totaled \$56.1bn this week consisted of \$28.7bn financials, \$16.5bn high-quality industrials and \$10.9bn BBB industrials. Supply this week was a bit lower than \$58bn issued in the first week of 2023. Market conditions remain favorable, including still relatively lower yields and tighter spreads, while investor demand is strong. On the other hand, the CPI report on Thursday next week could limit issuance. Hence, we look for the robust pace of supply to slow next week to \$30-\$35bn range.

This week, new issue concession averaged 13.0bps, break performance – -1.4bps and net performance (new issue concession plus break performance) was +11.5bps. That's weaker than the week of December 11, when net new issuer performance averaged +5.3bps (Exhibit 44).

Exhibit 44: Weekly new issue supply performance

For the week of Jan 1 2024: new issue concession = 13.0bps; break performance = -1.4bps; net performance = 11.5bps.



Source: BofA Global Research

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Exhibit 45: Weekly Supply seasonality

Supply volumes tend to be higher side in Jan.

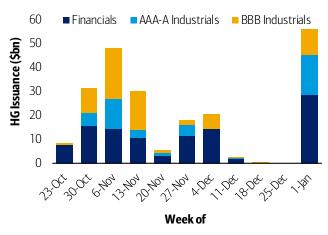


Source: Bloomberg, BofA Global Research

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Exhibit 46: Weekly Supply

This week's supply consisted of \$28.7bn financials, \$16.5bn high-quality industrials and \$10.9bn BBB industrials.

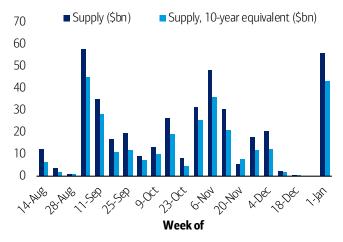


Source: Bloomberg, BofA Global Research



Exhibit 47: Weekly gross and 10-year equivalent supply volumes

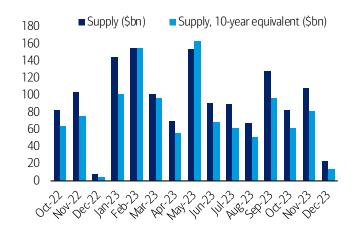
10-year equivalent supply = \$43.3bnWTD



Source: BofA Global Research, Bloomberg

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Exhibit 48: Monthly gross and 10-year equivalent supply volumes 10-year equivalent supply = \$43.3bn in January



Source: BofA Global Research, Bloomberg

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Exhibit 49: Recent new issue pricing and new issue concessions

List of new issues in the IG corporate bond market today along with performance metrics.

5.4	T		_	Size	Moody's/S&P	Coupon	Px Spread	New Issue Conc.	* Break	Current spread
Date	Ticker	Name	Tenor	(\$mm)	Rating	(%)	(bps)	(bps)	performance	(bps)
2024-01-02	BNP	BNP Paribas SA	6NC5	1,750	Aa3/A+	5.176	125	n.a.	-1	125
2024-01-02	CAT	Caterpillar Financial Services Corp	3	500	A2/A	4.5	45 73	n.a.	n.a.	45 73
2024-01-02	CMS	Consumers Energy Co	5	600	A1/A	4.6		n.a.	n.a.	73
2024-01-02	D	Virginia Electric and Power Co	10	500	A2/BBB+	5	115	n.a.	n.a.	115
2024-01-02	D	Virginia Electric and Power Co	30	500	A2/BBB+	5.35	127	10	n.a.	129
2024-01-02	DE	John Deere Capital Corp	3	750	A2/A	4.5	45	11	-3	44
2024-01-02	DE	John Deere Capital Corp	5	1,000	A2/A	4.5	63	n.a.	-3	63
2024-01-02	DUK	Duke Energy Corp	3	550	Baa2/BBB	4.85	75 25	n.a.	n.a.	73
2024-01-02	DUK	Duke Energy Corp	5	550	Baa2/BBB	4.85	95	6	-1	96
2024-01-02	EPD	Enterprise Products Operating LLC	3	1,000	A3/A-	4.6	55	n.a.	n.a.	57
2024-01-02	EPD	Enterprise Products Operating LLC	10	1,000	A3/A-	4.85	95	5	2	97
2024-01-02	F -	Ford Motor Credit Co LLC	3	1,500	Ba1/BBB-	5.8	175	0	-3	173
2024-01-02	F	Ford Motor Credit Co LLC	7	1,000	Ba1/BBB-	6.05	215	n.a.	3	219
2024-01-02	LLOYDS	Lloyds Banking Group PLC	4NC3	300	A3/BBB+	FRN	0	n.a.	n.a.	n.a.
2024-01-02	LLOYDS	Lloyds Banking Group PLC	4NC3	1,500	A3/BBB+	5.462	138	n.a.	-2	137
2024-01-02	LLOYDS	Lloyds Banking Group PLC	11NC10	2,000	A3/BBB+	5.679	175	n.a.	-2	177
2024-01-02	MET	Metropolitan Life Global Funding I	5	750	Aa3/AA-	4.85	93	n.a.	-1	92
2024-01-02	MET	Metropolitan Life Global Funding I	10	550	Aa3/AA-	5.05	113	n.a.	-1	116
2024-01-02	PPL	PPL Electric Utilities Corp	10	650	A1/A+	4.85	92	n.a.	-3	90
2024-01-02	RABOBK	Cooperatieve Rabobank UA/NY	2	750	Aa2/A+	FRN	0	n.a.	n.a.	n.a.
2024-01-02	RABOBK	Cooperatieve Rabobank UA/NY	2	1,000	Aa2/A+	4.85	55	n.a.	-1	55
2024-01-02	RABOBK	Cooperatieve Rabobank UA/NY	5	500	Aa2/A+	4.8	90	n.a.	-1	90
2024-01-02	SANUSA	Santander Holdings USA Inc	6NC5	1,000	Baa2/BBB+	6.174	225	n.a.	n.a.	n.a.
2024-01-02	TOYOTA	Toyota Motor Credit Corp	2	500	A1/A+	FRN	SOFR+65	n.a.	n.a.	n.a.
2024-01-02	TOYOTA	Toyota Motor Credit Corp	2	900	A1/A+	4.8	50	n.a.	-3	49
2024-01-02		Toyota Motor Credit Corp	5	800	A1/A+	4.65	75	n.a.	-4	70
2024-01-02		Toyota Motor Credit Corp	10	800	A1/A+	4.8	88	n.a.	-4	83
2024-01-02	UBS	UBS Group AG	6NC5	1,750	A3/A-	5.428	152	n.a.	-2	153
2024-01-02	UBS	UBS Group AG	11NC10	2,250	A3/A-	5.699	177	n.a.	-1	180
2024-01-02	WMB	Williams Cos Inc/The	5	1,100	Baa2/BBB	4.9	102	n.a.	-1	102
2024-01-02	WMB	Williams Cos Inc/The	10	1,000	Baa2/BBB	5.15	122	n.a.	n.a.	127
2024-01-03	ACAFP	Credit Agricole SA	6	1,000	A3/A-	5.335	145	20	0	144
2024-01-03	ACAFP	Credit Agricole SA	11	1,500	Baa1/BBB+	0	235	n.a.	-3	232
2024-01-03	AEE	Union Electric Co	30	350	A2/A	5.25	123	11	0	123
2024-01-03	BRKHEC	PacifiCorp	5	500	A2/A	5.1	120	n.a.	-3	119
2024-01-03	BRKHEC	PacifiCorp	7	700	A2/A	5.3	140	9	-4	140
2024-01-03	BRKHEC	PacifiCorp	10	1,100	A2/A	5.45	155	n.a.	-1	158

Exhibit 49: Recent new issue pricing and new issue concessions

List of new issues in the IG corporate bond market today along with performance metrics.

D	T		-	Size	Moody's/S&P	Coupon	Px Spread	New Issue Conc.	* Break	Current spread
Date	Ticker	Name	Tenor	(\$mm)	Rating	(%)	(bps)	(bps)	performance	(bps)
2024-01-03	BRKHEC	PacifiCorp	31	1,500	A2/A	5.8	175	8	1	178
2024-01-03	CPT	Camden Property Trust	10	400	A3/A-	4.9	105	n.a.	n.a.	105
2024-01-03	DUK	Duke Energy Carolinas LLC	10	575	Aa3/A	4.85	100	18	1	101
2024-01-03	DUK	Duke Energy Carolinas LLC	30	425	Baa2/BBB+	5.4	118	n.a.	2	120
2024-01-03	GBLATL	GA Global Funding Trust	5	700	A2/A-	5.5	175	n.a.	n.a.	174
2024-01-03	HYNMTR	Hyundai Capital America	3	300	Baa1/BBB+	FRN	SOFR+150	n.a.	n.a.	n.a.
2024-01-03	HYNMTR	Hyundai Capital America	3	1,000	Baa1/BBB+	5.25	130	18	-2	128
2024-01-03	HYNMTR	Hyundai Capital America	5	700	Baa1/BBB+	5.3	145	15	-3	142
2024-01-03	HYNMTR	Hyundai Capital America	7	500	Baa1/BBB+	5.4	155	24	-4	151
2024-01-03	NAB	National Australia Bank Ltd	2	500	Aa3/AA-	FRN	SOFR+65	n.a.	n.a.	n.a.
2024-01-03	NAB	National Australia Bank Ltd/New York	2	1,000	Aa3/AA-	4.75	53	n.a.	-2	51
2024-01-03	NAB	National Australia Bank Ltd/New York	5	1,000	Aa3/AA-	4.787	90	n.a.	-2	88
2024-01-03	NAB	National Australia Bank Ltd	10	750	Aa3/AA-	4.951	105	n.a.	-3	103
2024-01-03	NWMLIC	Northwestern Mutual Global Funding	5	500	Aaa/AAA	4.71	80	n.a.	n.a.	72
2024-01-04	AER	AerCap Ireland Capital DAC	5	800	Baa2/BBB	5.1	140	n.a.	n.a.	n.a.
2024-01-04	AER	AerCap Ireland Capital DAC	10	700	Baa2/BBB	5.3	160	n.a.	n.a.	n.a.
2024-01-04	ATH	Athene Global Funding	5	750	A1/A+	5.583	160	n.a.	n.a.	n.a.
2024-01-04	BCP	Banco de Credito del Peru S.A.	5	500	NA/BBB	5.85	190	n.a.	n.a.	n.a.
2024-01-04	BIMBOA	Bimbo Bakeries USA Inc	5	450	Baa1/BBB+	6.05	115	15	n.a.	104
2024-01-04	BIMBOA	Bimbo Bakeries USA Inc	12	800	Baa1/BBB+	5.375	150	n.a.	n.a.	n.a.
2024-01-04	BNS	Bank of Nova Scotia/The	60NC5	750	Baa3/BBB-	8	402	n.a.	n.a.	n.a.
2024-01-04	BPLN	BP Capital Markets America Inc	5	1,250	A2/A-	4.699	73	17	n.a.	n.a.
2024-01-04	BPLN	BP Capital Markets America Inc	10	1,000	A2/A-	4.989	100	12	n.a.	n.a.
2024-01-04	CPGX	Columbia Pipelines Holding Co LLC	10	500	Baa2/BBB+	5.681	168	n.a.	n.a.	n.a.
2024-01-04	MAA	Mid-America Apartments LP	10	350	A3/A-	5	112	n.a.	n.a.	n.a.
2024-01-04	NYLIFE	New York Life Global Funding	10	1,000	Aaa/AA+	5	100	n.a.	-1	99
2024-01-04	PACLIF	Pacific Life Global Funding II	5	400	Aa3/AA-	4.9	95	n.a.	n.a.	n.a.
2024-01-04	STANLN	Standard Chartered PLC	11NC10	1,500	A3/BBB+	6.097	210	23	-3	207
2024-01-04	SUI	Sun Communities Operating LP	5	500	Baa3/BBB	5.5	155	n.a.	n.a.	n.a.
2024-01-04	WTRG	Essential Utilities Inc	10	500	Baa2/A-	5.375	140	n.a.	n.a.	n.a.

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 50 and Exhibit 51. We estimate the corresponding DV01 equivalent in Exhibit 51. More details by sector and maturity are available in Exhibit 52 and Exhibit 53. Finally, note that the data for the current date is through about 4:40 p.m. Eastern Standard Time.



Exhibit 50: Estimated dealer inventories of IG corporate bonds.

We estimate IG dealer inventories of US issuer bonds increased to 6.3bn currently from 2.7bn on Dec-27.



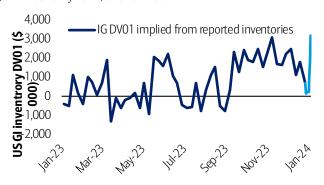
Note: data for US issuer bonds only, maturities 13M or longer. Actual dealer inventory data is from Primary Dealer Statistics survey by the NY Fed. The subsequent change in inventory is estimated based on TRACE.

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

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Exhibit 51: Estimated dealer inventory DV01 for IG corporate bonds.

We estimate IG dealer inventory DV01 of US issuer bonds increased to \$3.2mn currently from \$0.7bn on Dec-27.



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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Exhibit 52: Estimated changes in IG dealer inventories by maturity and broad sector.

We estimate IG dealer inventories increased \$2,147mn today and increased \$6,336mn over the prior week.

		Net	Net dealer DV01 change (\$thousand)				Trading volumes on 4-Jan-24 (\$mn)							
Sector	4-Jan	3-Jan	1 W	2 W	4 W	4-Jan	3-Jan	1 W	2 W	4 W	Buy	Sell	Dealer	Total
High grade (13M+)	2,147	2,954	6,336	3,588	6,733	1,522	1,639	4,010	2,393	7,468	14,315	12,167	10,274	36,755
<3yr	-235	359	444	-449	-1,743	-33	45	85	-143	-369	1,736	1,971	1,487	5,194
3-5yr	477	469	811	-72	132	193	169	338	13	63	2,517	2,041	1,891	6,449
5-11yr	1,329	1,895	4,112	3,713	3,130	763	1,145	2,577	2,301	1,767	5,658	4,329	3,564	13,551
11+yr	576	231	969	396	5,214	598	280	1,010	222	6,007	4,403	3,827	3,331	11,562
Fin	443	1,062	2,330	1,411	1,980	275	556	1,237	743	2,282	5,674	5,231	3,912	14,816
Non-Fin	1,704	1,892	4,005	2,177	4,753	1,247	1,083	2,773	1,651	5,185	8,641	6,936	6,362	21,939
Fixed	2,236	2,975	6,549	3,941	7,423	1,554	1,653	4,087	2,509	7,767	14,179	11,944	10,165	36,288
Floating	-88	-21	-214	-353	-689	-32	-13	-77	-116	-300	135	223	109	467
US issuers	1,944	1,866	4,562	2,165	5,035	1,396	1,084	3,029	1,666	6,128	11,179	9,235	8,193	28,607
DM Yankees	151	1,150	1,839	1,496	1,592	104	601	1,020	755	1,289	2,799	2,648	2,001	7,448
EM Yankees	52	-62	-66	-73	106	22	-46	-39	-28	51	336	284	80	700

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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Exhibit 53: Estimated changes in IG dealer inventories by sector.

We estimate today IG dealer inventories increased \$15mn for Banks/Brokers and increased \$13mn for Energy.

	Net dealer buy (\$mn)					Net o	dealer DV	01 chang	e (\$thou	Trading volumes on 4-Jan-24 (\$mn)				
Sector	4-Jan	3-Jan	1 W	2 W	4 W	4-Jan	3-Jan	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Aerospace/Defense	-22	85	42	-29	326	-46	65	13	-78	278	206	228	205	640
Automobiles	127	289	655	638	311	63	140	313	326	194	491	364	384	1,239
Banks/Brokers	15	690	1,416	788	1,250	59	306	684	345	1,380	3,854	3,839	2,701	10,394
Basic Materials	163	72	292	131	247	76	25	183	70	238	449	286	193	928
Commercial Services	2	53	54	72	295	20	46	73	82	241	124	122	109	355
Energy	13	250	251	3	196	11	64	83	5	176	805	792	623	2,220
Finance	186	241	534	397	44	85	112	249	174	170	1,003	817	730	2,550
Food, Bev, & Bottling	200	51	294	160	542	196	-7	248	190	535	573	373	450	1,396
Health Care	161	47	194	-80	669	79	15	180	-8	1,081	1,255	1,093	1,173	3,521
Industrial Products	94	141	402	300	309	41	83	202	131	265	268	174	205	648
Insurance	46	55	169	39	545	10	59	116	34	538	311	264	200	775
Media & Entertainment	6	44	1	-209	-181	-16	32	-23	-161	55	433	427	328	1,188
REITs	196	75	211	187	142	120	79	189	189	194	506	310	280	1,097
Retail	82	135	181	120	340	87	102	171	148	409	476	394	346	1,216
Technology	112	196	132	79	151	50	144	45	17	376	932	819	527	2,278
Telecom	179	140	411	274	675	147	87	355	254	633	624	446	356	1,426
Tobacco	1	1	-47	-71	-72	-8	-8	-49	-68	-36	112	111	114	337



Exhibit 53: Estimated changes in IG dealer inventories by sector.

We estimate today IG dealer inventories increased \$15mn for Banks/Brokers and increased \$13mn for Energy.

	Net dealer buy (\$mn)					Net	dealer DV	01 chang	ge (\$thou	Trading volumes on 4-Jan-24 (\$mn)				
Sector	4-Jan	3-Jan	1 W	2 W	4 W	4-Jan	3-Jan	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Transportation	21	61	94	5	91	41	50	124	71	126	168	148	150	466
Utilities	541	310	1,044	794	884	520	266	905	731	709	1,562	1,020	1,040	3,622
Other	23	19	6	-8	-32	-14	-21	-50	-59	-96	162	139	157	458

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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