

Situation Room

December IG ratings: Downgrades driven by two issuers

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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

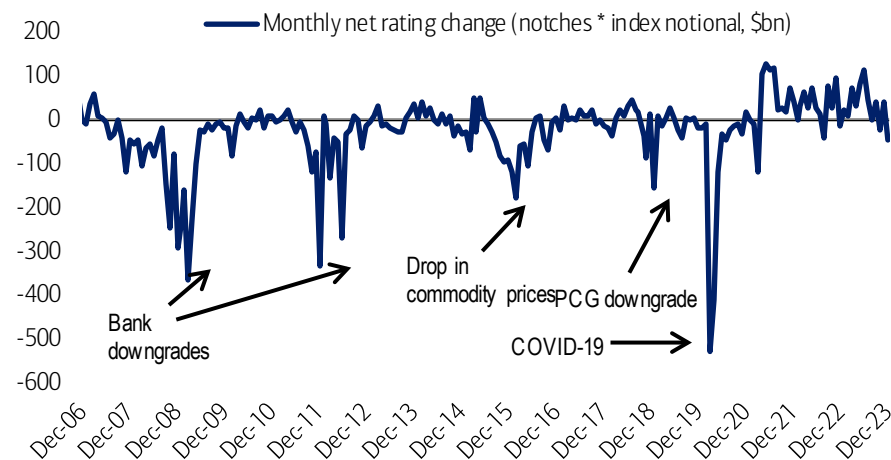
Gross rating activity for IG corporate issuers (upgrades + downgrades) remained robust in December at \$139bn, close to \$138bn median over the prior 12 months (Exhibit 5). The share of rating upgrades dropped to 34% in December – the lowest since August 2022 – and down from 66% in November (Exhibit 6).

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 7). The share on a negative outlook / watch remained low at 2.2% in November (Exhibit 8).

Exhibit 1: 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 COA0.

Source: BofA Global Research, Bloomberg.

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02 January 2024

Credit Strategy
United States
Cross Product

Yuri Seliger
Credit Strategist
BofAS
+1 646 855 7209
yuri.seliger@bofa.com

Jean-Tiago Hamm
Credit Strategist
BofAS
jean-tiago.hamm@bofa.com

Srini Talagadevi
Credit Strategist
BofAS
sreenivasa.rao@bofa.com

In this report

M&A volumes increased in December

Daily credit snapshot

Daily dealer inventories update

Daily foreign demand tracker

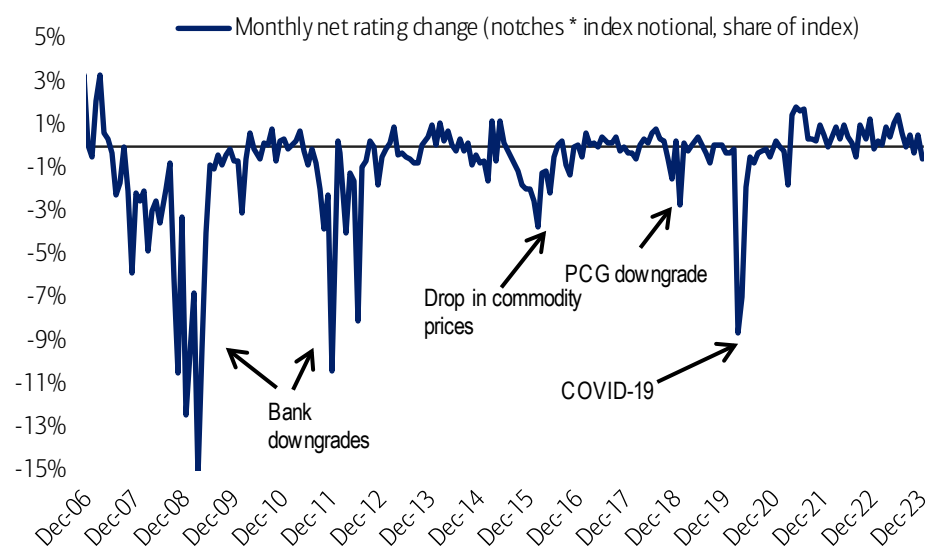
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Exhibit 2: Net upgrades weakened to -0.6% of index notional in December

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



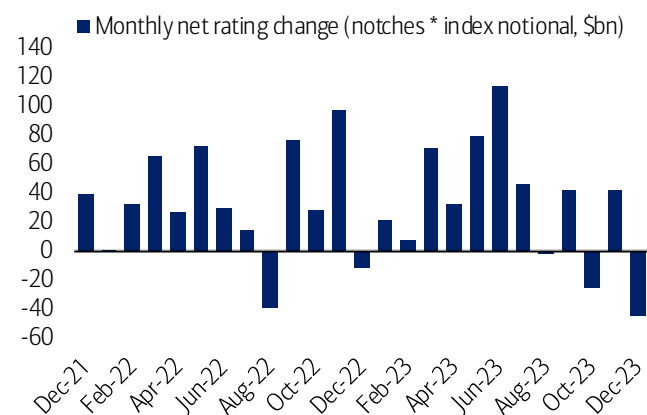
Note: net rating change equals upgrades less downgrades. Based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO.

Source: BofA Global Research, Bloomberg.

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Exhibit 3: 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.



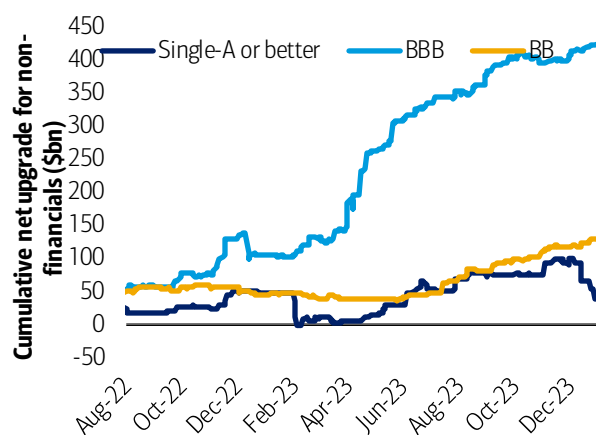
Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO.

Source: BofA Global Research

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Exhibit 4: Cumulative net upgrade for non-financials by rating (\$bn)

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

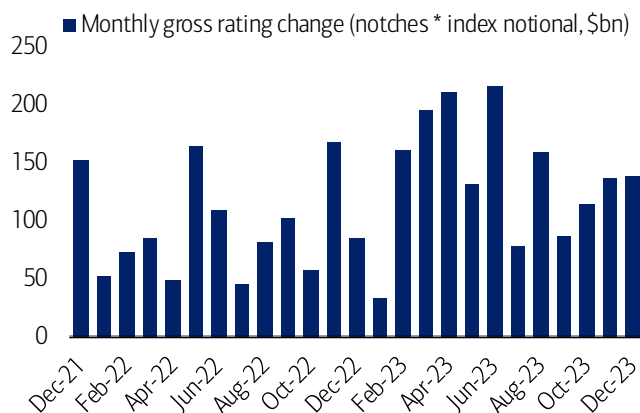


Source: BofA Global Research, Bloomberg.

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Exhibit 5: Gross rating actions remained robust in December

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



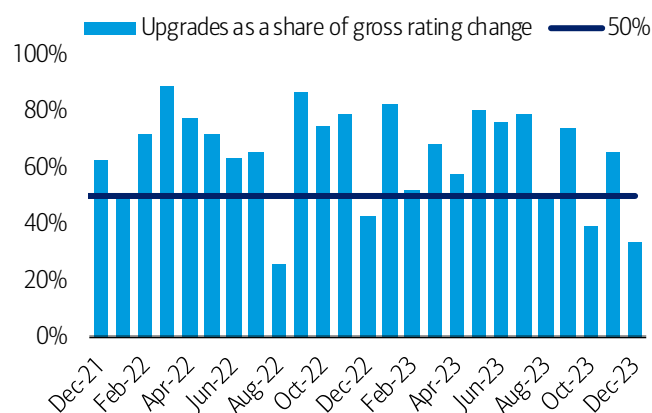
Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO

Source: BofA Global Research

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Exhibit 6: 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

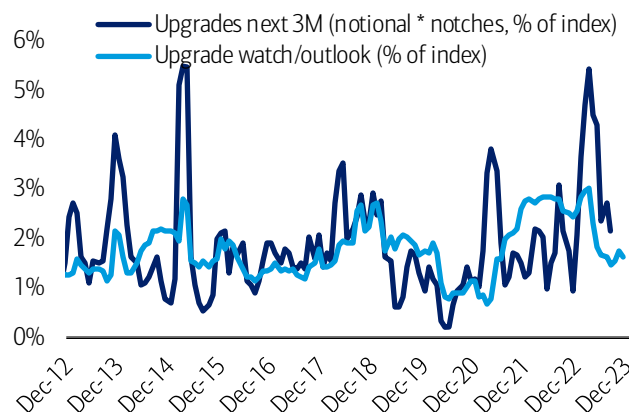
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Rating watches/outlooks point to more upgrades

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 7). 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 8).

Exhibit 7: Positive watch/outlook is now back to normal levels

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



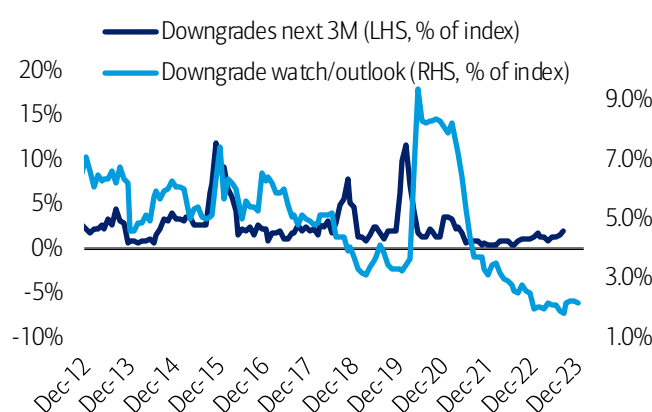
Note: watch/outlook is computed as 0.66 * notional for a watch and 0.33 * notional for an outlook. Upgrades are tracking rating changes only (ignoring outlook and watch changes).

Source: BofA Global Research

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Exhibit 8: 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).

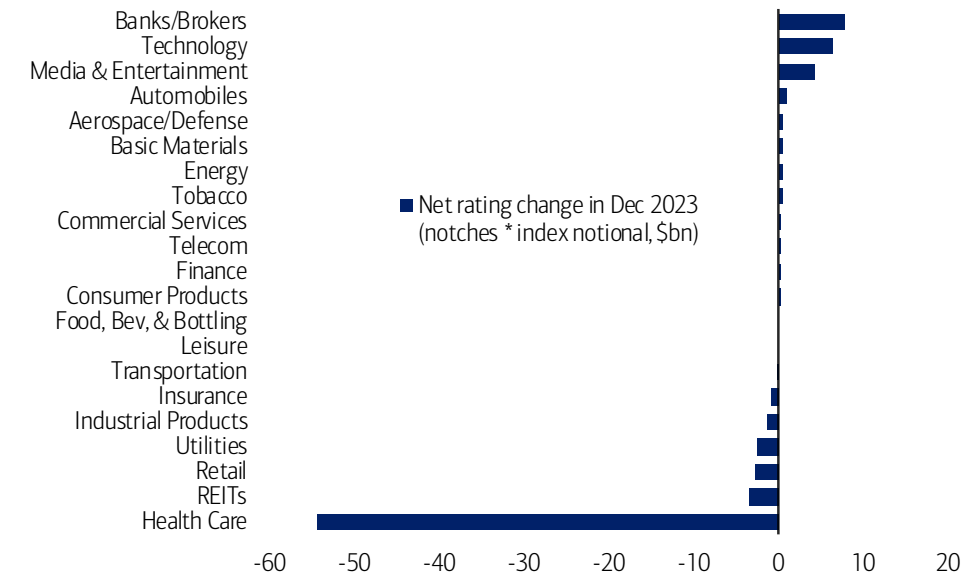
Source: BofA Global Research

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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 10 and Exhibit 11 below.

Exhibit 9: 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 10: Issuers with largest ratings upgrades in Dec-23

Top 15 issuers by rating upgrades.

Ticker	Sector	Issuer notional (\$bn)	Rating change: notches	Rating change: notional * \$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 11: Issuers with largest ratings downgrades in Dec-23

Top 15 issuers by rating downgrades.

Ticker	Sector	Issuer notional (\$bn)	Rating change: notches	Rating change: notional * \$bn
PFE	Health Care	56.9	-0.5	-29.2
BMJ	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

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

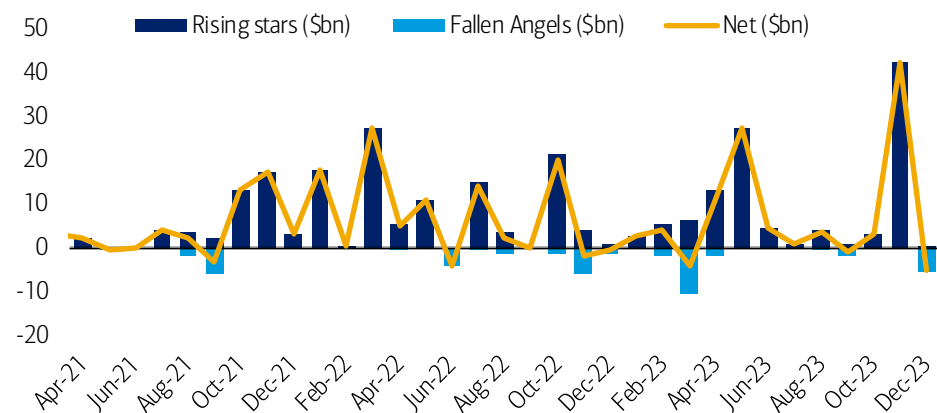
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Rising stars and fallen angels

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 12, Exhibit 13, Exhibit 14).

Exhibit 12: 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 13: December rising stars

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

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

Source: BofA Global Research, ICE Data Indices, LLC

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Exhibit 14: 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. Yield (%)	Avg. OAS (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.

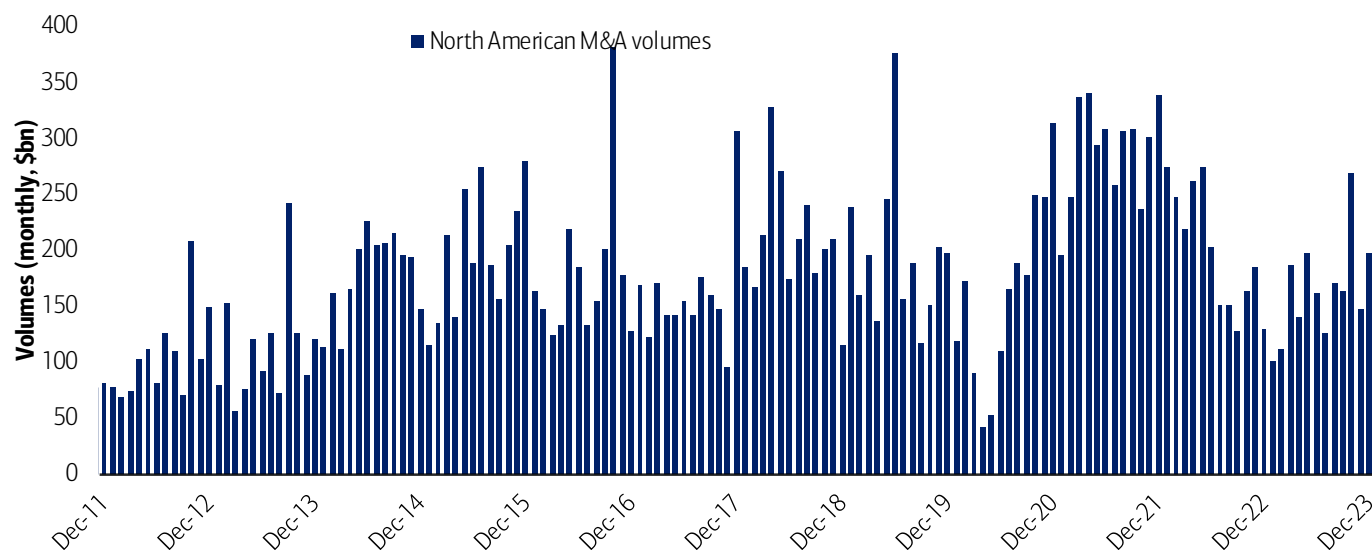
For example, suppose a \$500mn bond rated by Moody's and S&P is downgraded one notch by Moody's only. In that case the average rating change is $\frac{1}{2}$ a notch and would result in a \$250mn downgrade amount in the analysis above. If both Moody's and S&P downgrade by one notch, the average rating 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 15). However, the pipeline of announced deals with potential IG funding implications remained moderate at \$331bn, similar to \$346bn in November (deal NAV, Exhibit 16). There was zero M&A-related IG issuance in December, down from \$13.0bn in November (Exhibit 17). See details of the current deal list in the [Pipeline of M&A deals with IG issuance implications](#) section.

Exhibit 15: 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 closed deals only. Cancelled deals are excluded.

Source: Bloomberg

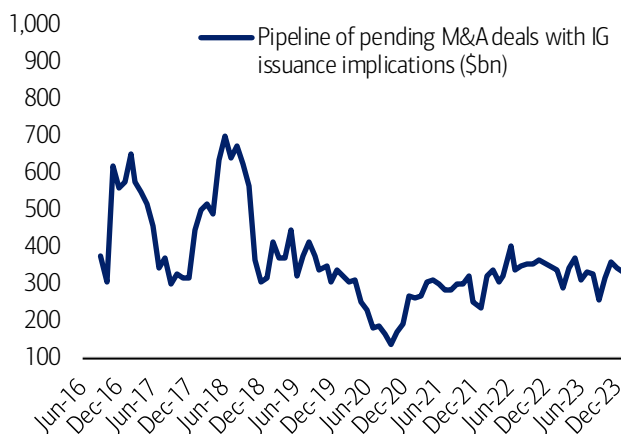
Exhibit 15: Monthly North American M&A volumes

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

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Exhibit 16: 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.

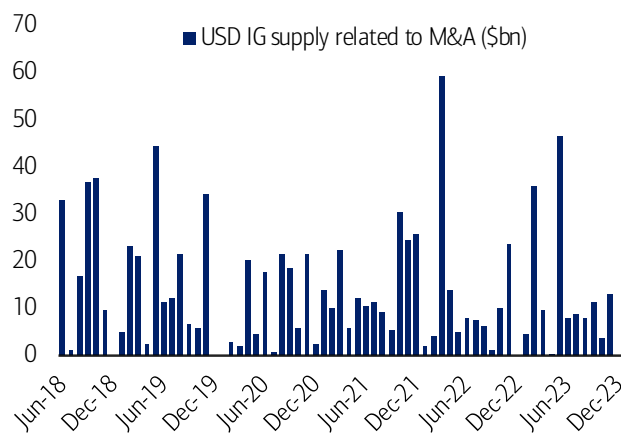


Source: BofA Global Research, Bloomberg

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Exhibit 17: US IG M&A related supply

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



Source: BofA Global Research

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Pipeline of M&A deals with IG issuance implications

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.

Exhibit 18: 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
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	BMJ US	Bristol-Myers Squibb Co	MRTX US	Mirati Therapeutics Inc	3.2	Mar-24
26-Jun-23	UNH US	UnitedHealth Group Inc	AMED US	Amedys Inc	3.7	Jun-24
20-Dec-23	AON US	Aon PLC	1468826D US	NFP Corp	13.4	Jun-24
22-Dec-23	BMJ 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

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Deal announcement date	Acquirer Ticker	Acquirer Name	Target Ticker	Target Name	Announced deal value (\$bn)	Expected completion date
26-Dec-23	BMJ US	Bristol-Myers Squibb Co	RYZB US	RayzeBio Inc	3.2	Jun-24
18-Dec-23	IBM US	International Business Machine	3208542Q US, 1649684D	US 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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Daily credit snapshot

US IG issuance totaled \$29.3bn across 16 deals today, \$29.3bn WTD and \$29.3bn MTD.

The average new issue concession was 6.4bps today, while the average break performance was 1.9bps tighter today.

S&P 500 closed -0.57%, 10-year Treasury yields +5bps, CDX IG +1.8bps, CDX HY - \$0.36pts, and cash bond spreads quoted from 1 to 4bps today, LQD closed 2.91bps wider today.

Exhibit 19: Recent new issue pricing and new issue concessions

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

Date	Ticker	Name	Tenor	Size (\$mm)	Moody's/S&P Rating	Coupon (%)	Px Spread (bps)	New Issue Conc. (bps)	* Break performance	Current spread (bps)
2024-01-02	BNP	BNP Paribas SA	6NC5	1,750	Aa3/A+	5.176	125	n.a.	-1	124
2024-01-02	CAT	Caterpillar Financial Services Corp	3	500	A2/A	4.5	45	n.a.	n.a.	n.a.
2024-01-02	CMS	Consumers Energy Co	5	600	A1/A	4.6	73	n.a.	n.a.	n.a.
2024-01-02	D	Virginia Electric and Power Co	10	500	A2/BBB+	5	115	n.a.	n.a.	n.a.
2024-01-02	D	Virginia Electric and Power Co	30	500	A2/BBB+	5.35	127	10	n.a.	n.a.
2024-01-02	DE	John Deere Capital Corp	3	750	A2/A	4.5	45	11	-3	42
2024-01-02	DE	John Deere Capital Corp	5	1,000	A2/A	4.5	63	n.a.	-3	60
2024-01-02	DUK	Duke Energy Corp	3	550	Baa2/BBB	4.85	75	n.a.	n.a.	n.a.
2024-01-02	DUK	Duke Energy Corp	5	550	Baa2/BBB	4.85	95	6	n.a.	n.a.
2024-01-02	EPD	Enterprise Products Operating	3	1,000	A3/A-	4.6	55	n.a.	n.a.	n.a.
2024-01-02	EPD	Enterprise Products Operating	10	1,000	A3/A-	4.85	95	5	n.a.	n.a.
2024-01-02	F	Ford Motor Credit Co LLC	3	1,500	Ba1/BBB-	5.8	175	0	n.a.	n.a.
2024-01-02	F	Ford Motor Credit Co LLC	7	1,000	Ba1/BBB-	6.05	215	n.a.	n.a.	n.a.
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	136
2024-01-02	LLOYDS	Lloyds Banking Group PLC	11NC10	2,000	A3/BBB+	5.679	175	n.a.	n.a.	n.a.
2024-01-02	MET	Metropolitan Life Global Funding	5	750	Aa3/AA-	4.85	93	n.a.	-1	92
2024-01-02	MET	Metropolitan Life Global Funding	10	550	Aa3/AA-	5.05	113	n.a.	-1	112
2024-01-02	PPL	PPL Electric Utilities Corp	10	650	A1/A+	4.85	92	n.a.	-3	89
2024-01-02	RABOBK	Cooperatieve Rabobank UA	2	750	Aa2/A+	FRN	0	n.a.	n.a.	n.a.
2024-01-02	RABOBK	Cooperatieve Rabobank UA	2	1,000	Aa2/A+	4.85	55	n.a.	n.a.	n.a.
2024-01-02	RABOBK	Cooperatieve Rabobank UA	5	500	Aa2/A+	4.8	90	n.a.	n.a.	n.a.

Exhibit 19: Recent new issue pricing and new issue concessions

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

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.	n.a.	n.a.
2024-01-02	TOYOTA	Toyota Motor Credit Corp	5	800	A1/A+	4.65	75	n.a.	n.a.	n.a.
2024-01-02	TOYOTA	Toyota Motor Credit Corp	10	800	A1/A+	4.8	88	n.a.	n.a.	n.a.
2024-01-02	UBS	UBS Group AG	6NC5	1,750	A3/A-	-	152	n.a.	-2	150
2024-01-02	UBS	UBS Group AG	11NC10	2,250	A3/A-	5.699	177	n.a.	-1	176
2024-01-02	WMB	Williams Cos Inc/The	5	1,100	Baa2/BBB	4.9	102	n.a.	n.a.	n.a.
2024-01-02	WMB	Williams Cos Inc/The	10	1,000	Baa2/BBB	5.15	122	n.a.	n.a.	n.a.

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

Source: BofA Global Research, Bloomberg

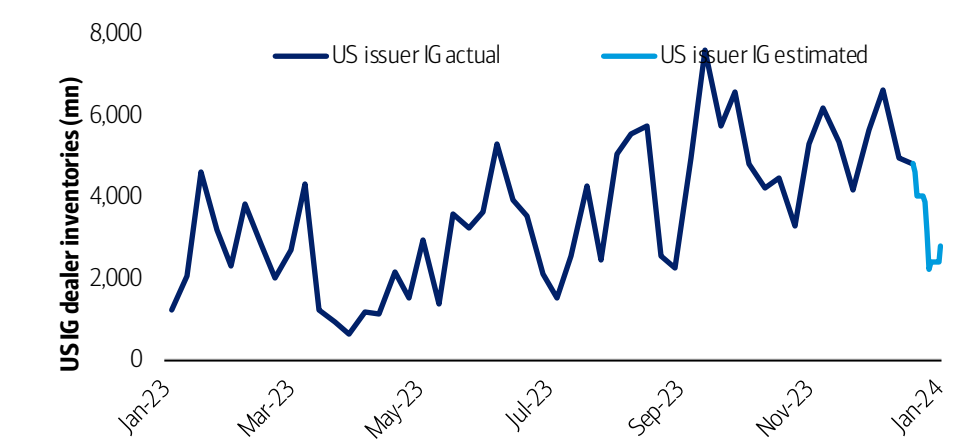
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Daily dealer inventories update

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 20. We estimate the corresponding DV01 equivalent in Exhibit 21. More details by sector and maturity are available in Exhibit 22 and Exhibit 23. Finally, note that the data for the current date is through about 4:40 p.m. Eastern Standard Time.

Exhibit 20: Estimated dealer inventories of IG corporate bonds.

We estimate IG dealer inventories of US issuer bonds declined to \$2.8bn currently from \$4.8bn on Dec-20.



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.

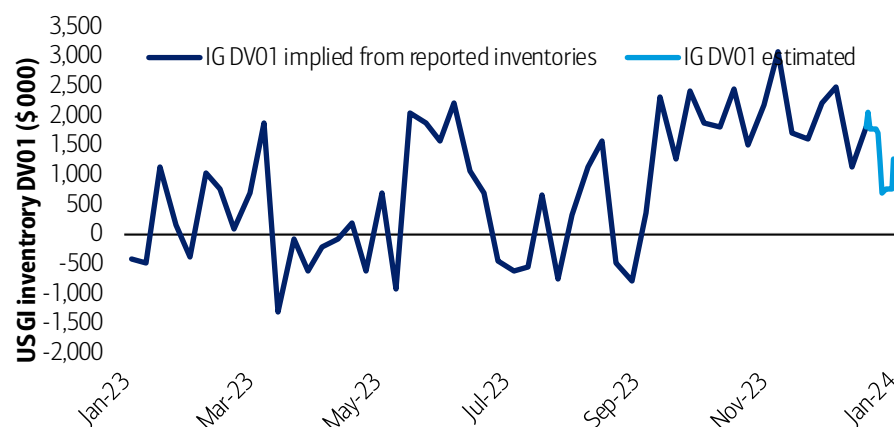
Source: BofA Global Research, FINRA, TRACE, Federal Reserve

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Exhibit 21: Estimated dealer inventory DV01 for IG corporate bonds.

We estimate IG dealer inventory DV01 of US issuer bonds dedined to \$1.3mn currently from \$1.8bn on Dec-20.



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

We estimate IG dealer inventories increased \$758mn today and declined -\$765mn over the prior week.

Sector	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 2-Jan-24 (\$mn)			
	2-Jan	1-Jan	1 W	2 W	4 W	2-Jan	1-Jan	1 W	2 W	4 W	Buy	Sell	Dealer	Total
High grade (13M+)	758	0	-765	-1,371	797	792	0	-261	-240	3,589	9,203	8,444	6,546	24,193
<3yr	51	0	-326	-113	-2,205	6	0	-99	-73	-474	1,580	1,529	1,119	4,229
3-5yr	-295	0	-724	-1,001	-946	-92	0	-251	-358	-359	1,648	1,942	1,397	4,987
5-11yr	660	0	448	-575	42	498	0	376	-323	-181	3,483	2,824	2,205	8,512
11+yr	343	0	-163	318	3,906	379	0	-287	514	4,603	2,491	2,149	1,825	6,465
Fin	361	0	98	-190	-581	284	0	15	10	863	3,543	3,182	2,309	9,034
Non-Fin	397	0	-863	-1,181	1,378	508	0	-275	-250	2,726	5,660	5,263	4,237	15,159
Fixed	801	0	-582	-1,135	1,459	805	0	-204	-167	3,853	9,155	8,354	6,507	24,016
Floating	-43	0	-183	-235	-663	-13	0	-56	-73	-264	47	90	39	177
US issuers	366	0	-1,095	-1,337	863	488	0	-455	-185	3,086	7,369	7,003	5,482	19,854
DM Yankees	447	0	382	43	-136	323	0	204	-51	476	1,698	1,251	991	3,940
EM Yankees	-54	0	-53	-77	70	-20	0	-10	-4	26	136	190	73	399

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 23: Estimated changes in IG dealer inventories by sector.

We estimate today IG dealer inventories increased \$308mn for Banks/Brokers and declined -\$22mn for Energy.

Sector	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 2-Jan-24 (\$mn)			
	2-Jan	1-Jan	1 W	2 W	4 W	2-Jan	1-Jan	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Aerospace/Defense	-50	0	-99	-62	72	-54	0	-106	-55	73	170	219	80	469
Automobiles	225	0	197	61	-151	103	0	95	1	-52	557	332	345	1,234
Banks/Brokers	308	0	192	28	-406	212	0	29	41	500	2,541	2,233	1,622	6,396
Basic Materials	62	0	-49	-221	-79	75	0	4	-131	39	299	237	232	769
Commercial Services	-17	0	2	46	186	-5	0	11	43	181	72	89	91	253
Energy	-22	0	-195	-363	494	25	0	-54	-97	509	553	575	433	1,562
Finance	80	0	-1	-97	-462	42	0	14	-52	-66	495	415	349	1,259
Food, Bev, & Bottling	63	0	-53	6	165	72	0	-8	50	252	304	241	230	775
Health Care	-65	0	-196	-350	345	51	0	-24	-131	844	974	1,039	866	2,879
Industrial Products	169	0	121	67	203	68	0	41	0	229	309	140	160	609
Insurance	44	0	6	-28	492	38	0	5	27	448	227	183	162	573
Media & Entertainment	23	0	-168	-128	-271	17	0	-120	-40	-10	323	300	264	886
REITs	-70	0	-99	-93	-205	-8	0	-33	-7	-19	280	350	176	806
Retail	-6	0	-126	-54	64	17	0	-71	38	105	307	313	261	881

Exhibit 23: Estimated changes in IG dealer inventories by sector.

We estimate today IG dealer inventories increased \$308mn for Banks/Brokers and declined -\$22mn for Energy.

Sector	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 2-Jan-24 (\$mn)			
	2-Jan	1-Jan	1 W	2 W	4 W	2-Jan	1-Jan	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Technology	-135	0	-135	22	188	-90	0	-72	45	385	565	700	356	1,621
Telecom	32	0	30	-19	435	76	0	95	45	435	348	316	257	920
Tobacco	-28	0	-55	-31	-30	-14	0	-28	-15	14	65	93	95	253
Transportation	7	0	-37	28	34	38	0	7	39	91	128	121	87	336
Utilities	157	0	-46	-76	-186	136	0	-14	2	-294	609	452	390	1,451
Other	-19	0	-55	-107	-91	-5	0	-32	-45	-75	76	95	91	262

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

Source: BofA Global Research, FINRA, TRACE.

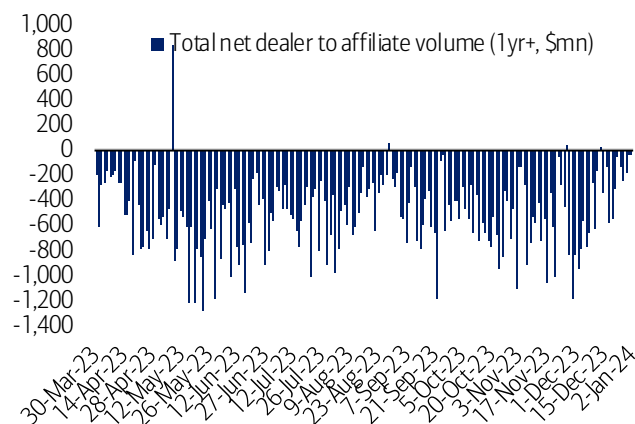
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Daily foreign demand tracker

We believe net dealer-to-affiliate volumes from Trace are correlated with foreign buying of US HG corporate bonds - i.e., negative numbers mean foreign investor buying (US dealers taking down inventory in favor of foreign affiliates). For supporting material see our “primer” on tracking foreign inflows. Exhibit 24 shows the overall daily dealer-to-affiliate volumes while Exhibit 25, Exhibit 26 and Exhibit 27 show subsets of this data. In particular Exhibit 25 shows net dealer-to-affiliate volumes for longer maturity (12+ years) bonds, Exhibit 26 displays volumes reported to Trace before 8am NY time (biased toward Asian buying) and Exhibit 27 shows the subset of net trades reported between 8am and noon (biased toward European buying).

Exhibit 24: Net dealer buying from affiliate (1yr+)

Exhibit shows inconsistent overall foreign buying of US IG corporate bonds for some time.



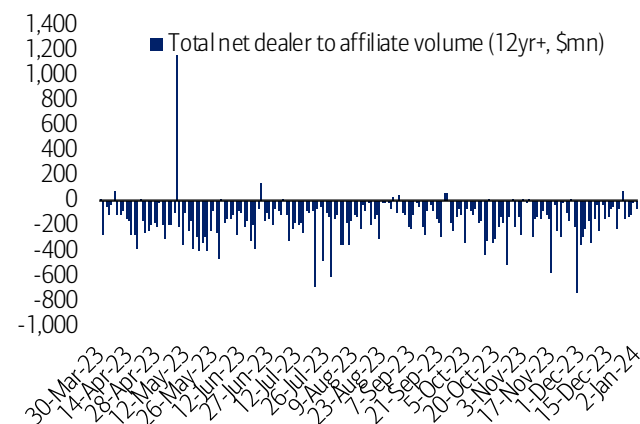
Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.

Source: Bloomberg, TRACE

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Exhibit 25: Net dealer buying from affiliate (12yr+)

Foreign buying of longer maturity US IG corporate bonds has been consistent this year



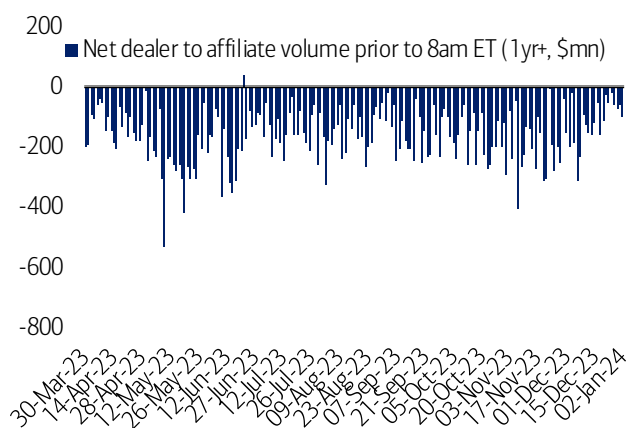
Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.

Source: Bloomberg, TRACE

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Exhibit 26: Net dealer-to-affiliate trading volumes before 8am ET

Foreign buying before 8am NY time is dominated by Asia and has been consistent this year



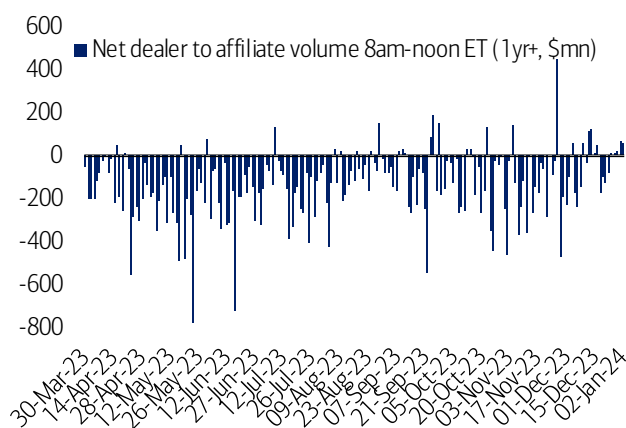
Note: Morning share of daily trading volume is correlated with secondary market activity of foreign investors due to different time zones.

Source: BofA Global Research, TRACE

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Exhibit 27: Net dealer-to-affiliate trading volumes 8am - noon ET

Foreign buying 8am-noon NY time is dominated by Europe and has been inconsistent this year



Note: Morning share of daily trading volume is correlated with secondary market activity of foreign investors due to different time zones.

Source: BofA Global Research, 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

Unched: Unchanged

CPI: Consumer Price Index

FOMC: The Federal Open Market Committee

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