

Situation Room

February IG ratings: strong

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Net ratings change for IG bonds in February was a strong net upgrade of +\$57bn (upgrades less downgrades, notional * notches), up from a modest +\$9bn net upgrade in January and a -\$45bn net downgrade in December. Sectors with most upgrades in February included Utilities, Industrial Products and Energy, while sectors with most net downgrades were Technology, Banks/Brokers and Media & Entertainment.

Rating agencies picked up activity in February

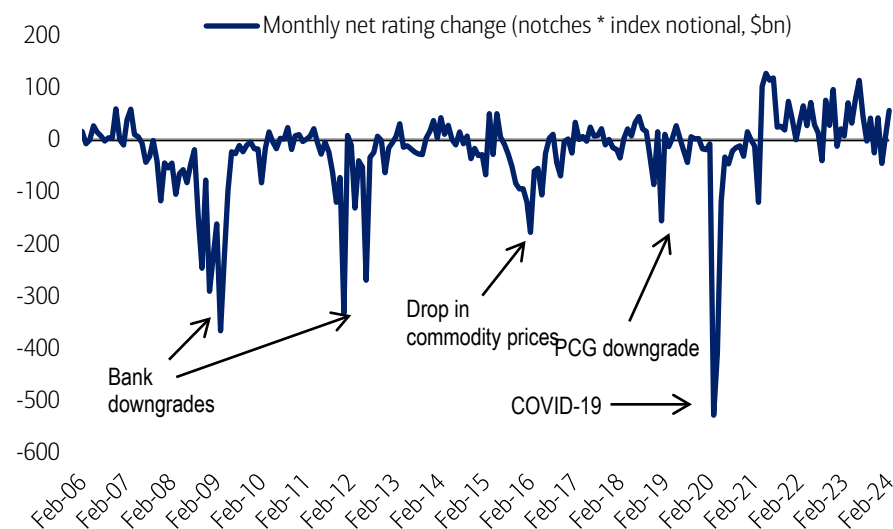
Gross rating activity for IG corporate issuers (upgrades + downgrades) rose in February to an eight-month high \$171bn, notably above the \$138bn median over the prior 12 months (Exhibit 5). Upgrades as a share of total rating actions rose to 67% in February, up from 57% in January and close to the 66% LTM median (Exhibit 6).

Outlook: still net positive

The outlook calls for actions to remain on net stronger than typical. The share of IG index bonds on a positive outlook or watch declined to 1.6% at the end of February, close to the 1.5% median since 2010 (Exhibit 7). However, the share of ratings on a negative outlook / watch remained at historically low levels.

Exhibit 1: The pace of net rating upgrades improved again in February

US IG net upgrades improved to an eight-month high in February.



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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04 March 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 Talagadeevi
Credit Strategist
BofAS
sreenivasa.rao@bofa.com

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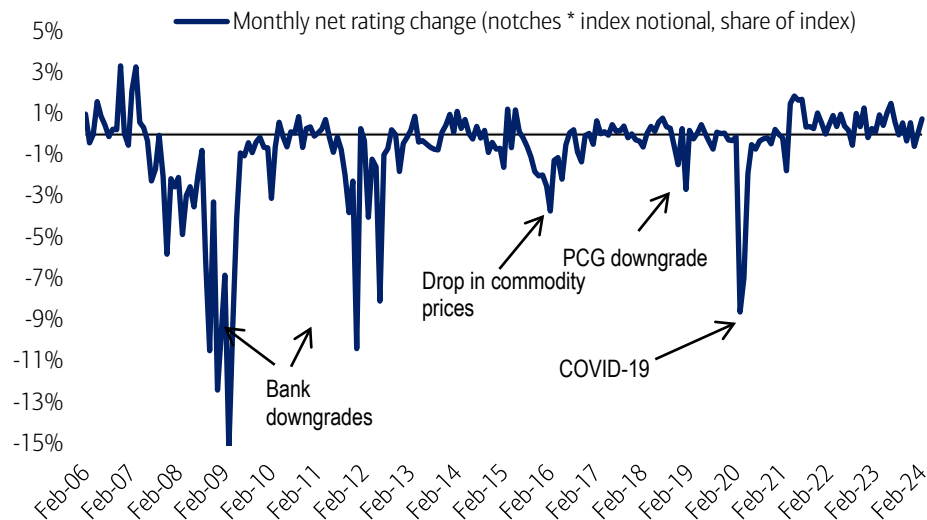
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Exhibit 2: Net upgrades improved to +0.6% of index notional in February

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



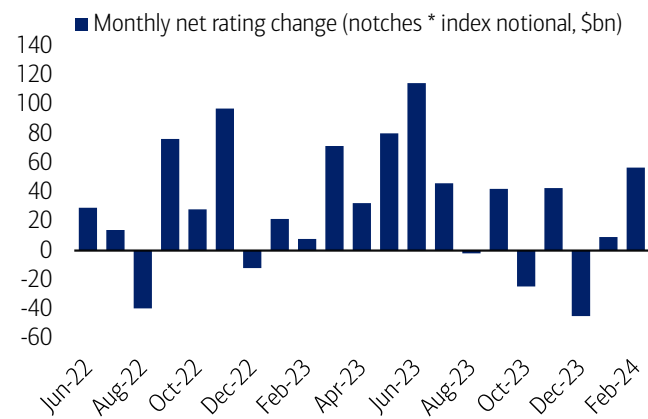
Note: net rating change equals upgrades less downgrades. Based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO.

Source: BofA Global Research, Bloomberg.

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Exhibit 3: Upgrades exceeded downgrades in February

Net upgrades rose to +\$57bn in February from +\$9bn in January, with \$42bn being the monthly median over the past 12 months.



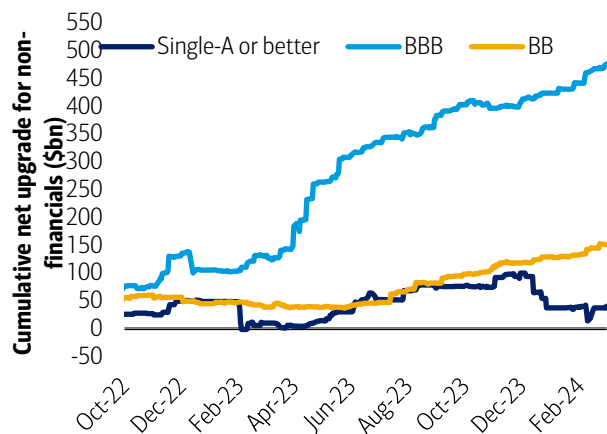
Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO.

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 in 2023 and so far in 2024

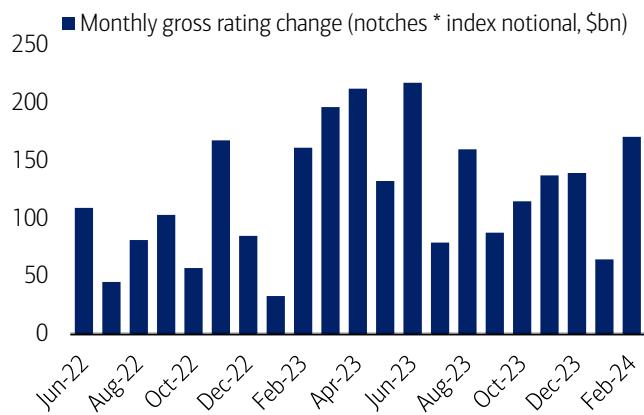


Source: BofA Global Research, Bloomberg.

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Exhibit 5: Gross rating actions accelerated in February

Gross rating increased to \$171bn in February from \$65bn in January.



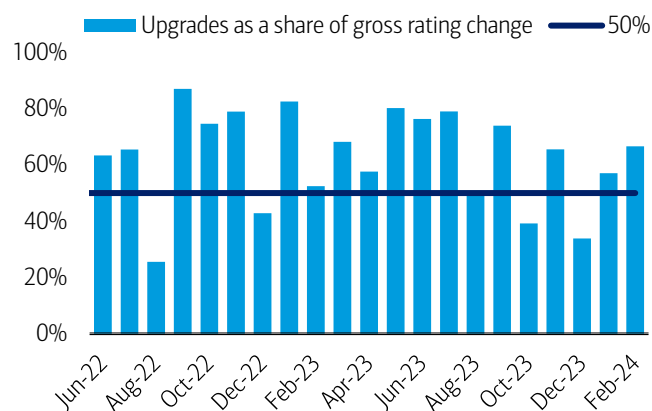
Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO

Source: BofA Global Research

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Exhibit 6: More upgrades than downgrades in February

Upgrades accounted for 67% of total rating actions in February, up from 57% in January and 66% 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

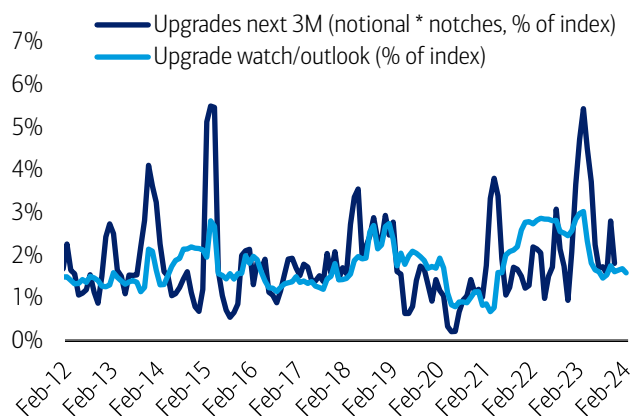
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Rating watches/outlooks point to more upgrades

Our tracker for IG corporate bonds on a positive watch or outlook was at 1.6% of the index in February (\$131bn), down from 1.7% in January (\$137bn). The current level is near the 1.5% historical median, suggesting rating agencies are signaling a close to 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 2.0% (\$163bn), 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 stable in February.



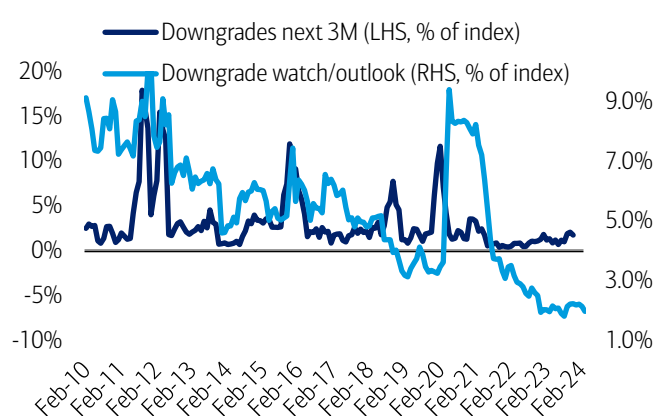
Note: watch/outlook is computed as 0.66 * notional for a watch and 0.33 * notional for an outlook. Upgrades are tracking rating changes only (ignoring outlook and watch changes).

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 February 2024.



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).

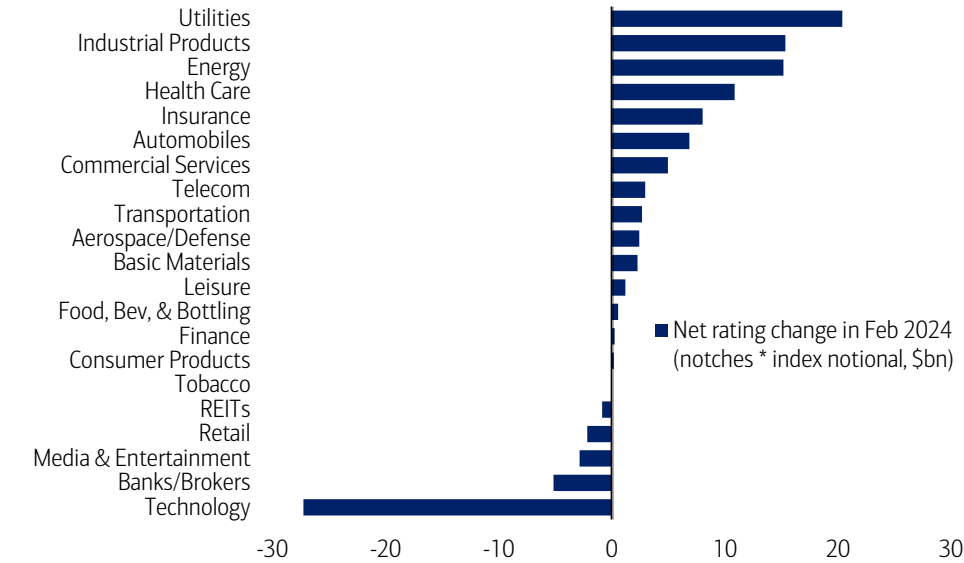
Source: BofA Global Research

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Sector/issuer level

Sectors with most upgrades in February included Utilities (+\$20.4bn), Industrial Products (+\$15.3bn) and Energy (+\$15.2bn). Sectors with most net downgrades in February were Technology (-\$27.3bn), Banks/Brokers (-\$5.2bn) and Media & Entertainment (-\$2.9bn). We list issuers with the biggest February upgrades and downgrades in Exhibit 10 and Exhibit 11 below.

Exhibit 9: February 2024 net rating changes by sector (notional * notches, \$bn)
February downgrades were dominated by the Technology sector (-\$27.3bn).



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 COA0
Source: BofA Global Research



Exhibit 10: Issuers with largest ratings upgrades in Feb-24

Top 15 issuers by rating upgrades.

Ticker	Sector	Issuer notional (\$bn)	Rating change: notches	Rating change: notional * \$bn
PCG	Utilities	36.1	0.6	20.1
ET	Energy	38.6	0.2	8.6
DE	Industrial Products	29.7	0.2	6.6
HYNMTR	Automobiles	18.3	0.3	6.1
SIEGR	Industrial Products	16.7	0.3	5.6
BMJ	Health Care	33.7	0.2	5.6
PRU	Insurance	21.4	0.2	3.4
TRGP	Energy	11.5	0.3	3.1
GE	Industrial Products	6.3	0.4	2.8
ENTERP	Commercial Services	7.9	0.3	2.6
NOVNVX	Health Care	11.4	0.2	2.5
ELV	Health Care	22.1	0.1	2.4
WM	Commercial Services	10.5	0.2	2.4
NBNAUS	Telecom	4.7	0.5	2.3
CP	Transportation	13.0	0.2	2.1

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 Feb-24

Top 15 issuers by rating downgrades.

Ticker	Sector	Issuer notional (\$bn)	Rating change: notches	Rating change: notional * \$bn
INTC	Technology	46.3	-0.6	-25.8
TFC	Banks/Brokers	25.7	-0.3	-8.6
COF	Finance	26.9	-0.1	-3.0
PARA	Media & Entertainment	13.0	-0.2	-2.9
CCI	REITs	18.8	-0.1	-2.1
VTR	REITs	5.9	-0.2	-1.3
VFC	Retail	2.6	-0.5	-1.3
NTT	Telecom	6.5	-0.2	-1.1
FABSVJ	Technology	1.1	-0.8	-0.9
AAP	Retail	1.8	-0.5	-0.9
GLW	Technology	4.6	-0.2	-0.8
WHR	Consumer Products	3.2	-0.2	-0.7
CMI	Industrial Products	2.8	-0.2	-0.5
HCSERV	Health Care	2.0	-0.2	-0.3
ABT	Health Care	11.8	0.0	-0.3

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

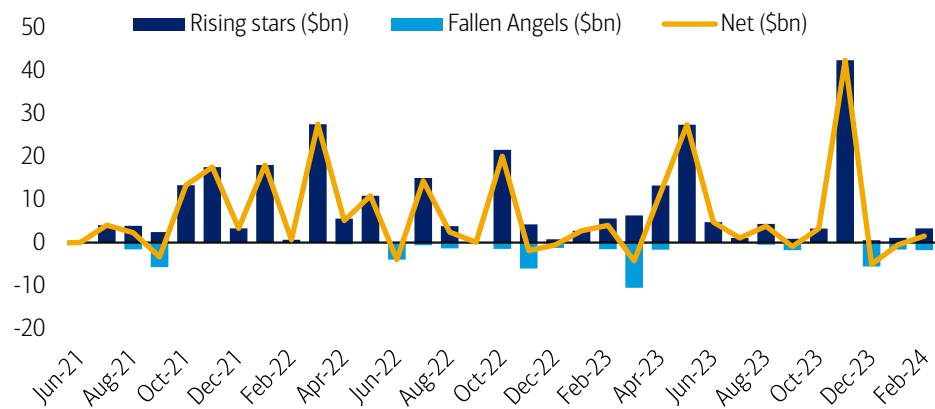
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Rising stars and fallen angels

Based on ICE BofA indices ex. EM \$3.3bn of bonds were upgraded from HY to IG in February (rising stars). On the other hand, \$1.8bn were downgraded from IG to HY (fallen angels) in February (Exhibit 12, Exhibit 13, Exhibit 14).

Exhibit 12: Monthly rising star and fallen angel volumes

\$3.3bn of rising stars, -\$1.8bn fallen angels in February (ex. EM).



Note: excluding EM issuers.

Source: BofA Global Research, ICE Data Indices, LLC

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Exhibit 13: February 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)
LVS	Leisure	BBB3	3	2,250	93.19	6.15	161
RCL	Leisure	BBB3	1	1,000	106.07	4.93	61

Source: BofA Global Research, ICE Data Indices, LLC

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Exhibit 14: February 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)
AAP	Retail	BB1	5	1,800	91.20	6.01	164

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 ½ 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 (2/3) / 2 = 1/3, with the corresponding downgrade amount of \$167mn.

Daily credit snapshot

US IG issuance totaled \$21.5bn across 14 deals today, \$21.5bn WTD and \$21.5bn MTD. The average new issue concession was 8.1bps today, while the average break performance was 3.0bps tighter today. This week's new issues are trading 3.0bps tighter on average from pricing.

S&P 500 closed -0.12%, 10-year Treasury yields +3bps, CDX IG -0.3bps, CDX HY +\$0.06pts, and cash bond spreads quoted -1/-3 bp today, LQD closed 0.17bps tighter today.

Exhibit 15: 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)
2024-02-26	BNCN	Brookfield Finance Inc	30	750	A3/A-	5.968	155	13	n.a.	155
2024-02-26	BPLN	BP Capital Markets PLC	PERP NC10	1,300	A2/A-	6.45	n.a.	n.a.	n.a.	207
2024-02-26	CNP	CenterPoint Energy Houston Electric LLC	10	400	A2/A	5.15	90	7	n.a.	94
2024-02-26	DANBNK	Danske Bank A/S	4NC3	1,000	A3/A+	5.427	95	n.a.	-3	94
2024-02-26	DANBNK	Danske Bank A/S	6NC5	1,250	Baa2/BBB+	5.705	140	n.a.	-2	140
2024-02-26	DUK	Duke Energy Indiana LLC	10	300	Aa3/A	5.25	100	2	-1	103
2024-02-26	EXC	Potomac Electric Power Co	10	375	A2/A	5.2	95	n.a.	2	102
2024-02-26	EXC	Potomac Electric Power Co	30	300	A2/A	5.5	110	n.a.	2	116
2024-02-26	FI	Fiserv Inc	3	750	Baa2/BBB	5.15	68	n.a.	n.a.	69
2024-02-26	FI	Fiserv Inc	7	500	Baa2/BBB	5.35	105	10	n.a.	111
2024-02-26	FI	Fiserv Inc	10	750	Baa2/BBB	5.45	115	4	n.a.	100
2024-02-26	HON	Honeywell International Inc	6	500	A2/A	4.875	55	n.a.	0	55
2024-02-26	HON	Honeywell International Inc	8	500	A2/A	4.95	65	n.a.	n.a.	71
2024-02-26	HON	Honeywell International Inc	11	750	A2/A	5	75	n.a.	-2	80
2024-02-26	HON	Honeywell International Inc	30	1,750	A2/A	5.25	85	n.a.	-2	92
2024-02-26	HON	Honeywell International Inc	40	650	A2/A	5.35	95	n.a.	-1	101

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Date	Ticker	Name	Tenor	Size (\$mm)	Moody's/S&P Rating	Coupon (%)	Px Spread (bps)	New Issue Conc. (bps)	* Break performance	Current spread (bps)
2024-02-26	HSBC	HSBC USA Inc	3	500	A2/A-	FRN	0	n.a.	n.a.	n.a.
2024-02-26	HSBC	HSBC USA Inc	3	1,000	A2/A-	5.294	80	n.a.	-1	84
2024-02-26	HSBC	HSBC Holdings PLC	6NC5	1,500	A3/A-	5.546	123	n.a.	1	130
2024-02-26	HSBC	HSBC Holdings PLC	11NC10	1,250	A3/A-	5.719	143	n.a.	2	152
2024-02-26	KEY	KeyCorp	11NC10	1,000	Baa2/BBB	6.401	210	n.a.	-3	214
2024-02-26	LYB	LYB International Finance III LLC	10	750	Baa2/BBB	5.5	130	n.a.	n.a.	136
2024-02-26	NWG	NatWest Group PLC	4NC3	300	A3/BBB+	FRN	SOFR+125	n.a.	n.a.	n.a.
2024-02-26	NWG	NatWest Group PLC	4NC3	1,000	A3/BBB+	5.583	110	0	-2	113
2024-02-26	NWG	NatWest Group PLC	11NC10	1,500	A3/BBB+	5.778	150	16	1	156
2024-02-26	PCG	Pacific Gas and Electric Co	5	850	Baa2/BBB	5.55	125	n.a.	-4	121
2024-02-26	PCG	Pacific Gas and Electric Co	10	1,100	Baa2/BBB	5.8	153	n.a.	3	159
2024-02-26	PCG	Pacific Gas and Electric Co	29	300	Baa2/BBB	6.75	170	n.a.	6	184
2024-02-26	PSX	Phillips 66 Co	7	600	A3/BBB+	5.25	100	n.a.	3	103
2024-02-26	PSX	Phillips 66 Co	9	400	A3/BBB+	5.3	110	n.a.	4	117
2024-02-26	PSX	Phillips 66 Co	30	500	A3/BBB+	5.65	125	2	3	136
2024-02-26	R	Ryder System Inc	3	350	Baa2/BBB+	5.3	83	n.a.	n.a.	n.a.
2024-02-26	R	Ryder System Inc	5	550	Baa2/BBB+	5.375	105	n.a.	n.a.	n.a.
2024-02-26	SO	Southern Co/The	5	400	Baa2/BBB	5.5	85	6	-5	88
2024-02-26	SO	Southern Co/The	10	400	Baa2/BBB	5.7	117	3	-2	123
2024-02-26	WAB	Westinghouse Air Brake Technologies Corp	10	500	Baa3/BBB	5.611	132	n.a.	n.a.	n.a.
2024-02-26	XEL	Xcel Energy Inc	10	800	Baa1/BBB+	5.5	125	n.a.	-1	153
2024-02-27	EIX	Southern California Edison Co	2	600	A2/A-	5.35	62	1	n.a.	n.a.
2024-02-27	EIX	Southern California Edison Co	5	600	A2/A-	5.15	83	7	n.a.	n.a.
2024-02-27	EIX	Southern California Edison Co	30	400	A2/A-	5.75	135	3	n.a.	142
2024-02-27	GMT	GATX Corp	3	350	Baa2/BBB	5.4	95	n.a.	-6	91
2024-02-27	NEE	NextEra Energy Capital Holdings Inc	31NC5	1,000	Baa2/BBB	6.7	236	n.a.	n.a.	251
2024-02-27	SEB	Skandinaviska Enskilda Banken AB	3	350	Aa3/A+	FRN	SOFR+89	n.a.	n.a.	84
2024-02-27	SEB	Skandinaviska Enskilda Banken AB	3	650	Aa3/A+	5.125	73	n.a.	-3	76
2024-02-27	SEB	Skandinaviska Enskilda Banken AB	5	750	A3/A-	5.375	117	n.a.	-2	122
2024-02-27	WTW	Willis North America Inc	30	750	Baa3/BBB+	5.9	150	n.a.	2	156
2024-02-28	AON	Aon North America Inc	3	600	Baa2/A-	5.125	75	n.a.	-2	72
2024-02-28	AON	Aon North America Inc	5	1,000	Baa2/A-	5.15	90	n.a.	-2	88
2024-02-28	AON	Aon North America Inc	7	650	Baa2/A-	5.3	105	n.a.	-1	104
2024-02-28	AON	Aon North America Inc	10	1,750	Baa2/A-	5.45	120	n.a.	-1	119
2024-02-28	AON	Aon North America Inc	30	2,000	Baa2/A-	5.75	140	n.a.	-6	135
2024-02-28	CTRA	Coterra Energy Inc	10	500	Baa2/BBB	5.6	135	n.a.	1	139
2024-02-28	NWG	NatWest Group PLC	10	1,000	Baa1/BBB-	6.475	220	n.a.	3	219
2024-02-28	PEG	Public Service Electric and Gas Co	10	450	A1/A	5.2	93	n.a.	n.a.	92
2024-02-28	PEG	Public Service Electric and Gas Co	30	550	A1/A	5.45	108	13	-2	107
2024-02-28	RDN	Radian Group Inc	5	625	Baa3/BBB-	6.2	195	n.a.	n.a.	n.a.
2024-02-28	TPG	TPG Operating Group II LP	40NC5	400	NA/NA	6.95	n.a.	n.a.	n.a.	n.a.
2024-02-28	TSN	Tyson Foods Inc	5	600	Baa2/BBB	5.4	115	n.a.	-3	112
2024-02-28	TSN	Tyson Foods Inc	10	900	Baa2/BBB	5.7	145	3	1	145
2024-02-29	BMO	Bank of Montreal	60NC5	1,000	Baa3/BBB-	7.7	n.a.	n.a.	n.a.	n.a.
2024-02-29	PROTAR	Prologis Targeted US Logistics Fund LP	5	500	A3/BBB+	5.25	110	n.a.	n.a.	n.a.
2024-02-29	PROTAR	Prologis Targeted US Logistics Fund LP	10	500	A3/BBB+	5.5	135	n.a.	n.a.	n.a.
2024-02-29	SAFE	Safehold GL Holdings LLC	10	300	A3/BBB+	6.1	200	n.a.	n.a.	195
2024-02-29	TPG	TPG Operating Group II LP	10	600	NA/BBB+	5.875	165	n.a.	n.a.	163

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.

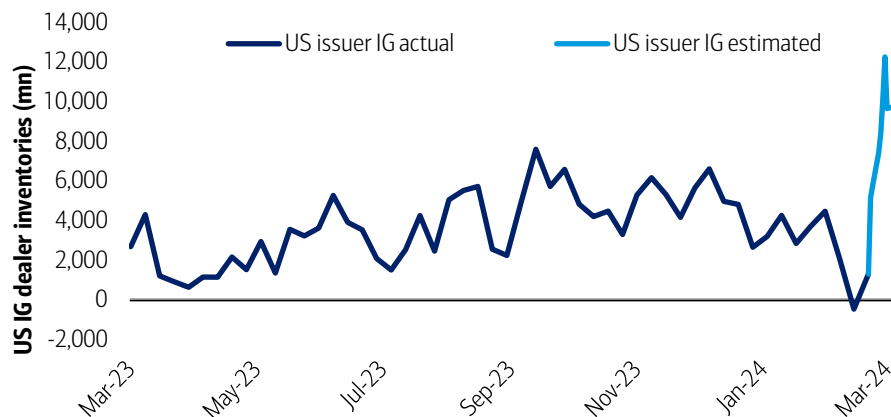
The actual inventories of US issuer bonds based on NY Fed survey, as well as the estimated change since the latest Fed report are plotted in Exhibit 16. We estimate the corresponding DV01 equivalent in Exhibit 17. More details by sector and maturity are



available in Exhibit 18 and Exhibit 19. Finally, note that the data for the current date is through about 4:40 p.m. Eastern Standard Time.

Exhibit 16: Estimated dealer inventories of IG corporate bonds.

We estimate IG dealer inventories of US issuer bonds increased to \$9.8bn currently from \$1.3bn on Feb-21.



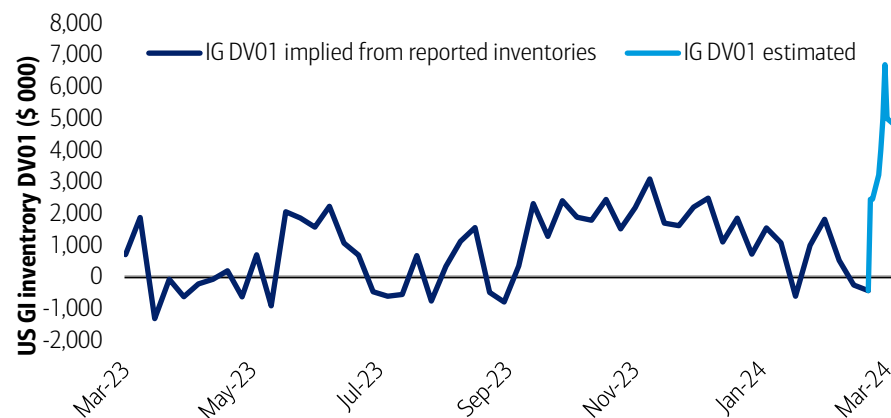
Note: data for US issuer bonds only, maturities 13M or longer. Actual dealer inventory data is from Primary Dealer Statistics survey by the NY Fed. The subsequent change in inventory is estimated based on TRACE.

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

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Exhibit 17: Estimated dealer inventory DV01 for IG corporate bonds.

We estimate IG dealer inventory DV01 of US issuer bonds increased to \$4.8mn currently from -\$0.4bn on Feb-21.



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

We estimate IG dealer inventories increased \$16mn today and increased \$3,015mn over the prior week.

Sector	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 4-Mar-24 (\$mn)			
	4-Mar	1-Mar	1 W	2 W	4 W	4-Mar	1-Mar	1 W	2 W	4 W	Buy	Sell	Dealer	Total
High grade (13M+)	16	-3,288	3,015	11,856	11,151	-234	-2,128	1,920	6,446	7,129	11,414	11,398	10,210	33,023
<3yr	-41	-851	158	2,219	1,410	-20	-164	-74	289	93	1,818	1,858	2,077	5,753
3-5yr	131	-399	725	3,384	2,538	24	-130	260	1,226	820	2,041	1,911	2,194	6,146
5-11yr	-50	-1,391	-100	1,967	1,146	-67	-934	-324	890	327	4,174	4,225	3,386	11,784
11+yr	-23	-647	2,232	4,286	6,056	-172	-900	2,057	4,040	5,889	3,381	3,405	2,554	9,340
Fin	-43	-1,493	1,494	4,561	2,636	-137	-721	777	2,110	1,321	4,006	4,049	3,454	11,509
Non-Fin	59	-1,795	1,520	7,295	8,515	-97	-1,407	1,143	4,336	5,809	7,409	7,349	6,756	21,514

Exhibit 18: Estimated changes in IG dealer inventories by maturity and broad sector.

We estimate IG dealer inventories increased \$16mn today and increased \$3,015mn over the prior week.

	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 4-Mar-24 (\$mn)			
	10	-3,169	3,158	11,827	11,188	-235	-2,115	1,944	6,532	7,229	11,275	11,265	10,135	32,674
Fixed	10	-3,169	3,158	11,827	11,188	-235	-2,115	1,944	6,532	7,229	11,275	11,265	10,135	32,674
Floating	6	-119	-144	29	-37	0	-14	-25	-86	-100	139	133	76	349
US issuers	89	-2,602	2,310	9,345	8,636	-170	-1,694	1,614	5,081	5,437	9,268	9,179	8,550	26,997
DM Yankees	-146	-632	489	1,791	1,468	-146	-407	116	781	924	1,787	1,933	1,501	5,221
EM Yankees	74	-54	216	720	1,047	81	-28	190	584	768	360	286	159	806

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 19: Estimated changes in IG dealer inventories by sector.

We estimate today IG dealer inventories declined -\$352mn for Banks/Brokers and increased \$41mn for Energy.

Sector	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 4-Mar-24 (\$mn)			
	4-Mar	1-Mar	1 W	2 W	4 W	4-Mar	1-Mar	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Aerospace/Defense	-121	-175	-342	-117	262	-131	-176	-280	-133	125	297	418	198	914
Automobiles	62	-65	132	648	552	31	-34	60	268	239	320	259	230	809
Banks/Brokers	-352	-1,039	744	2,952	2,277	-277	-484	149	1,046	534	2,653	3,005	2,303	7,960
Basic Materials	116	-104	224	706	789	103	-73	114	371	392	423	306	268	997
Commercial Services	9	-29	-190	-96	-227	9	-10	-45	31	-3	144	135	101	381
Energy	41	-33	797	1,474	1,015	-19	-26	603	952	798	704	663	697	2,065
Finance	113	-197	-9	542	69	44	-79	78	302	118	621	508	578	1,707
Food, Bev, & Bottling	15	-74	99	480	569	31	-40	166	425	538	402	387	344	1,134
Health Care	-85	-594	-468	-99	524	-98	-540	-517	-802	-178	1,392	1,477	1,401	4,270
Industrial Products	49	-61	-62	469	642	16	-5	2	372	538	335	286	349	970
Insurance	57	-66	315	501	390	27	-34	289	454	672	262	206	274	742
Media & Entertainment	109	-78	358	725	535	107	-50	282	498	262	499	390	451	1,340
REITs	139	-191	444	566	-100	69	-124	262	307	-3	469	330	299	1,099
Retail	-20	-21	4	145	56	10	-25	46	224	223	376	396	374	1,147
Technology	-145	-279	-23	978	654	-139	-242	-63	577	382	789	934	780	2,503
Telecom	-68	-58	-77	-31	142	-51	-48	-34	-18	177	309	377	372	1,057
Tobacco	-22	-49	11	8	394	-8	-10	13	6	166	163	185	190	539
Transportation	35	-58	62	175	424	32	-50	11	170	444	142	108	101	351
Utilities	92	-78	1,011	1,728	2,174	45	-36	877	1,433	1,746	956	863	716	2,535
Other	-8	-39	-17	102	10	-36	-45	-93	-37	-40	156	164	183	504

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

Source: BofA Global Research, FINRA, TRACE.

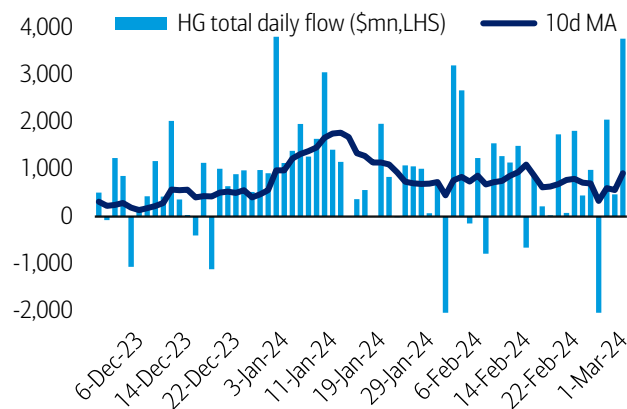
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Daily HG fund flows

We define our high grade flows 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.

Exhibit 20: Daily HG fund flows

The chart plots daily HG fund flows as well as a 10-day average trend.

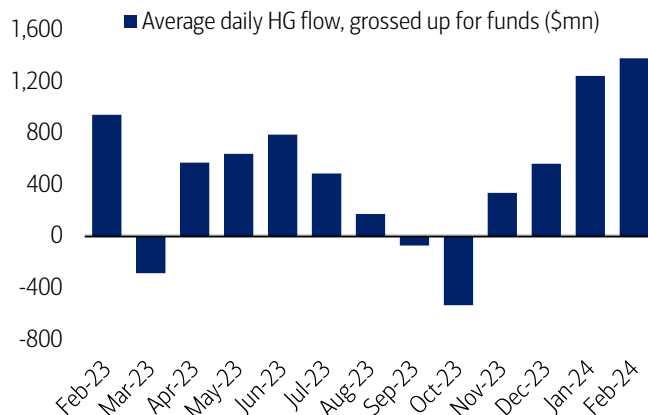


Source: EPFR Global, BofA Global Research

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Exhibit 21: Average daily HG flows by month

The chart plots the average daily ETF flows plus double the average daily fund flow, as only about half of funds report flows daily.



Source: EPFR Global, BofA Global Research

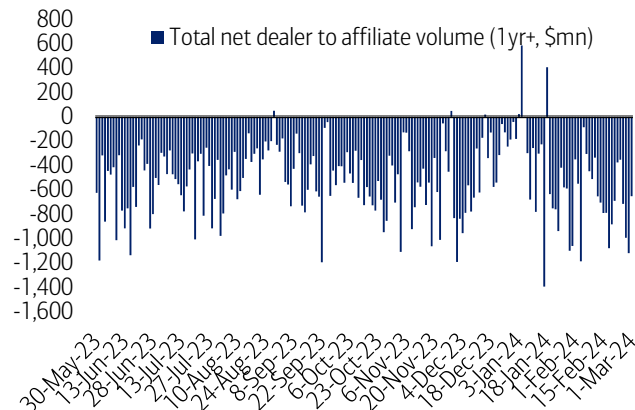
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Daily foreign demand tracker

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 22 shows the overall daily dealer-to-affiliate volumes while Exhibit 23, Exhibit 24 and Exhibit 25 show subsets of this data. In particular Exhibit 23 shows net dealer-to-affiliate volumes for longer maturity (12+ years) bonds, Exhibit 24 displays volumes reported to Trace before 8am NY time (biased toward Asian buying) and Exhibit 25 shows the subset of net trades reported between 8am and noon (biased toward European buying).

Exhibit 22: Net dealer buying from affiliate (1yr+)

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



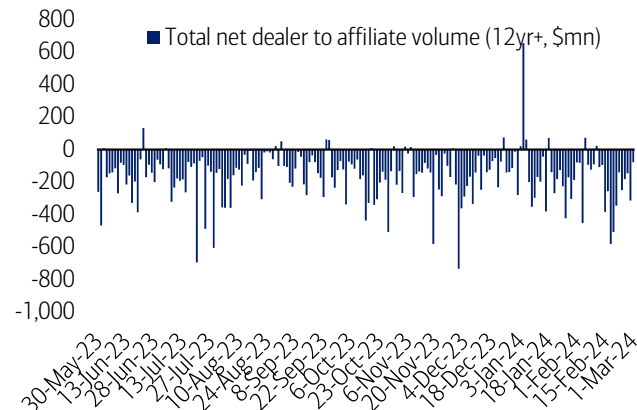
Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.

Source: Bloomberg, TRACE

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Exhibit 23: Net dealer buying from affiliate (12yr+)

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



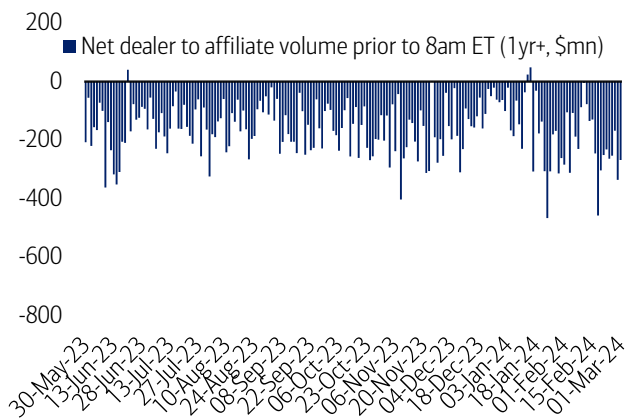
Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.

Source: Bloomberg, TRACE

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Exhibit 24: 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



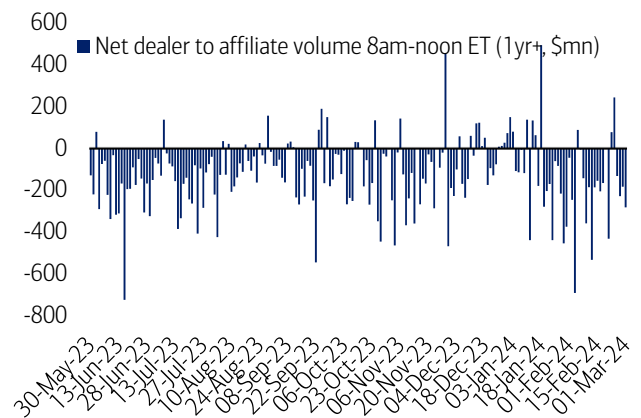
Note: Morning share of daily trading volume is correlated with secondary market activity of foreign investors due to different time zones.

Source: BofA Global Research, TRACE

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Exhibit 25: 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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