

Situation Room

Trades for declining rates risk

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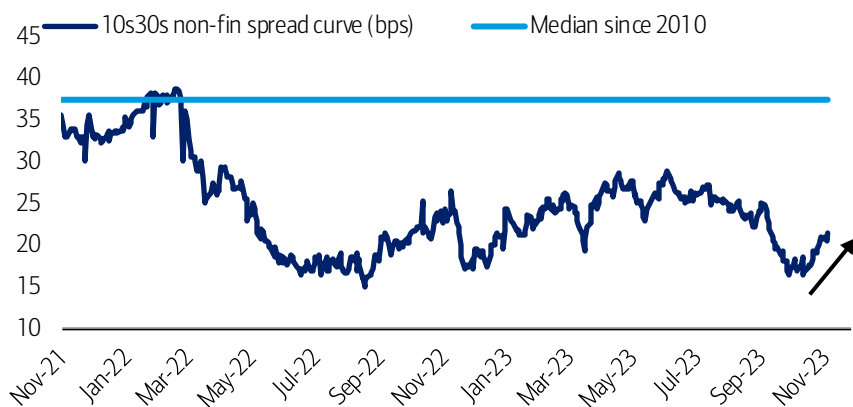
Interest rates risk declined materially last week on the combination of a dovish Fed, a benign Treasury refunding announcement and cooling US data (see [US Watch: October employment: A cool front to start fall](#)). As a result, the impacts of “rate shock” on IG credit should now be reversing as follows. First, we look for flatter 10s30s IG spread curve and steeper 5s10s IG spread curve (see [Credit Market Strategist: The flattening 10s](#)). Second, banks spreads should finally outperform industrials (see [Situation Room: Bank spreads vs rates](#)). Third, bonds should outperform CDS following a big underperformance over the past two months (see [Situation Room: Basis for bonds](#), Exhibit 5). In Exhibit 6 we screen for CDS cash basis that have widened the most. Fourth, a more benign outlook for spreads and lower recession risk should also be supportive for BBBs, as they continue to trade cheap to single-As (Exhibit 7).

10s30s to re-flatten

Investors reduced duration in October in reacted to the rate shock, by shifting out of 30yr and into 10yr maturities. This de-risking pushed dealer inventories of 30yr IG corporate bonds to the highest levels in at least 12 months (Exhibit 2). With rates risk lower the technicals for 30yr IG spreads should again turn very strong, given the lack of 30yr supply (Exhibit 3). As a result, we look for 10s30s IG spread curve to re-flatten (Exhibit 1). In Exhibit 4 below we screen for 10s30s spread curves that steepened the most in October.

Exhibit 1: We look for IG 10s30s spread curve to flatten again.

IG 10s30s IG spread curve flattened to 17bps in early October, before re-steepening to 22bps currently.



Source: BofA Global Research, ICE Data Indices, LLC

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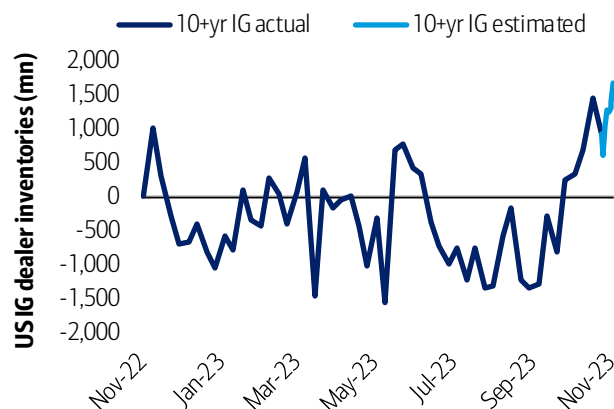
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Timestamp: 06 November 2023 08:13PM EST

Exhibit 2: Dealer inventories of IG 10+yr bonds at the highs.

We estimate dealer inventories of 10+yr bonds have reached some of the highest levels in at least 12 months.

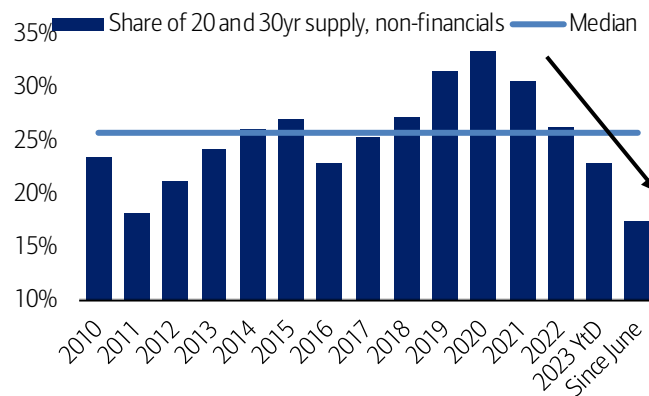


Source: BofA Global Research, NY Fed, TRACE.

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Exhibit 3: The share of 10+yr supply collapsed in 2023.

The share of 10+yr IG supply dropped to 22.9% YtD and 17.5% since June 2023 – some of the lowest since at least 2010.



Source: BofA Global Research

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Exhibit 4: Steeper 10s30s IG spread curve screen.

We screen for 10s30s IG spread curves that steepened by at least 5bps since September 29.

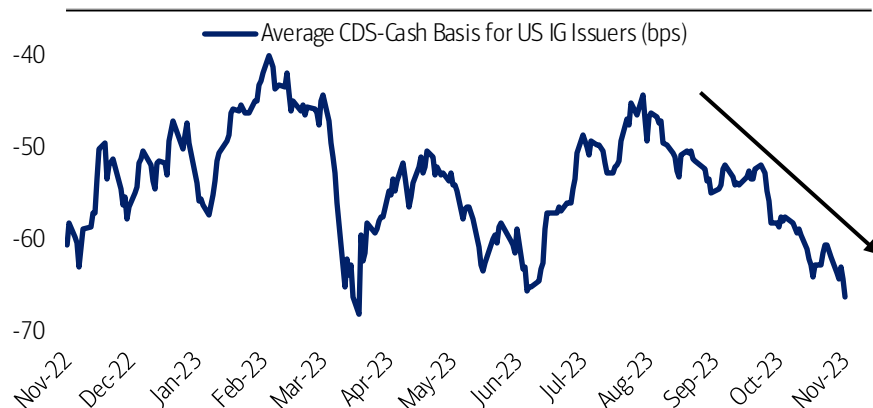
Issuer	10yr bond	30yr bond	Index rating	Sector	10yr g-spread (bps)	30yr g-spread (bps)	10s30s curve, \$ adj. (bps)	Curve on Sep 29, \$ adj. (bps)	Curve change
DOLLAR GENERAL	DG 5.45 07/05/33	DG 5 1/2 11/01/52	BBB2	Retail	173	202	42	24	18
ELEC DE FRANCE	EDF 6 1/4 05/23/33	EDF 6.9 05/23/53	BBB1	Utilities	166	235	72	56	16
CHURCH & DWIGHT	CHD 5.6 11/15/32	CHD 5 06/15/52	BBB1	Consumer Products	91	110	27	17	10
MCDONALD'S CORP	MCD 4.95 08/14/33	MCD 5.45 08/14/53	BBB1	Retail	97	123	29	19	10
COLUMBIA PIPE OC	CPGX 6.036 11/15/33	CPGX 6.544 11/15/53	BBB1	Energy	173	204	34	25	8
GEORGIA POWER	SO 4.95 05/17/33	SO 5 1/8 05/15/52	BBB1	Utilities	119	126	13	5	8
OVINTIV INC	OW 6 1/4 07/15/33	OW 7.1 07/15/53	BBB3	Energy	203	238	32	25	7
EXELON CO	EXC 5.3 03/15/33	EXC 5.6 03/15/53	BBB2	Utilities	138	159	26	19	7
APPLE INC	AAPL 4.3 05/10/33	AAPL 4.85 05/10/53	AA1	Technology	40	69	31	25	6
RIO TINTO FINANC	RIOLN 5 03/09/33	RIOLN 5 1/8 03/09/53	A2	Basic Materials	93	106	17	11	6
AT&T INC	T 5.4 02/15/34	T 3 1/2 09/15/53	BBB2	Telecom	149	157	35	29	6
FMC CORP	FMC 5.65 05/18/33	FMC 6 3/8 05/18/53	BBB3	Basic Materials	254	273	25	19	6
AON CORP/AON GLO	AON 5.35 02/28/33	AON 3.9 02/28/52	BBB1	Insurance	134	131	15	10	5
AMGEN INC	AMGN 5 1/4 03/02/33	AMGN 5.65 03/02/53	BBB1	Health Care	125	145	23	17	5
PEPSICO INC	PEP 4.45 02/15/33	PEP 4.65 02/15/53	A1	Food, Bev, & Bottling	42	70	32	26	5
L3HARRIS TECH IN	LHX 5.4 07/31/33	LHX 5.6 07/31/53	BBB2	Aerospace/Defense	135	138	5	-1	5

Source: BofA Global Research

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Exhibit 5: IG CDS cash basis has reached some of the widest levels over the past 12 monhs

IG CDS-cash basis has widened to -66bps currently from -44bps in late July.



Source: BofA Global Research, Markit.

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Exhibit 6: Wide CDS cash basis screen

We screen for IG issuers where the 5yr IG CDS cash basis has widened the most since July 31st.

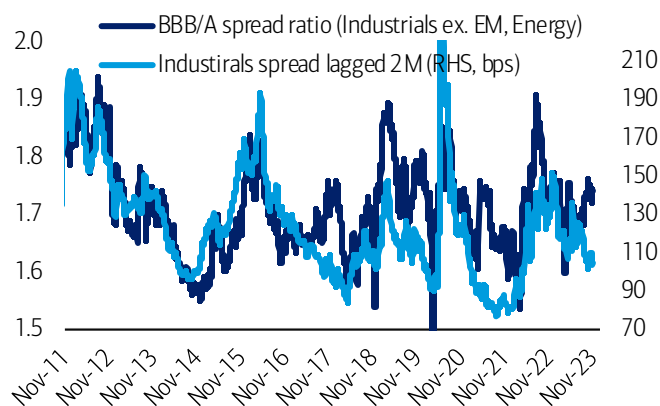
Ticker	Index rating	Sector	Current CDS cash basis (bps)	Basis on July 31st (bps)	Basis change (bps)
PARA	BBB3	Media & Entertainment	-52	10	-62
KR	BBB2	Retail	-63	-24	-39
TRPCN	BBB1	Energy	-81	-44	-37
UPS	A2	Transportation	-54	-19	-35
SRE	BBB2	Utilities	-101	-66	-35
EXPE	BBB3	Leisure	-67	-34	-34
BBY	BBB1	Retail	-53	-20	-33
RTX	BBB1	Aerospace/Defense	-87	-55	-32
CPB	BBB2	Food, Bev, & Bottling	-79	-47	-32
NEE	BBB1	Utilities	-65	-33	-32
HPQ	BBB2	Technology	-48	-16	-31
ORCL	BBB2	Technology	-75	-44	-31
CVS	BBB2	Health Care	-83	-52	-31
JNJ	AAA	Health Care	-30	-1	-29
DGX	BBB2	Health Care	-87	-59	-28
MCD	BBB1	Retail	-67	-39	-28
CAG	BBB3	Food, Bev, & Bottling	-92	-66	-27
NRUC	A2	Finance	-91	-65	-26
EMN	BBB2	Basic Materials	-61	-36	-25
CSX	BBB1	Transportation	-81	-57	-24

Source: BofA Global Research, Markit.

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Exhibit 7: BBB-rated industrial spreads are cheap vs. single-A's

BBB / A industrial spread ratio is currently high relative to spreads.

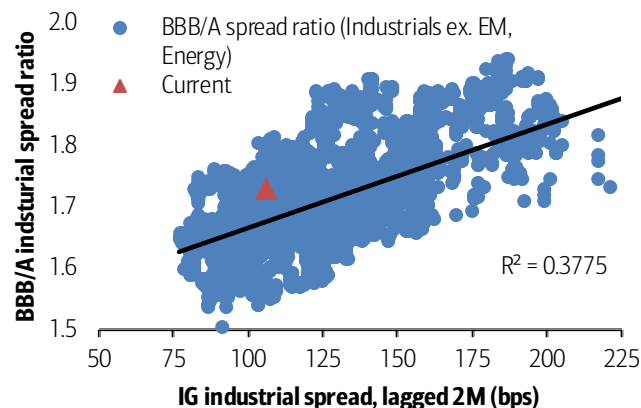


Source: BofA Global Research, ICE Data indices, LLC

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Exhibit 8: BBB/A spread ratio vs. spreads

BBB / A industrial spread ratio screens high relative to spreads.



Source: BofA Global Research, ICE Data indices, LLC

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October IG ratings: From upgrades to downgrades

Net ratings change for IG bonds turned negative in October at -\$25bn (upgrades less downgrades, notional * notches). That's down from +\$42bn net upgrade in September and -\$2bn in August. Negative rating actions were concentrated in Banks, Healthcare and Utilities in October (Exhibit 19).

Higher rating activity

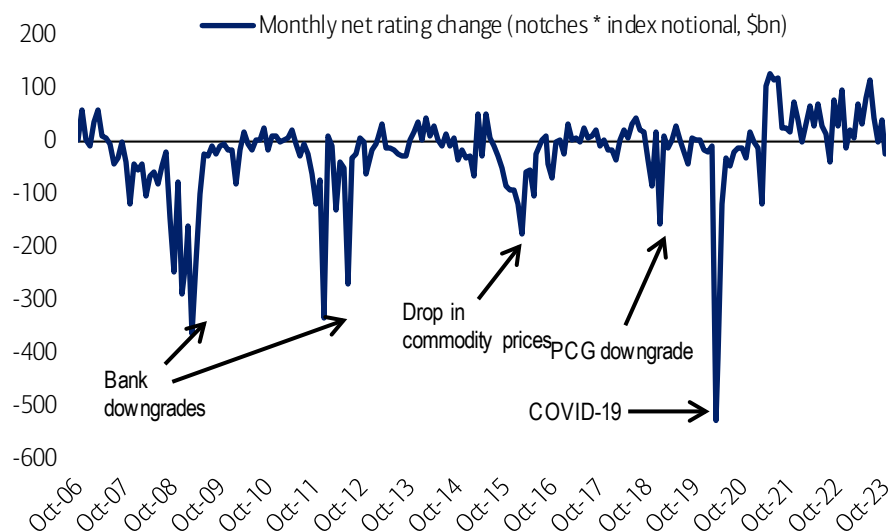
Gross rating activity (upgrades + downgrades) accelerated in October to \$115bn – still below the \$146bn median over the prior 12 months. However, rating upgrades made up merely 39% of the total, down from 74% in September and below the 74% median over the past 12 months (Exhibit 14).

Outlook: typical for upgrades, subdued for downgrades

The outlook calls for a moderating pace of rating upgrades. The share of IG index bonds on a positive outlook or watch was at 1.8% in October, up from 1.5% in September, but is down from 3.0% in March of this year (Exhibit 15). The share on a negative outlook / watch remained steady at 2.2% in October, a very low level relative to history (Exhibit 16).

Exhibit 9: The pace of net rating upgrades turned negative in October

Net upgrades peaked at record \$116bn average monthly pace from Apr to Jul 2021, before slowing in 2022 and into 2023.



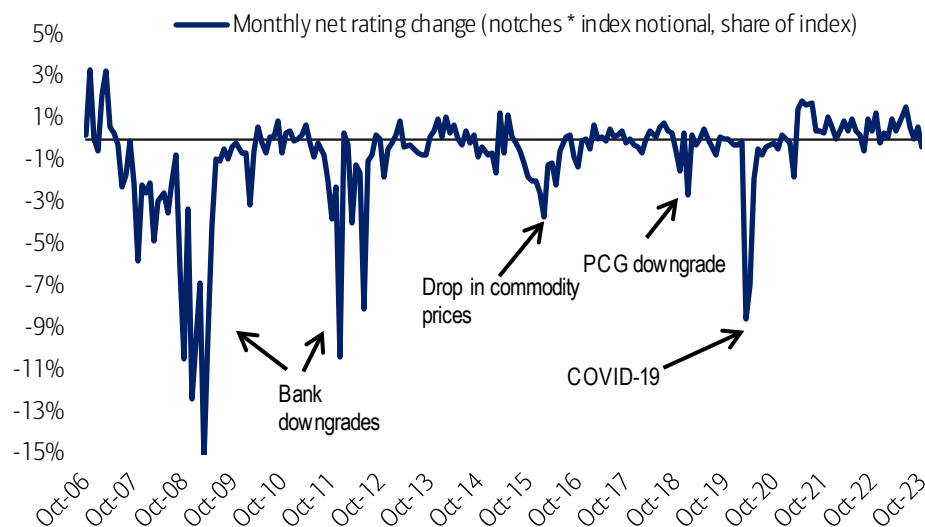
Note: net rating change equals upgrades less downgrades. Based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COA0.

Source: BofA Global Research, Bloomberg.

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Exhibit 10: Net upgrades decreased to -0.3% of index notional in October

Net downgrades peaked at 8.6% of index notional in March 2020 before rebounding to 1.9% peak net upgrade in May 2021.



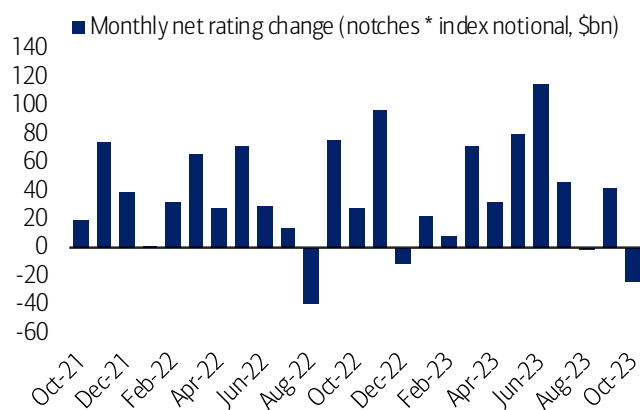
Note: net rating change equals upgrades less downgrades. Based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COA0.

Source: BofA Global Research, Bloomberg.

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Exhibit 11: Downgrades exceeded upgrades in October

Net upgrades decreased to -\$25bn in October from +\$42bn in September, with \$37bn being the monthly median over the past 12 months.



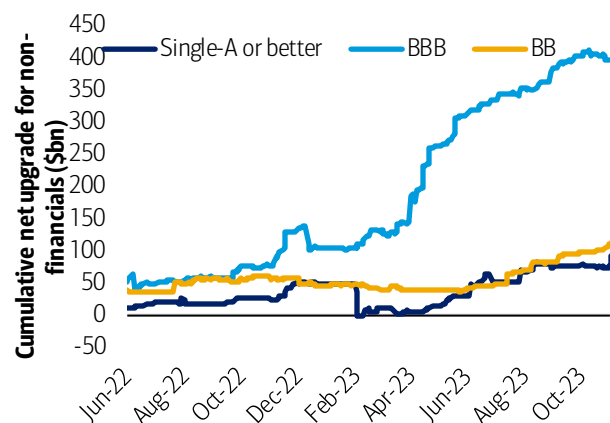
Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO

Source: BofA Global Research

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Exhibit 12: Cumulative net upgrade for non-financials by rating (\$bn)

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

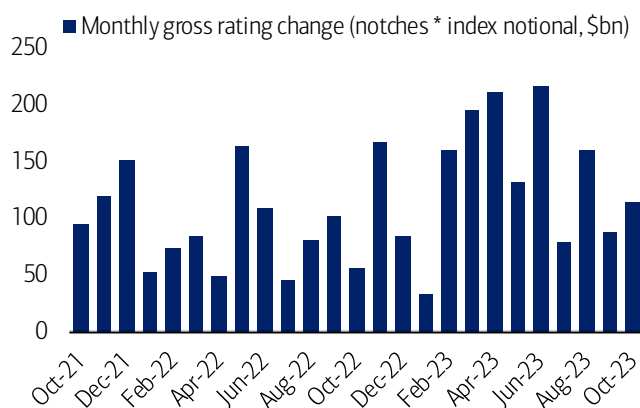


Source: BofA Global Research, Bloomberg.

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Exhibit 13: Gross rating actions accelerated in October

Gross rating actions increased to \$115bn in October from \$88bn in September.



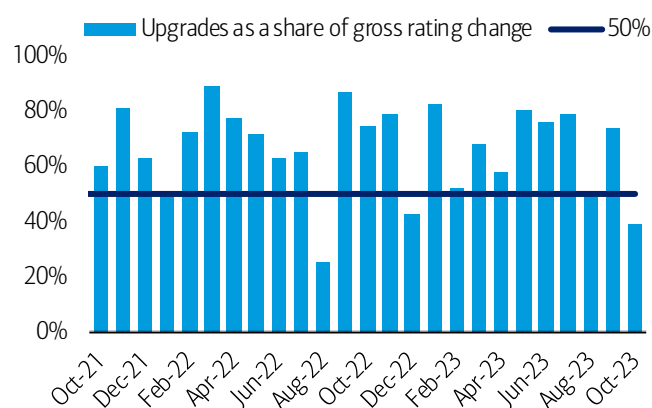
Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO

Source: BofA Global Research

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Exhibit 14: Downgrades outweighed upgrades in October

Upgrades accounted for 39% of total rating actions in October– the LTM median being 74%.



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

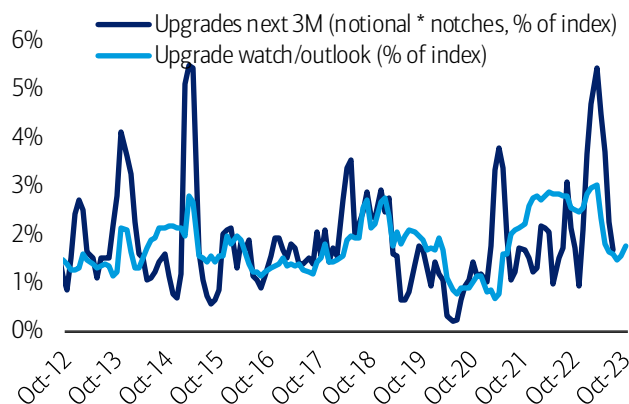
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Rating watches/outlooks point to more upgrades

Our tracker for IG corporate bonds on a positive watch or outlook was at 1.8% of the index in October (\$141bn), up from September (1.5% or \$124bn). The current level is slightly above the historical median, suggesting rating agencies are back to signaling a stronger than usual pace of upgrades over the next three months (Exhibit 15). 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 16).

Exhibit 15: Positive watch/outlook is now back to normal levels

The volume of IG corporate bonds on positive watch/outlook increased in October.



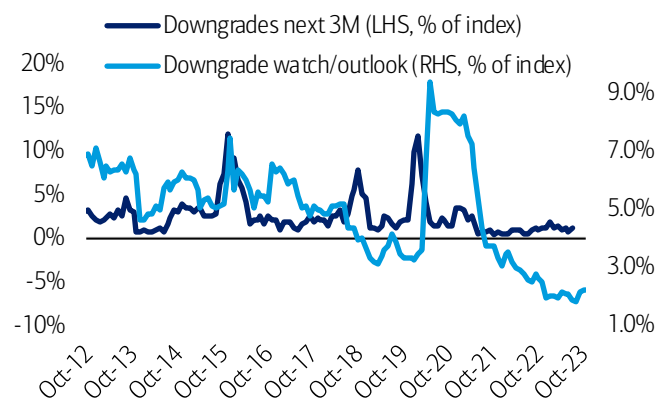
Note: watch/outlook is computed as 0.66 * notional for a watch and 0.33 * notional for an outlook. Upgrades are tracking rating changes only (ignoring outlook and watch changes).

Source: BofA Global Research

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Exhibit 16: Negative watch/outlook remains low

The volume of IG corporate bonds on negative watch/outlook remained low in October 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

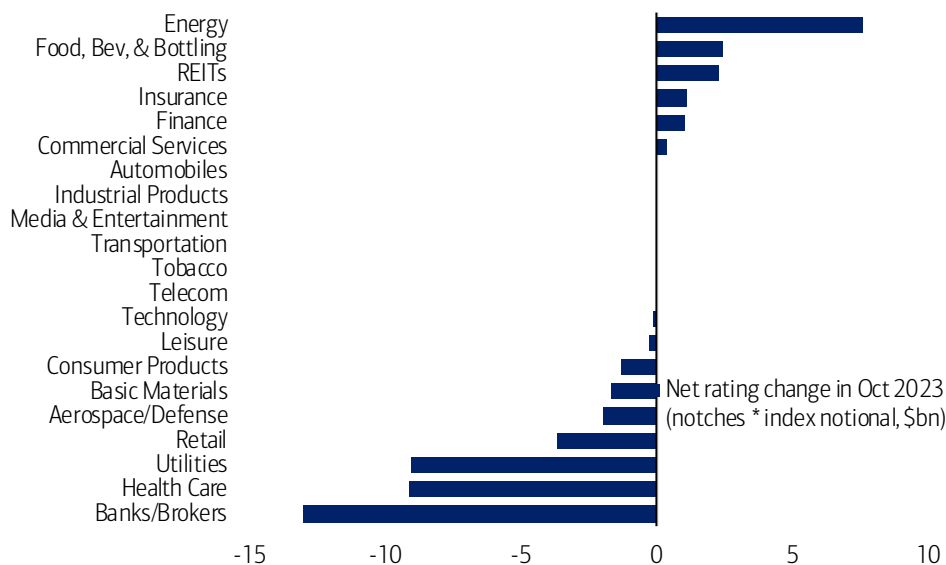
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Sector/issuer level

Sectors with most upgrades in October included Energy (\$7.6bn), Food, Bev & Bottling (+\$2.5bn) and REITs (+\$2.3bn). Sectors with most net downgrades in October were Banks/Brokers (-\$13.0bn), Healthcare (-\$9.1bn) and Utilities (-\$9.1bn). We list issuers with the biggest October upgrades and downgrades in Exhibit 18 and Exhibit 19 below.

Exhibit 17: October 2023 net rating changes by sector (notional * notches, \$bn)

Energy received the most net rating upgrades (\$7.6bn) in October.



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: Issuers with largest ratings upgrades in October-23

Top 15 issuers by rating upgrades.

Ticker	Sector	Issuer notional (\$bn)	Rating change: notches	Rating change: notional * \$bn
BA	Aerospace/Defense	46.3	0.1	5.1
HES	Energy	5.1	0.7	3.4
GD	Aerospace/Defense	9.3	0.3	3.1
PXD	Energy	4.0	0.7	2.6
TAP	Food, Bev, & Bottling	4.9	0.5	2.5
SANUSA	Banks/Brokers	7.1	0.3	2.4
CHCOCH	Energy	4.4	0.3	1.5
SRC	REITs	2.8	0.4	1.2
CAMLNG	Energy	3.0	0.3	1.0
CB	Insurance	8.6	0.1	0.9
AIG	Insurance	8.5	0.1	0.9
AYR	Finance	2.7	0.3	0.9
FFHCN	Insurance	2.6	0.3	0.9
DOC	REITs	1.3	0.7	0.8
MFCN	Insurance	3.8	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 19: Issuers with largest ratings downgrades in Oct-23

Top 15 issuers by rating downgrades.

Ticker	Sector	Issuer notional (\$bn)	Rating change: notches	Rating change: notional * \$bn
RTX	Aerospace/Defense	30.7	-0.3	-10.1
KEY	Banks/Brokers	10.1	-0.7	-6.7
AMGN	Health Care	58.5	-0.1	-6.6
ES	Utilities	17.6	-0.3	-5.7
BPCEGP	Banks/Brokers	20.8	-0.2	-4.8
WBA	Retail	5.7	-0.7	-3.8
AEP	Utilities	30.6	-0.1	-3.4
TFC	Banks/Brokers	26.2	-0.1	-2.9
PFE	Health Care	56.9	0.0	-2.5
NTRCN	Basic Materials	8.6	-0.2	-1.4
SCJOHN	Consumer Products	2.6	-0.5	-1.3
LNC	Insurance	4.6	-0.2	-1.1
JXN	Insurance	4.8	-0.2	-1.1
MMP	Energy	5.0	-0.2	-0.9
CFG	Banks/Brokers	6.0	-0.1	-0.7

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

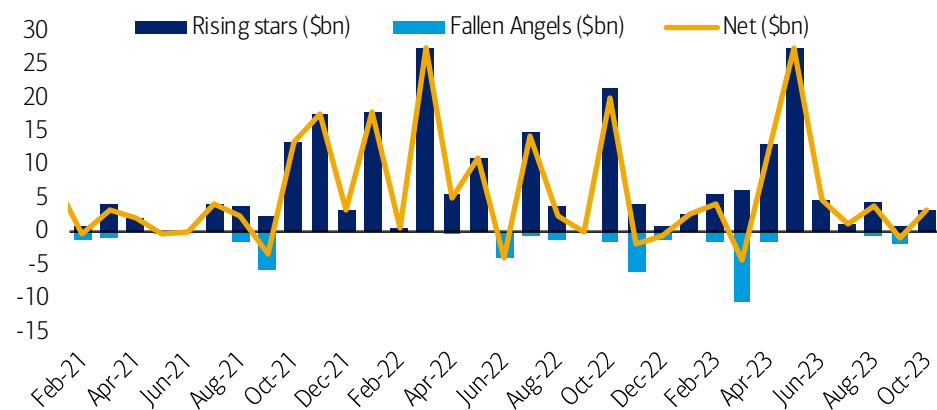
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Rising stars and fallen angels

Based on ICE BofA indices ex. EM \$3.2n of bonds were upgraded from HY to IG in October (rising stars), up from \$0.8bn in September. On the other hand, \$0bn were downgraded from IG to HY (fallen angels) in October (Exhibit 20, Exhibit 21, Exhibit 22).

Exhibit 20: Monthly rising star and fallen angel volumes

\$3.2.bn of rising stars, \$0bn fallen angels in October (ex. EM).



Note: excluding EM issuers.

Source: BofA Global Research, ICE Data Indices, LLC

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Exhibit 21: October 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)
IT	Commercial Services	BBB3	3	2,200	85.85	6.97	209
MTH	Basic Materials	BBB3	3	1,000	90.67	7.22	225

Source: BofA Global Research, ICE Data Indices, LLC

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Exhibit 22: October 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)
None							

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.

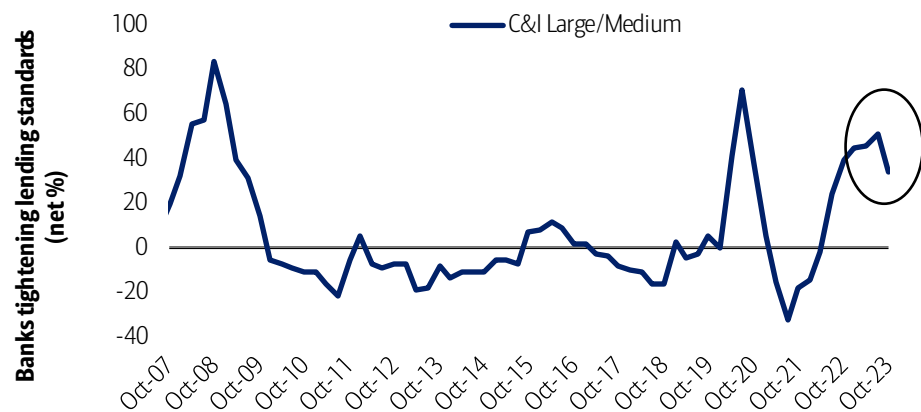
For example, suppose a \$500mn bond rated by Moody's and S&P is downgraded one notch by Moody's only. In that case the average rating change is $\frac{1}{2}$ a notch and would result in a \$250mn downgrade amount in the analysis above. If both Moody's and S&P downgrade by one notch, the average rating 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.

The October Senior Loan Officer Survey: slower pace of tightening

The Fed's July senior loan officer survey released today shows that a lower net share of banks is tightening lending standards for C&I loans relative to the prior survey in July (Exhibit 23). In addition to a slower pace of tightening a smaller net share of banks reported weaker demand for large / medium C&I loans (Exhibit 25). The net share tightening standards for consumer loans (Auto, credit cards) is also off the highs, while demand trends continued to be negative (Exhibit 28, Exhibit 29). However, the net share tightening standards for CRE loans was little changed (at a high net 66%, Exhibit 24).

Exhibit 23: Net share reporting tighter C&I lending standards decreased in October

A lower net share of banks reported tighter lending standards in October (net 33.9%) compared to July (net 50.8%).

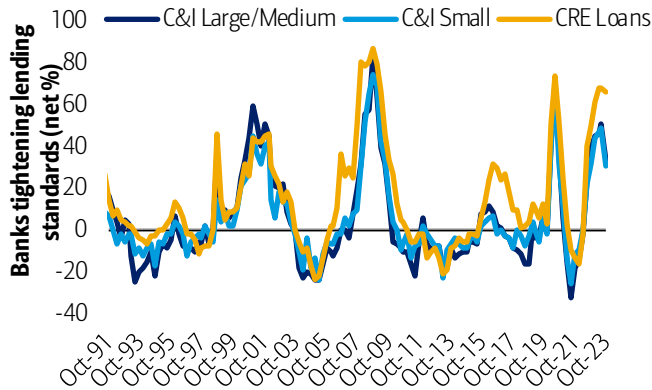


Source: Federal Reserve

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Exhibit 24: Lending standards: C&I loans

Banks stopped tightening standards on C&I loans in October.

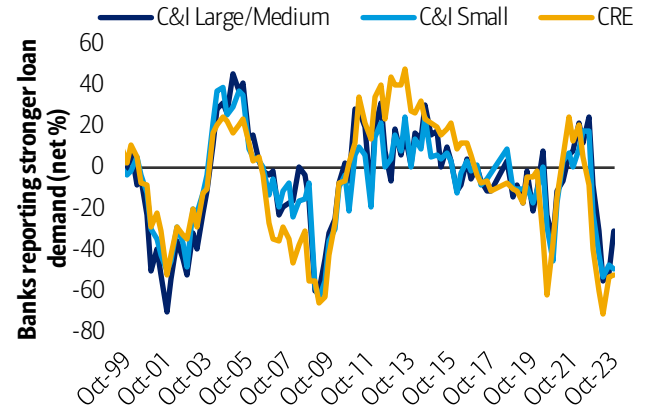


Source: Federal Reserve

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Exhibit 25: Loan demand: C&I loans

Demand was weaker across C&I and CRE loans in October, but by a smaller margin compared to July.

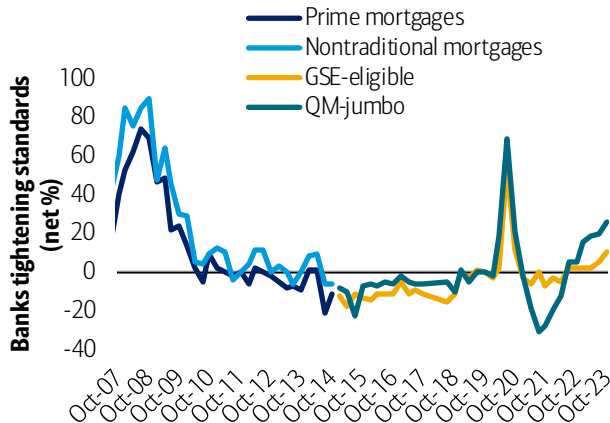


Source: Federal Reserve

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Exhibit 26: Lending standards: residential mortgages

The net share tightening standards mortgage loans increased in October.

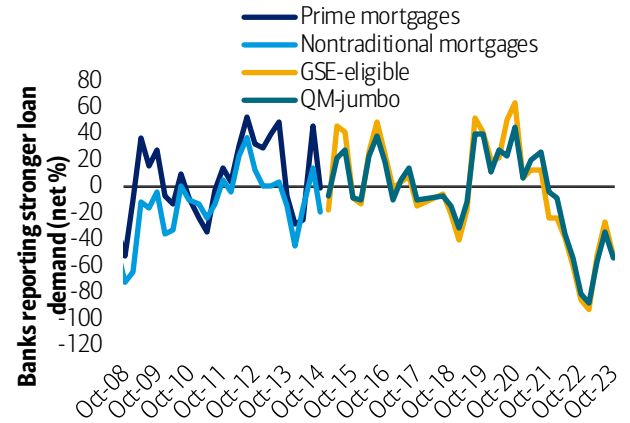


Source: Federal Reserve

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Exhibit 27: Loan demand: residential mortgages

On net banks are reporting weaker demand for residential mortgages.

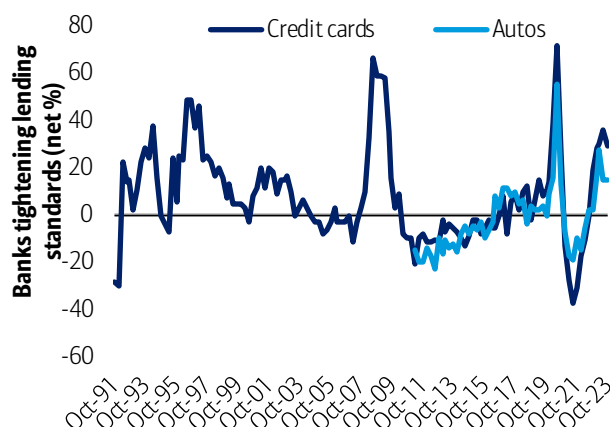


Source: Federal Reserve

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Exhibit 28: Lending standards: consumer loans

On net fewer banks are tightening lending standards on credit card loans compared to July.

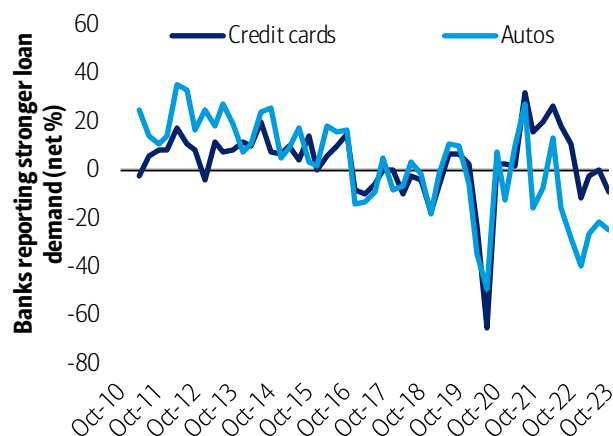


Source: Federal Reserve

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Exhibit 29: Loan demand: consumer loans

Demand was weaker for credit card loans and auto loans in October.



Source: Federal Reserve

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Daily credit snapshot

US IG issuance \$23.7bn across 11 deals today, \$23.7bn WTD and \$29.8bn MTD. The average new issue concession was 3.9bps 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 +0.18%, 10-year Treasury yields +7bps, CDX IG +1.3bps, CDX HY - \$0.29pts, and cash bond spreads quoted +/- 2bps today, LQD closed 0.19bps tighter today.

Exhibit 30: Recent new issue pricing and new issue concessions

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

Date	Ticker	Name	Tenor	Size (\$mm)	Moody's/S&P Rating	Coupon (%)	Px Spread (bps)	New Issue Conc. (bps)	* Break performance	Current spread (bps)
2023-11-06	DUK	Duke Energy Florida LLC	10	600	A1/A	5.875	125	-1	-5	120
2023-11-06	DUK	Duke Energy Florida LLC	30	700	A1/A	6.2	142	3	-2	140
2023-11-06	ENBCN	Enbridge Inc	3	750	Baa1/BBB+	5.9	117	n.a.	-4	113
2023-11-06	ENBCN	Enbridge Inc	5	750	Baa1/BBB+	6	142	13	-4	138
2023-11-06	ENBCN	Enbridge Inc	7	750	Baa1/BBB+	6.2	157	3	-3	154
2023-11-06	ENBCN	Enbridge Inc	30	1,250	Baa1/BBB+	6.7	187	1	-3	184
2023-11-06	HSBC	HSBC Holdings PLC	11NC10	2,000	Baa1/BBB	7.399	275	8	-1	274
2023-11-06	PCG	Pacific Gas and Electric Co	10	800	Baa3/BBB-	6.95	233	-3	-2	231
2023-11-06	ROSW	Roche Holdings Inc	3	300	Aa2/AA	FRN	SOFR+74	n.a.	n.a.	n.a.
2023-11-06	ROSW	Roche Holding AG	3	1,100	Aa2/AA	5.265	55	4	-3	52
2023-11-06	ROSW	Roche Holdings Inc	5	1,250	Aa2/AA	5.338	75	3	-2	73
2023-11-06	ROSW	Roche Holdings Inc	7	1,250	Aa2/AA	5.489	85	3	-3	82
2023-11-06	ROSW	Roche Holdings Inc	10	1,600	Aa2/AA	5.593	95	8	-4	91
2023-11-06	RTX	RTX Corp	3	1,250	Baa1/BBB+	5.75	105	1	n.a.	n.a.
2023-11-06	RTX	RTX Corp	5	500	Baa1/BBB+	5.75	115	-7	n.a.	n.a.
2023-11-06	RTX	RTX Corp	7	1,000	Baa1/BBB+	6	135	5	n.a.	n.a.
2023-11-06	RTX	RTX Corp	10	1,500	Baa1/BBB+	6.1	147	10	n.a.	n.a.
2023-11-06	RTX	RTX Corp	30	1,750	Baa1/BBB+	6.4	160	8	n.a.	n.a.
2023-11-06	SANUSA	Santander Holdings USA Inc	8	500	Baa2/BBB+	7.66	300	n.a.	n.a.	n.a.
2023-11-06	SO	Alabama Power Co	10	300	A1/A-	5.85	120	n.a.	n.a.	n.a.
2023-11-06	SPG	Simon Property Group LP	10	500	A3/A-	6.25	172	n.a.	n.a.	n.a.
2023-11-06	SPG	Simon Property Group LP	30	500	A3/A-	6.65	190	n.a.	n.a.	n.a.
2023-11-06	SY	Sysco Corp	5	300	Baa1/BBB	5.75	120	2	-3	117
2023-11-06	SY	Sysco Corp	10	500	Baa1/BBB	6	147	9	-4	143

Exhibit 30: Recent new issue pricing and new issue concessions

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

Date	Ticker	Name	Tenor	Size (\$mm)	Moody's/S&P Rating	Coupon (%)	Px Spread (bps)	New Issue Conc. (bps)	* Break performance	Current spread (bps)
2023-11-06	TRGP	Targa Resources Partners LP / Targa Resources Part	5	1,000	Baa3/BBB-	6.15	160	n.a.	n.a.	n.a.
2023-11-06	TRGP	Targa Resources Partners LP / Targa Resources Part	10	1,000	Baa3/BBB-	6.5	185	n.a.	-2	183

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

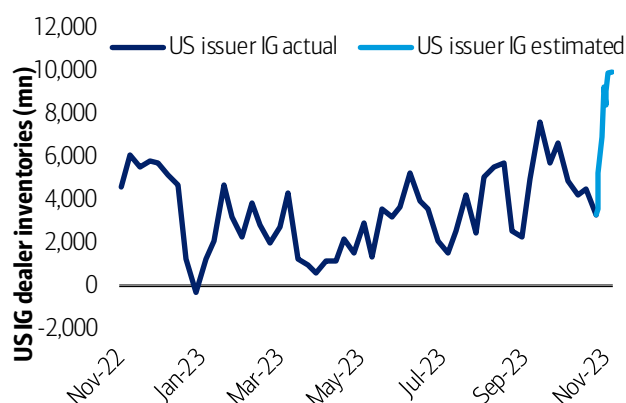
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Daily dealer inventories update

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 31 and Exhibit 32. We estimate the corresponding DV01 equivalent in Exhibit 32. **Error! Reference source not found.** More details by sector and maturity are available in Exhibit 33 and Exhibit 34. Finally, note that the data for the current date is through about 4:40 p.m. Eastern Standard Time.

Exhibit 31: Estimated dealer inventories of IG corporate bonds.

We estimate IG dealer inventories of US issuer bonds increased to \$9.9bn currently from \$3.3bn on Oct-25.



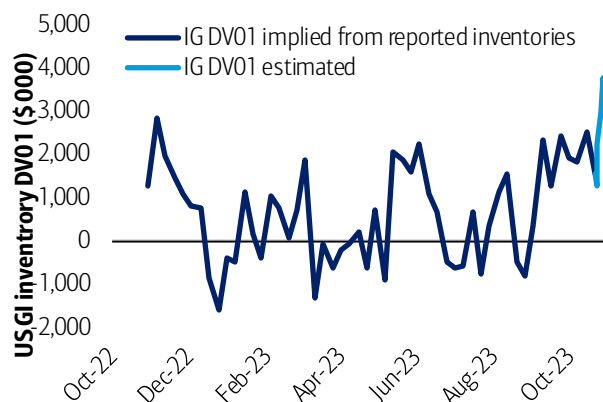
Note: data for US issuer bonds only, maturities 13M or longer. Actual dealer inventory data is from Primary Dealer Statistics survey by the NY Fed. The subsequent change in inventory is estimated based on TRACE.

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

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Exhibit 32: Estimated dealer inventory DV01 for IG corporate bonds.

We estimate IG dealer inventory DV01 of US issuer bonds increased to \$3.7mn currently from \$1.6mn on Oct-25.



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

We estimate IG dealer inventories increased \$374mn today and increased \$4,384mn over the prior week.

Sector	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 6-Nov-23 (\$mn)			
	6-Nov	3-Nov	1 W	2 W	4 W	6-Nov	3-Nov	1 W	2 W	4 W	Buy	Sell	Dealer	Total
High grade (13M+)	374	1,259	4,384	10,040	7,752	-62	648	1,119	3,246	4,132	9,196	8,822	7,510	25,529
<3yr	428	386	2,794	4,499	3,181	79	67	417	692	448	1,709	1,281	1,215	4,206
3-5yr	114	430	996	3,309	424	44	152	351	1,158	170	1,958	1,844	1,761	5,563
5-11yr	157	97	469	1,423	689	128	113	390	840	259	3,219	3,062	2,487	8,767
11+yr	-324	345	125	809	3,458	-313	316	-40	557	3,255	2,311	2,635	2,047	6,993

Exhibit 33: Estimated changes in IG dealer inventories by maturity and broad sector.

We estimate IG dealer inventories increased \$374mn today and increased \$4,384mn over the prior week.

	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 6-Nov-23 (\$mn)			
Fin	-265	141	405	4,067	3,365	-115	38	-225	1,144	1,172	3,351	3,616	2,731	9,698
Non-Fin	639	1,118	3,979	5,973	4,387	53	611	1,343	2,102	2,961	5,845	5,206	4,779	15,831
Fixed	385	1,257	4,263	9,807	7,591	-64	638	1,153	3,161	4,009	9,092	8,707	7,478	25,277
Floating	-11	1	121	233	161	3	10	-34	85	123	105	116	32	253
US issuers	42	860	3,032	6,619	3,946	-158	470	742	2,118	2,527	6,936	6,894	6,225	20,056
DM Yankees	261	355	1,118	3,120	3,637	61	163	306	1,103	1,669	1,902	1,641	1,188	4,730
EM Yankees	71	43	234	300	169	35	16	70	25	-63	358	288	97	743

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 34: Estimated changes in IG dealer inventories by sector.

We estimate today IG dealer inventories declined -\$196mn for Banks/Brokers and increased \$83mn for Energy.

Sector	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 6-Nov-23 (\$mn)			
	6-Nov	3-Nov	1 W	2 W	4 W	6-Nov	3-Nov	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Aerospace/Defense	2	40	-74	173	-184	-19	39	-119	-1	-299	158	156	179	493
Automobiles	197	185	1,030	1,209	928	49	61	265	340	252	450	253	413	1,116
Banks/Brokers	-196	169	175	3,049	2,474	-78	130	-208	857	805	2,349	2,545	1,965	6,858
Basic Materials	146	40	113	521	481	73	38	-35	229	288	390	244	216	850
Commercial Services	2	34	144	156	83	3	20	39	27	46	186	184	89	459
Energy	83	135	464	917	920	12	40	179	428	645	688	605	464	1,756
Finance	-92	39	85	755	355	-31	-20	36	295	154	429	520	414	1,363
Food, Bev, & Bottling	67	53	264	76	487	23	22	152	1	493	316	249	236	801
Health Care	-8	254	689	605	1,094	-116	137	332	73	702	966	974	819	2,759
Industrial Products	48	22	25	237	22	20	2	-28	154	113	229	181	188	598
Insurance	-12	-28	66	140	86	-18	-43	-75	7	50	299	310	162	771
Media & Entertainment	-52	67	227	371	-119	-40	44	99	192	8	299	351	425	1,076
REITs	35	-38	80	123	449	12	-29	23	-15	162	275	240	190	706
Retail	-12	11	109	99	-164	-28	-9	17	-10	-89	255	267	324	847
Technology	-81	133	100	430	309	-66	84	38	191	260	421	503	475	1,399
Telecom	22	79	206	-80	-559	-8	87	142	-86	-385	381	359	301	1,040
Tobacco	1	21	-26	123	44	3	23	-71	6	15	58	57	84	199
Transportation	-4	88	241	388	322	-22	30	88	207	251	157	160	96	412
Utilities	220	-40	362	690	720	159	3	193	324	612	756	537	366	1,659
Other	9	-4	104	58	3	9	-10	53	28	49	136	127	104	367

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

Source: BofA Global Research, FINRA, TRACE.

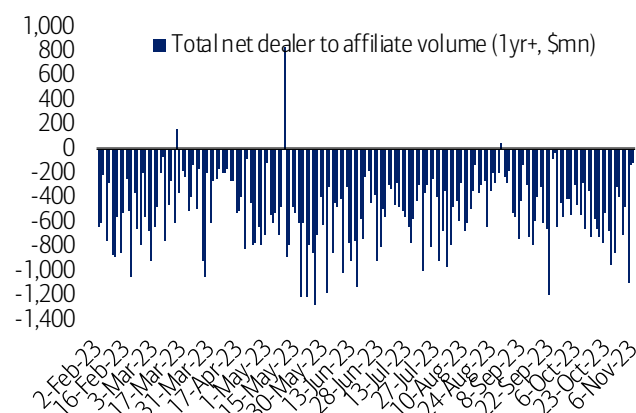
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Daily foreign demand tracker

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 (See: [Credit Market Strategist: One year round-trip in spreads 15 July 2016](#)). Exhibit 35 shows the overall daily dealer-to-affiliate volumes while Exhibit 36, Exhibit 37 and Exhibit 38 show subsets of this data. In particular Exhibit 36 shows net dealer-to-affiliate volumes for longer maturity (12+ years) bonds, Exhibit 37 displays volumes reported to Trace before 8am NY time (biased toward Asian buying) and Exhibit 38 shows the subset of net trades reported between 8am and noon (biased toward European buying).

Exhibit 35: Net dealer buying from affiliate (1yr+)

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



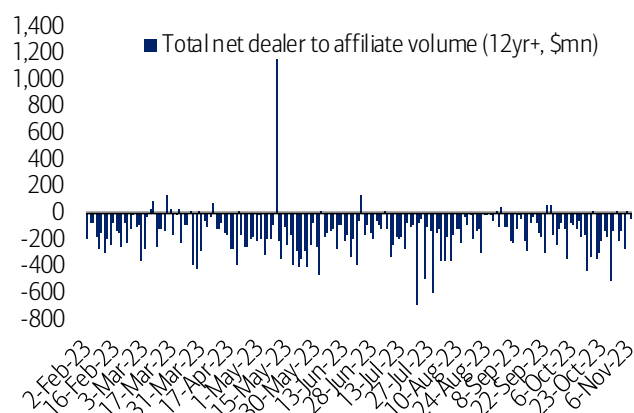
Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.

Source: Bloomberg, TRACE

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Exhibit 36: Net dealer buying from affiliate (12yr+)

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



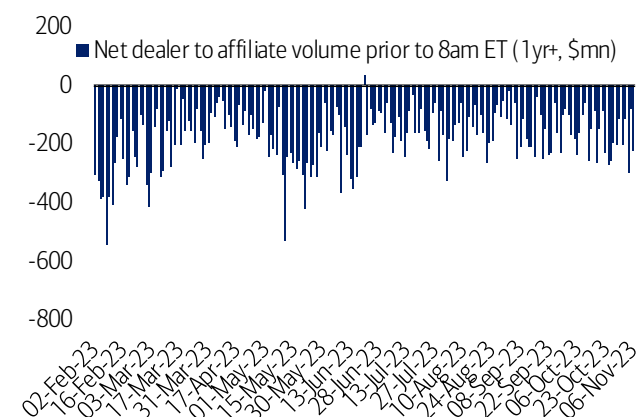
Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.

Source: Bloomberg, TRACE

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Exhibit 37: 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



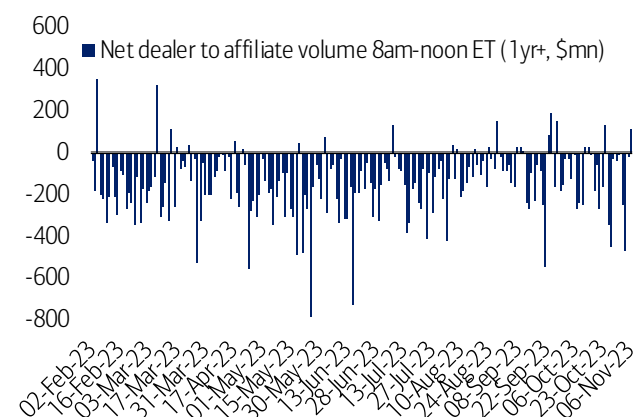
Note: Morning share of daily trading volume is correlated with secondary market activity of foreign investors due to different time zones.

Source: BofA Global Research, TRACE

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Exhibit 38: 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
 Unchd: Unchanged
 CPI: Consumer Price Index
 FOMC: The Federal Open Market Committee
 CRE: Commercial real estate

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