

Credit Market Strategist

It's the economy, stupid

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US economic re-acceleration is the key risk to markets currently. It has already triggered higher Treasury yields, increased Fed uncertainties, and lower stocks. Our economists and rates strategists see potential for more. IG spreads should be resilient (see Credit Market Strategist: Rate resilience), but not immune. We like BBB over single-A industrials, cyclicals, and 10s30s spread curve flatteners.

Re-acceleration and higher rates

Strong US data led to a significant risk of re-acceleration, with our economists currently tracking +3.1% for US 3Q GDP (see <u>US Economic Weekly: A balancing act</u>). Our rates strategists have shifted their view on long-term Treasury yields to neutral and see an upside risks to their year-end 10yr Treasury yield (see <u>Global Rates Weekly</u>).

Strong economy -> prefer cyclicals, BBBs

BBB-rated industrials have underperformed single-As. That makes BBBs screen relatively cheap, as the BBB/single-A spread ratio tends to lag the IG market spread by about two months, The more cyclical sectors that could benefit from the stronger US economy include Tech, Energy, Autos and Basic Materials.

Flatter 10s30s IG spread curves

Less back-end supply and more demand should flatten the spread curves. We screen for the steepest IG 10s30s spread curves inside.

Drinking from supply firehose

The start of September delivered the second busiest two-day supply volume YtD.

August IG ratings: balanced

Net IG ratings upgrades were nearly balanced at -\$2.1bn in August, down from +\$46bn net upgrade in July. Ex. the Moody's regional bank downgrade IG rating actions remained positive in August at +\$22bn.

Steady M&A volumes in August

North American M&A announcements were relatively steady at \$129bn in August, modestly up from \$121bn in July.

IG market technicals

Supply: \$57.5bn of issuance this week, expect \$25-35bn next week. **Flows**: +\$1.01bn inflow this past week ending on September 6. **Weekly technicals**: expect \$15.7bn of coupon payments, \$0.3bn of calls and \$2.4bn tender offers to become effective next week. Bond maturities: \$2.8bn this week, \$41.6bn next week. **Dealer inventories**: +\$1,996mn past week ended Thu. Details inside.

We published the weekly CMS data and charts in <u>Situation Room</u>.

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Refer to important disclosures on page 24 to 26.

08 September 2023

Credit Strategy United States

Data Analytics



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Recent credit strategy research

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Publication	Name
Situation Room	Out of stocks, into HG bond
	<u>funds</u>
Situation Room	Drinking from supply firehose
Situation Room	August IG ratings: balanced
Monthly HG Market Review	Aug '23: It's all about the data
Credit Market	Jul '23 Credit Investor Survey:
Strategist	Bear retreating
Credit Market	Summer 2023 snapshot of US
Strategist	<u>IG market</u>

It's the economy, stupid

US economic re-acceleration is the key risk to markets currently. It has already triggered higher Treasury yields, increased Fed uncertainties, and lower stocks. Our economists and rates strategists see potential for more. IG spreads should be resilient (see Credit Market Strategist: Rate resilience), but not immune. We like BBB over single-A industrials, cyclicals, and 10s30s spread curve flatteners.

Re-acceleration and higher rates

After surprising to the upside in July and August US economic data continues to surprise to the upside in September. For example, this week's the ISM Services report was much stronger than expected. This all adds up to a significant risk of US re-acceleration, with our economists currently tracking +3.1% for US 3Q GDP (see <u>US Economic Weekly: A balancing act</u>). As a result our rates strategists have shifted their view on long-term Treasury yields to neutral from bullish, and now see upside risks to their year-end 10yr Treasury yield target of 4% (see Global Rates Weekly: The beginning of the end).

Figure 1: US data has surprised to the upside since JuneBloomberg US Economic surprise index rose to around 0.4 since early June

Bloomberg US Economic surprise index rose to around 0.4 since early June from zero in late April.

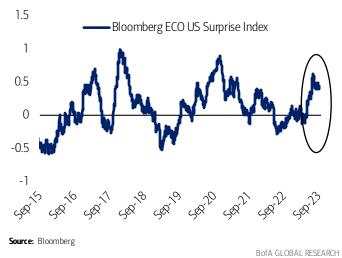
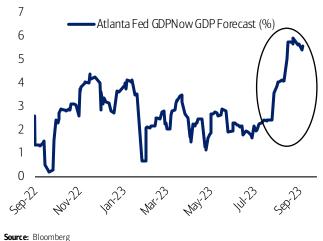


Figure 2: Atlanta Fed GDP Now reached 5% in August Atlanta Fed GDPNow tracker is currently at 5.6%.



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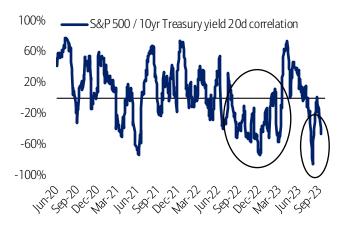
Good news (for the economy) is bad news (for markets)

US economic re-acceleration risks have been negative for risk assets due to increasing chances of a higher-for-longer Fed. Hence the negative correlation between stocks and rates (higher 10yr Treasury yields, lower S&P 500) exceeded 2022 levels in August (Figure 3). The positive correlation between IG bond index spreads and rates (higher 10yr Treasury yield, wider IG spread) is also approaching 2022 levels, although clearly spreads are no much tighter (Figure 4).



Figure 3: Higher rates are driving stock prices lower ...

The negative correlation between stock prices and 10yr Treasury yields in August exceeded 2022 levels.

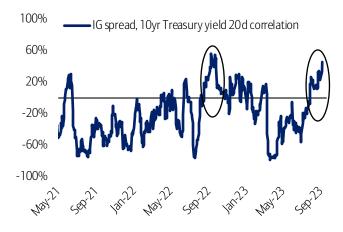


Source: BofA Global Research, Bloomberg.

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Figure 4: ... and IG spreads wider

The positive correlation between IG bond index spreads and 10yr Treasury yields is approaching the 2022 levels.



Source: BofA Global Research, Bloomberg.

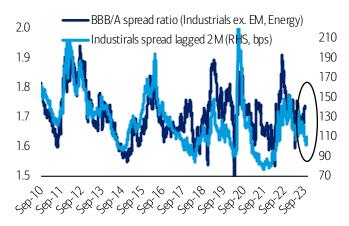
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Strong economy -> prefer cyclicals, BBBs

Despite the stronger outlook for the economy and tighter IG market spreads, BBB-rated industrials have underperformed single-As. That makes BBBs screen relatively cheap, as the BBB/single-A spread ratio tends to lag the IG market spread by about two months (Figure 5, Figure 6). Hence, tighter IG market spreads since June should be supportive of BBB spreads relative to single-As in September. Finally, in terms of sectors, the more cyclical sectors that could benefit from the stronger US economy include Tech, Energy, Autos and Basic Materials (Figure 7).

Figure 5: BBBs have underperformed since mid-August

The BBB/A industrial spread ratio increased to 1.73 currently from 1.68 in mid-August, despite tighter spreads in June.

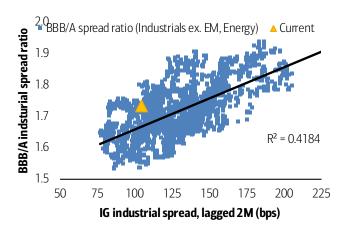


Source: BofA Global Research, ICE Data Indices, LLC

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Figure 6: BBB are currently trading cheap to single-As

BBB/A industrial spread ratio is high relative to IG market spreads (lagged by two months).

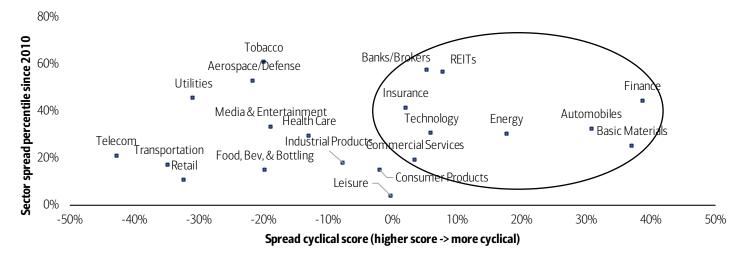


Source: BofA Global Research, ICE Data Indices, LLC



Figure 7: The more cyclical IG sectors could benefit from the stronger US economy

The upper right comer includes the more cyclical sectors trading relatively wide.



Note: the cyclical score reflects historical correlation between ISM manufacturing index and sector spread performance relative to the market. Source: BofA Global Research, Bloomberg, ICE Data Indices, LLC

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BBB bond screen

For investors looking for cheap BBB bonds we screen for BBB-rated non-financial issuers bonds (\$500mn or larger in size) trading wide relative to the prior 12 months (Figure 8).

Figure 8: BBB-rated non-financial bonds trading wide relative to the prior 12 months

We screen for non-financial BBB-rated bonds (\$500mn or larger, DM issuers only), trading at a high 12 months spread percentile.

Bond	Sector	Index rating	Seniority	12M spread percentile	G- spread (bps)	Price (\$)	Yield (%)
WBA 4.8 11/18/44	Retail	BBB3	Sr Unsecured	99.6%	251	75.8	7.0
IFF 4 3/8 06/01/47	Basic Materials	BBB3	Sr Unsecured	94.2%	245	69.9	7.0
DG 4 1/8 04/03/50	Retail	BBB2	Sr Unsecured	93.1%	191	72.1	6.3
PARA 4.85 07/01/42	Media & Entertainment	BBB2	Sr Unsecured	88.4%	350	69.4	8.0
TRPCN 5 7/8 08/15/2076	Energy	BBB3	Jr Subordinated	87.6%	429	91.8	9.5
TSN 5.1 09/28/48	Food, Bev, & Bottling	BBB2	Sr Unsecured	84.6%	187	84.1	6.4
TPR 3.05 03/15/32	Retail	BBB2	Sr Unsecured	75.3%	263	75.4	6.9
CPGX 5.8 06/01/45	Energy	BBB1	Sr Unsecured	74.5%	205	90.6	6.6
RTX 4.45 11/16/38	Aerospace/Defense	BBB1	Sr Unsecured	73.7%	145	86.6	5.8
T 6.3 01/15/38	Telecom	BBB2	Sr Unsecured	71.4%	194	99.8	6.3
CHCOCH 2.742 12/31/39	Energy	BBB2	1st lien	69.1%	162	76.3	5.9
DUK 3 1/4 01/15/2082	Utilities	BBB3	Jr Subordinated	67.6%	858	74.0	8.0
CNC 4 5/8 12/15/29	Health Care	BBB3	Sr Unsecured	64.9%	198	90.6	6.3
FE 2.866 09/15/28	Utilities	BBB3	Sr Unsecured	60.6%	139	86.9	5.9
CVS 4.78 03/25/38	Health Care	BBB2	Sr Unsecured	58.3%	174	87.4	6.1
HWM 6 7/8 05/01/25	Aerospace/Defense	BBB3	Sr Unsecured	58.3%	142	100.5	6.5
FCX 4 5/8 08/01/30	Basic Materials	BBB3	Sr Unsecured	56.0%	176	91.2	6.0
SO 401/15/51	Utilities	BBB3	Jr Subordinated	55.2%	317	92.2	7.1
TCKBCN 3.9 07/15/30	Basic Materials	BBB3	Sr Unsecured	54.4%	170	88.0	6.0
XEL 3 1/2 12/01/49	Utilities	BBB1	Sr Unsecured	54.4%	151	67.7	5.9

Source: BofA Global Research, ICE Data Indices, LLC

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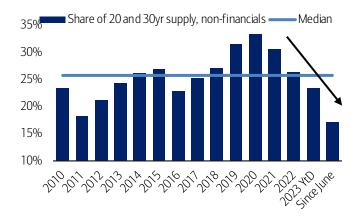
Flatter 10s30s IG spread curves

Higher Treasury yields stimulate yield sensitive demand, concentrated on bonds in the back-end of the curve. On the other hand, issuers avoid locking in the high borrowing costs for longer. Hence the share of 20 and 30yr supply was the lowest since at least

2010 this week (see <u>Situation Room: Drinking from supply firehose</u>), and also since June (Figure 9). Stronger back-end demand and lower supply is a 10s30s spread curve flattener, particularly as the 10s30s IG spread curve is currently steep relative to the much higher 30yr Treasury yield (Figure 10). In Figure 11 below we screen for the steepest 10s30s non-financial IG spread curves.

Figure 9: Higher rates -> less back-end IG corporate supply

The share of IG non-financial supply longer than 10yr(20 and 30yr supply) was just 17% since June – some of the lowest level since at least 2010.

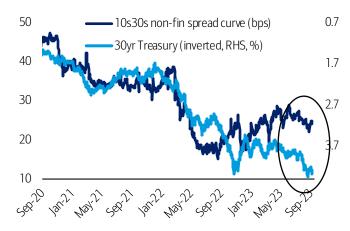


Source: BofA Global Research

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Figure 10: IG 10s30s spread curve is steep to rates

IG 10s 30s spread curve has lagged the recent increase in 30yr Treasury yields.



Source: BofA Global Research

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Figure 11: Steep 10s30s IG non-financial spread curve screen

We screen for the steepest IG spread curves, for non-financial issuers.

					10yr	30yr	10s30s	10yr	30yr	10s30s curve,	10s30s curve, share
lssuer	10yr bond	30yr bond	Index rating	Sector	spread (bps)	spread (bps)	curve (bps)	price (\$)	price (\$)	adjusted for \$ price	of 10yr spread
APPLE INC	AAPL 4.3 05/10/33	AAPL 4.85 05/10/53	AA1	Technology	45	74	29	96.6	96.4	30	67.0%
PEPSICO INC	PEP 4.45 02/15/33	PEP 4.65 02/15/53	A1	Food, Bev, & Bottling	48	76	28	97.8	93.3	30	65.6%
META PLATFORMS	META 4.95 05/15/33	META 5.6 05/15/53	A1	Media & Entertainment		137	44	97.8	97.8	45	48.5%
HOME DEPOT INC	HD 4 1/2 09/15/32	HD 4.95 09/15/52	A2	Retail	75	107	32	96.2	93.1	36	48.4%
QUALCOMM INC	QCOM 5.4 05/20/33	QCOM 6 05/20/53	A2	Technology	85	128	43	102.1	104.9	40	48.2%
INTEL CORP	INTC 5.2 02/10/33	INTC 5.7 02/10/53	A2	Technology	111	156	45	98.4	96.7	47	42.9%
IBM CORP	IBM 43/402/06/33	IBM 5.1 02/06/53	А3	Technology	99	135	36	96.0	91.3	40	40.6%
DOW CHEMICAL CO	DOW 6.3 03/15/33	DOW 6.9 05/15/53	BBB1	Basic Materials	133	189	56	104.8	108.5	52	40.6%
CSX CORP	CSX 4.1 11/15/32	CSX 4 1/2 11/15/52	BBB1	Transportation	88	118	30	92.1	85.0	36	40.0%
TEXAS INSTRUMENT	TXN 4.9 03/14/33	TXN 5 03/14/53	A1	Technology	74	99	25	98.8	94.8	28	37.9%
ORACLE CORP	ORCL 4.9 02/06/33	ORCL 5.55 02/06/53	BBB2	Technology	141	187	46	94.0	90.5	51	35.2%
UNITEDHEALTH GRP	UNH 4 1/2 04/15/33	UNH 5.05 04/15/53	A2	Health Care	88	117	29	94.7	92.9	31	35.1%
LOWE'S COS INC	LOW 5.15 07/01/33	LOW 5 3/4 07/01/53	BBB1	Retail	124	165	41	97.0	96.3	43	33.9%
AMAZON.COM INC	AMZN 4.7 12/01/32	AMZN 3.95 04/13/52	AA3	Retail	69	85	16	97.9	81.1	22	32.3%
LYB INT FIN III	LYB 5 5/8 05/15/33	LYB 3 5/8 04/01/51	BBB2	Basic Materials	164	190	26	97.6	65.5	51	31.2%
ELEC DE FRANCE	EDF 6 1/4 05/23/33	EDF 6.9 05/23/53	BBB1	Utilities	180	235	55	101.2	102.3	53	29.8%
TARGET CORP	TGT 4.4 01/15/33	TGT 4.8 01/15/53	A2	Retail	92	115	23	94.3	89.3	28	29.7%
MPLX LP	MPLX 5 03/01/33	MPLX 5.65 03/01/53	BBB2	Energy	171	215	45	92.8	88.6	52	29.4%
		BATSLN 7.081 08/02/53		Tobacco	236	301	65	98.1	96.3	69	29.0%
UNITED PARCEL	UPS 4 7/8 03/03/33	UPS 5.05 03/03/53	A2	Transportation	80	101	21	98.3	95.2	23	28.7%

Source: BofA Global Research, ICE Data Indices, LLC

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Situation Room: Drinking from supply firehose 06 September 2023

Drinking from supply firehose

IG supply over the first two days after Labor Day has totaled \$52.6bn – including \$38.2bn on Tuesday and \$14.4bn on Wednesday. That's third largest issuance over the same period since 2010, and above \$48bn average over the prior five years. The start of September also delivered the second busiest two-day supply volume YtD, behind only \$62.2bn priced in the first two business days of January.

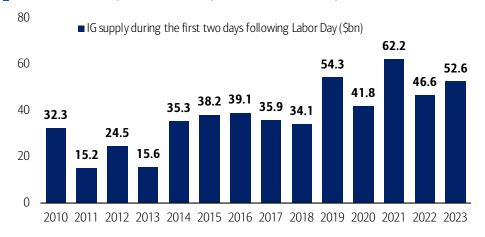
Dude, where is my duration?

The share of 10+yr supply over the first two days post Labor Day was 10% this year. That's the lowest share of back-end supply for the same period since at least 2010, behind 15% in 2022 and 23% in 2021 (Figure 13).

Paying the Treasury concession

10yr Treasury yield is up 11bps since Friday September 1st and up 18bps over the past five business days. While there are other drivers of rates (like the strong ISM services print today), it's not unusual for Treasury yields to increase on the back of heavy IG supply. Treasury yields also jumped following heavy IG supply in May and June of this year (Figure 14).

Figure 12: \$52.6bn priced in the two days after Labor Day
That's behind \$62.2bn priced over the same period in 2021 and \$54.3bn priced in 2019.

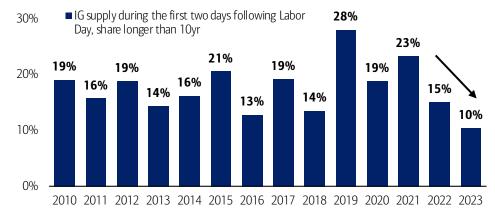


Source: BofA Global Research



Figure 13: The shortest start to September

The share of 10+yr supply was 10% over the first two days post Labor Day – the lowest since at least 2010.

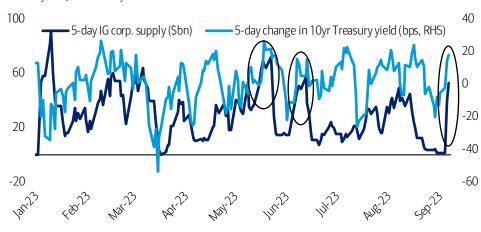


Source: BofA Global Research

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Figure 14: Higher IG supply -> higher rates

10yr Treasury yield is up 11bps since September 1st. Treasury yields tend to increase on heavy IG supply, such as in May and June of this year.



Source: BofA Global Research, Bloomberg.

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Situation Room: August IG ratings: balanced 06 September 2023

August IG ratings: balanced

Net ratings upgrades for IG bonds in August were nearly balanced at -\$2.1bn (upgrades less downgrades, notional * notches). That's down from +\$46bn net upgrade in July and \$30bn ex. CS (Credit Suisse) in June. However, big rating actions for banks were again impacting the monthly totals. This time it was the Moody's \$24bn downgrade of the US regional banks (see Situation Room: Moody's bank downgrade). Hence ex. the Moody's regional bank downgrade IG rating actions remained positive in August at +\$22bn.



Higher rating activity

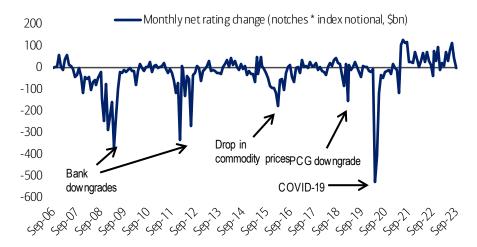
Gross rating activity (upgrades + downgrades) picked up in August to \$160bn – above the \$118bn over the prior 12 months. However, rating upgrades made up 49% of the total, down from 79% in July and 75% median over the past 12 months.

Outlook: typical for upgrades, subdued for downgrades

The outlook continues to call for a moderating pace of rating upgrades. The share of IG index bonds on a positive outlook or watch declined to 1.5% in August – which is the median level – from 1.6% in July and 3.0% in March of this year (Figure 21)

Figure 15: The pace of net rating upgrades slowed further in August

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



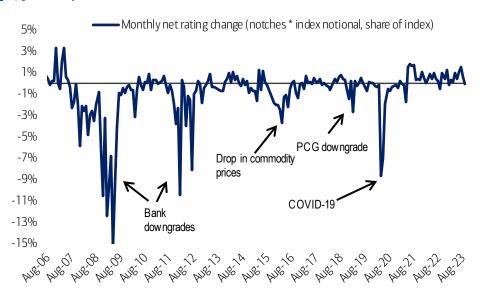
Note: net rating change equals upgrades less downgrades. Based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO.

Source: BofA Global Research, Bloomberg.

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Figure 16: Net upgrades declined to 0.0% of index notional in July

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 COAO.



Figure 16: Net upgrades declined to 0.0% of index notional in July

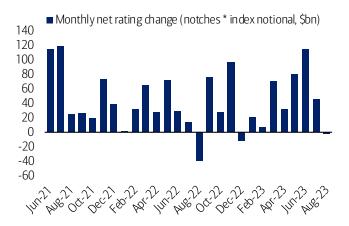
Net downgrades peaked at 8.6% of index notional in March 2020 before rebounding to 1.9% peak net upgrade in May 2021.

Source: BotA Global Research, Bloomberg.

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Figure 17: The pace of net upgrades was near flat in August

Net upgrades slowed to -\$2bn in August from +\$46bn in July, below the \$39bn monthly median over the past 12 months.



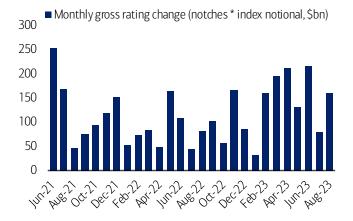
Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO

Source: BofA Global Research

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Figure 19: Gross rating actions accelerated in August

Gross rating actions increased to \$160bn in August from \$79bn in July.

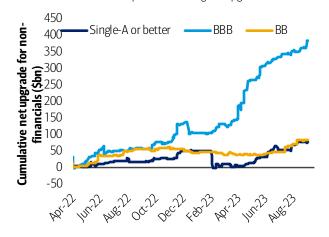


Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO.

Source: BofA Global Research

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Figure 18: Cumulative net upgrade for non-financials by rating (\$bn) Non-financials BBBs have experienced strong net upgrades so far in 2023

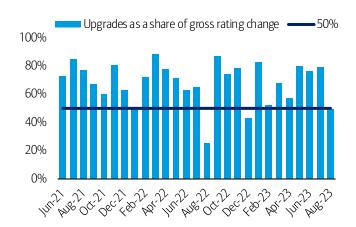


Source: BofA Global Research, Bloomberg.

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Figure 20: Upgrades / downgrades were balanced in August

Upgrades accounted for 49% of total rating actions in August– below the 75% 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

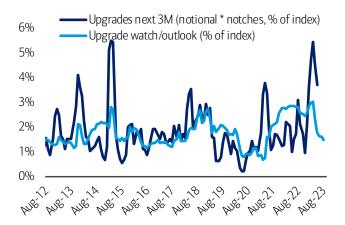
Our tracker for IG corporate bonds on a positive watch or outlook declined further to 1.5% of the index in August (\$117bn) from 1.6% in June (\$129bn). The current level is at the historical median, suggesting rating agencies are no longer signaling a stronger than usual pace of upgrades over the next three months (Figure 21). The tracker for IG



corporate bonds on a negative watch / outlook remains at a very low levels of 2.1% (\$172bn), but above the record low of 1.8% of the index notional (\$145bn) in July (Figure 22).

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

The volume of IG corporate bonds on positive watch/outlook decreased further in August and is now back to the typical levels.



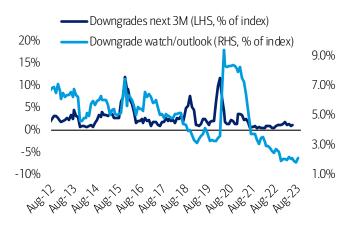
Note: watch/outlook is computed as 0.66 * notional for a watch and 0.33 * notional for an outlook. Upgrades are tracking rating changes only (ignoring outlook and watch changes).

Source: BofA Global Research

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Figure 22: Negative watch/outlook remains low

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

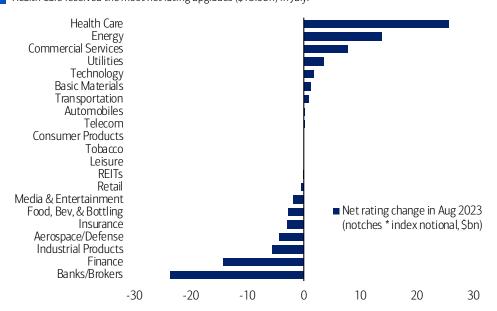
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Sector/issuer level

Sectors with most upgrades in August included Health Care (\$25.7bn), Energy (+\$13.8bn) and Commercial Services (+\$7.9bn). Sectors with most net downgrades in August were Banks/Brokers (-\$23.6bn), Finance (-\$14.4bn) and Industrial Products (-\$5.7bn). We list issuers with the biggest July upgrades and downgrades in Figure 24 and Figure 25 below.

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

Health Care received the most net rating upgrades (\$13.0bn) in July.



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



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

Health Care received the most net rating upgrades (\$13.0bn) in July.

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Figure 24: Issuers with largest ratings upgrades in July-23

Top 15 issuers by rating upgrades.

Tickei	Sector	lssuer notional (\$bn)	Rating change: notches	Rating change: notional * notches, \$bn
ABBV	Health Care	49.8	0.3	16.7
ET	Energy	31.7	0.2	7.1
AZN	Health Care	18.5	0.3	6.2
LMT	Aerospace/Defense	17.6	0.3	5.9
NFLX	Media & Entertainment	8.5	0.5	4.2
SO	Utilities	35.6	0.1	3.9
HUM	Health Care	9.8	0.3	3.3
RSG	Commercial Services	8.8	0.3	2.9
SPLLLC	Energy	8.8	0.3	2.9
WM	Commercial Services	8.5	0.3	2.8
TT	Industrial Products	4.4	0.5	2.2
WCNCN	Commercial Services	4.9	0.3	1.6
MSI	Technology	4.8	0.3	1.6
RIOLN	Basic Materials	7.6	0.2	1.4
HES	Energy	5.1	0.2	1.1

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

Ticker	Sector	Issuer notional (\$bn)	Rating change: notches	Rating change: notional * notches, Sbn
RTX	Aerospace/Defense	30.7	-0.3	-10.3
USB	Banks/Brokers	28.6	-0.2	-6.3
PARA	Media & Entertainment	14.1	-0.4	-6.3
TFC	Banks/Brokers	28.0	-0.2	-6.1
BK	Finance	27.2	-0.2	-6.0
MMM	Industrial Products	11.0	-0.5	-5.5
STT	Finance	15.1	-0.2	-3.3
PNC	Banks/Brokers	26.0	-0.1	-2.9
COF	Finance	25.9	-0.1	-2.8
CPB	Food, Bev, & Bottling	3.9	-0.7	-2.6
KEY	Banks/Brokers	10.1	-0.2	-2.2
MTB	Banks/Brokers	5.8	-0.3	-2.0
SWK	Industrial Products	5.9	-0.3	-2.0
ALL	Insurance	6.0	-0.2	-1.4
DOW	Basic Materials	10.7	-0.1	-1.3

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

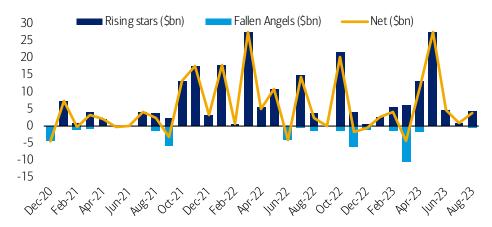
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Rising stars and fallen angels

Based on ICE BofA indices ex. EM \$4.3bn of bonds were upgraded from HY to IG in August (rising stars), up from \$1.0bn in July. On the other hand, only \$0.6bn were downgraded from IG to HY (fallen angels) in August (Figure 26, Figure 27, Figure 28).

Figure 26: Monthly rising star and fallen angel volumes

\$4.3.bn of rising stars, \$0.6bn fallen angels in August (ex. EM).



Note: excluding EM issuers.

Source: BofA Global Research, ICE Data Indices, LLC



Figure 27: August 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)
HWM	Aerospace/Defense	BBB3	6	3,555	97.02	6.12	148
PDCE	Energy	BBB2	1	750	99.75	6.10	72

Source: BofA Global Research, ICE Data Indices, LLC

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Figure 28: August 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. UAS (bps)
VLY	Banks/Brokers	BB1	1	300	79.84	9.37	407
ASB	Banks/Brokers	BB1	1	250	95.69	7.61	250

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.

Previously published here

Situation Room: August IG ratings: balanced 06 September 2023

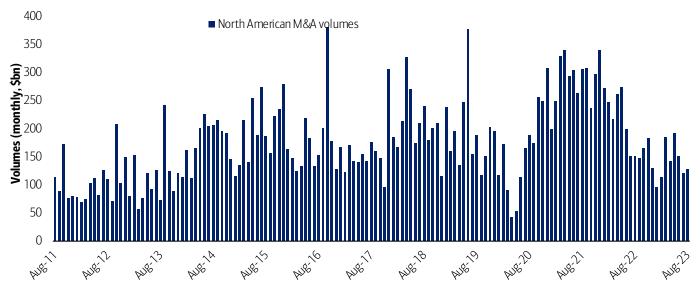
Steady M&A volumes in August

North American M&A announcements were relatively steady at \$129bn in August, modestly up from \$121bn in July (Figure 29). The pipeline of announced deals with potential IG funding implications was also little changed at \$329bn in August, similar to \$330bn in July (deal NAV, Figure 30). M&A-related IG issuance remained modest in August at \$8.0bn, little changed from \$8.8bn in July, but down from the very high \$40.5bn priced in May (Figure 31). See details of the current deal list in the Pipeline of M&A deals with IG issuance implications section.



Figure 29: Monthly North American M&A volumes

North American M&A announcement volume were steady at \$129bn in August, up from to \$121bn in July.

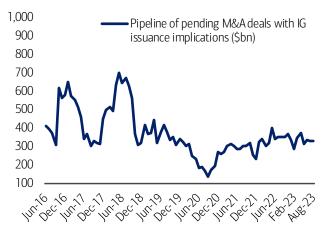


Note: limited to pending and closed deals only. Cancelled deals are excluded.

Source: Bloomberg

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Figure 30: Pipeline of pending M&A deals with IG funding implications The pipeline of pending M&A deals with US IG funding implications remained relatively steady in August at \$329bn.

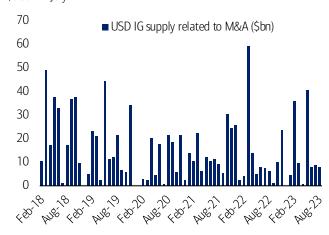


Source: BofA Global Research, Bloomberg

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Figure 31: US IG M&A related supply

US IG M&A-related supply remained modest at \$8.0bn in August, down from \$8.8bn in July.



Source: BofA Global Research

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Pipeline of M&A deals with IG issuance implications

Microsoft (MSFT) announced the acquisition of Activision Blizzard (ATVI) on January 18 2022. Our analyst Jason Kilgariff thinks MSTF could issue \$20-30bn to fund the deal (see: <u>High Grade Telecom, Media & Technology Weekly: The TMT Weekly Rewind 18 January 2022</u>)

Kroger (KR). On October 14 2022 Kroger announced it entered into a definitive agreement to acquire Albertsons Cos (ACI) in an all-cash transaction for \$34.10/share. Our analyst Brian Callen expects the deal to be funded with \$15bn of new debt, including \$10-11bn of bonds and \$4-5bn term loans (see Kroger Co.: Stocking the cart; re-leveraging for rival 17 October 2022).



Our criteria for inclusion in the list of announced deals listed in Figure 32 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.

Figure 32: M&A deals with potential high grade bond funding needs
A list of pending M&A deals with potential IG bond funding implications

Deal announcement	Acquirer	0 1	Target		Announced deal value	Expected completion
date	Ticker	Acquirer Name	Ticker	Target Name	(\$bn)	date
1-Sep-21	BARC LN	Barclays PLC	n.a.	US Credit Card Portfolio	3.8	Jun-22
13-Jul-22	RPRX US	Royalty Pharma PLC	2105326D US	Theravance Respiratory Co LLC	1.3	Jul-22
28-Feb-22	WPC US	WP Carey Inc	CPYA US	Corporate Property Associates	2.8	Sep-22
20-Sep-22	WBA US	Walgreens Boots Alliance Inc	1717936D US	Shields Health Solutions Holdi	1.4	Dec-22
17-Jun-22	UNH US	UnitedHealth Group Inc	EMIS LN	EMIS Group PLC	1.4	Mar-23
16-Apr-23	MRK US	Merck & Co Inc	RXDX US	Prometheus Biosciences Inc	8.8	Jun-23
28-Oct-22	NEE US	NextEra Energy Inc	n.a.	Portfolio of operating landfil	1.1	Jun-23
6-Mar-23	O US	Realty Income Corp	n.a.	415 single tenant convenience	1.5	Jun-23
20-Jun-23	LLY US	Eli Lilly & Co	DICE US	DICE Therapeutics Inc	1.7	Aug-23
26-Jun-23	IBM US	International Business Machine	APTI US	Apptio Inc	4.6	Aug-23
12-Jun-23	NOVN SW	Novartis AG	KDNY US	Chinook Therapeutics Inc	2.4	Aug-23
14-Jul-23	LLY US	Eli Lilly & Co	1915621D US	Versanis Bio Inc	1.9	Aug-23
15-Feb-22	INTC US	Intel Corp	TSEM IT	Tower Semiconductor Ltd	5.4	Aug-23
11-Jul-23	BRK/A US	Berkshire Hathaway Inc	118905Z US	Cove Point LNG LP	3.3	Sep-23
27-Apr-23	SUCN	Suncor Energy Inc	2253611D CN	TotalEnergies EP Canada Ltd	5.5	Sep-23
18-Jan-22	MSFT US	Microsoft Corp	ATVI US	Activision Blizzard Inc	67.9	Oct-23
26-May-22	AVGO US	Broadcom Inc	PNM US	PNM Resources Inc	7.6	Dec-23
21-Oct-20	AGR US	Avangrid Inc	1349863D US	Figma Inc	20.0	Dec-23
15-Sep-22	ADBE US	Adobe Inc	ENGH US	Energy Harbor Corp	6.8	Dec-23
6-Mar-23	VST US	Vistra Corp	2253458D GR	Viessmann Climate Solutions SE	12.0	Dec-23
26-Apr-23	CARR US	Carrier Global Corp	RETA US	Reata Pharmaceuticals Inc	6.3	Dec-23
28-Jul-23	BIIB US	Biogen Inc	HEP US	Holly Energy Partners LP	3.7	Dec-23
16-Aug-23	DINO US	HF Sinclair Corp	SOVO US	Sovos Brands Inc	2.7	Dec-23
7-Aug-23	CPB US	Campbell Soup Co	ACI US	Albertsons Cos Inc	25.4	Jan-24
14-Oct-22	KR US	Kroger Co/The	NATI US	National Instruments Corp	8.2	Mar-24
12-Apr-23	EMR US	Emerson Electric Co	AMED US	Amedisys Inc	3.7	Jun-24
26-Jun-23	UNH US	UnitedHealth Group Inc	1882583D NA		17.8	Jun-24
13-Jun-23	BG US	Bunge Ltd	n.a.	Aerospace unit/Ball Corp	5.6	Jun-24
17-Aug-23	BA/LN	BAE Systems PLC	CPRI US	Capri Holdings Ltd	10.0	Dec-24
10-Aug-23	TPR US	Tapestry Inc		NomNomNow Inc	1.0	n.a.
15-Jan-22	4614Z US	Mars Inc	IRBT US	iRobot Corp	1.6	n.a.
5-Aug-22	AMZN US	Amazon.com Inc		Cincinnati Southern Railway Co	1.6	n.a.
21-Nov-22	NSC US	Norfolk Southern Corp		Diamond BC BV	4.6	n.a.
13-Mar-23	1990508D KY	Olympus Water Holding TLP	ABCM US	Abcam PLC	5.7	n.a.
28-Aug-23	DHR US	Danaher Corp	ABCM US	Abcam PLC	5.7	n.a.

Previously published here

Situation Room: Out of stocks, into HG bond funds 07 September 2023



Flows

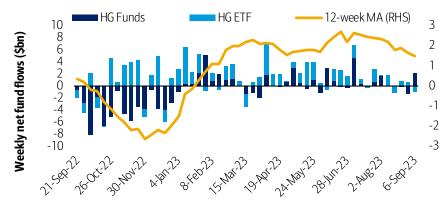
Out of stocks, into HG bond funds

Flows to US HG bond funds and ETFs improved to a +\$1.01bn inflow this past week ending on September 6, from a -\$0.73bn outflow in the prior week. This increase was due to flows for HG funds (to +\$2.10bn from -\$1.35bn), while HG ETF flows weakened (to -\$1.09bn from +\$0.62bn). This was the biggest inflow to HG funds in nine weeks (since July 5th). Outflows from short-term HG moderated (to -\$0.29bn from -\$1.70bn), while inflows to ex. short-term accelerated (to +\$1.31bn from +\$0.97bn).

Away from HG flows were mixed. Flows turned negative for stocks (to -\$1.35bn from +3.56bn) and munis (to -\$0.73bn from +\$0.66bn) and remained for global EM bonds (to -\$0.62bn from -\$1.67bn). On the other hand, inflows continued into high yield (to +\$0.30bn from +\$1.16bn) and loans (to +\$0.56bn from +\$0.34bn). Finally, money markets reported a +\$41.77bn inflow this past week (the biggest inflow since July 5), following a +\$7.30bn inflow a week earlier.

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

HG ETF -\$1.09bn, HG Funds +\$2.10

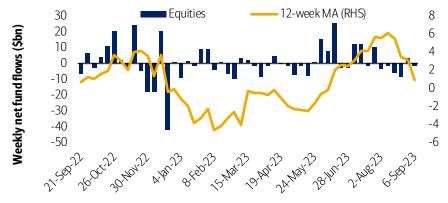


Source: EPFR Global. Note: data are for US-domiciled funds only

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Figure 34: Weekly equity fund flows, \$bn

Equities -\$1.35bn



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

Figure 35: Fund flows summary

YTD fund flows summary by asset class

Asset class	Last week (% of AUM for weekly reporting funds/ETFs)	YTD (% of AUM for all funds/ETFs)	YTD (\$bn)
High grade: total	0.05%	4.0%	144.6
High grade: ex short-term	0.09%	7.6%	211.8
High yield: total	0.13%	-0.5%	-1.6
High yield: ETFs only	-0.24%	-6.0%	-4.0
Loans	0.70%	-10.2%	-12.2
EM	-0.13%	-1.4%	-8.7
Munis	-0.15%	1.2%	11.0
All fixed income	0.07%	3.9%	234.1
Money markets	0.69%	15.3%	817.3
Equities	-0.01%	-0.3%	-46.7

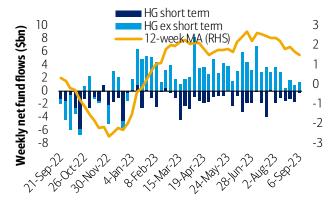
Note: Last week flow as % of AUM is based on AUM for weekly reporting funds / ETFs only. YTD flow as % of AUM is based on AUM for the full fund/ ETF universe as of December 31 2020. Global EM funds, US-domiciled funds only for other fund types.

Source: EPFR Global, BofA Global Research

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Figure 37: Weekly high grade fund flows, \$bn

HG short-term -\$0.29bn, HG ex short-term +\$1.31

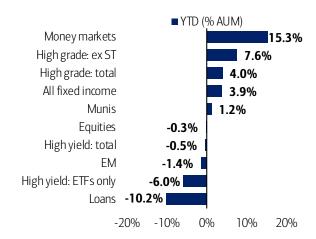


EPFR Global. Note: data are for US-domiciled funds only

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Figure 36: Year to date fund flows, % of AUM

HY ETFs have had the biggest outflows so farin 2023.



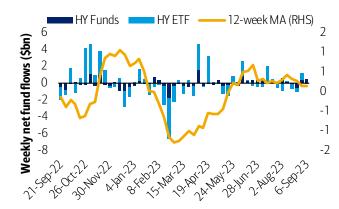
Note: Global EM funds, US-domiciled funds only for other fund types.

Source: EPFR Global, BofA Global Research

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Figure 38: Weekly high yield fund flows, \$bn

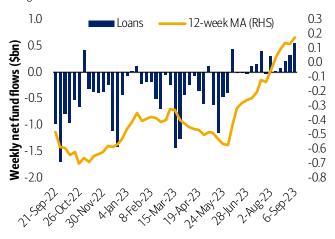
HY ETFs -\$0.15bn, HY funds +\$0.45



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

Figure 39: Weekly loan fund flows, \$bn

Leveraged loans +\$0.56bn

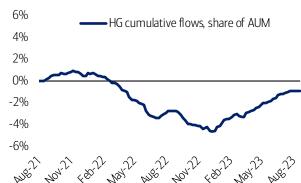


EPFR Global. Note: data are for US-domiciled funds only.

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Figure 41: Cumulative % flows in HG over the last 2 years

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

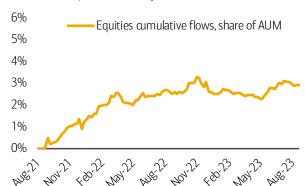


Source: EPFR Global, BofA Global Research

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Figure 43: Cumulative % flows in equities over the last 2 years

Flows moderate in equities after two years of inflows

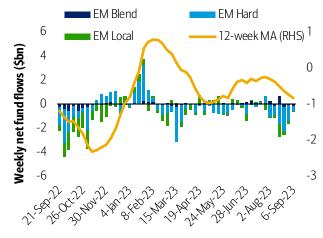


Source: EPFR Global, BofA Global Research

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Figure 40: Weekly EM fund flows, \$bn

Global EM bonds -\$0.62bn

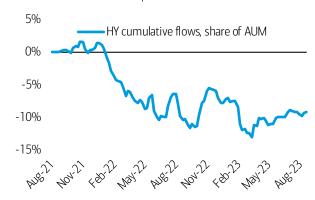


EPFR Global. Note: data are for US-domiciled funds only.

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Figure 42: Cumulative % flows in HY over the last 2 years

2022 and 2023 have seen consequent outflows in HY

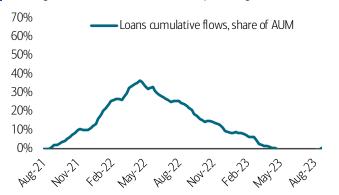


Source: EPFR Global, BofA Global Research

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Figure 44: Cumulative % flows in loans over the last 2 years

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



Source: EPFR Global, BofA Global Research



Appendix: defining high grade

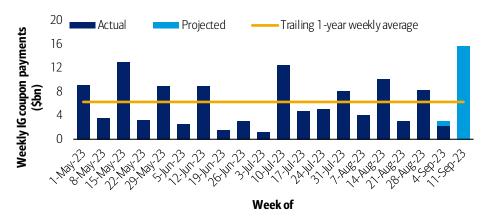
We define our high grade flows metric as a combination of "bond" and "corporate bond" fixed income funds and ETFs domiciled in the US (and investing in any currency, although the majority is invested in USD). We also exclude funds primarily focused on Government, HY, EM and MBS from the sample. The "bond"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

Weekly technicals

The US IG corporate bond market is expected to generate \$15.7bn in coupon payments next week, above the trailing 1-year weekly average of \$6.3bn (Figure 45). In addition, \$0.3bn of calls and \$2.4bn tender offers were settled and paid this week, while \$5.6bn of calls are expected to become effective next week. Bond maturities: \$2.8bn this week, \$41.6bn next week.

Figure 45: Weekly US IG coupon payments

Expect \$15.7bn of coupon payments next week, above the \$6.3bn trailing 1-year weekly average.



Source: ICE Data Indices, LLC, BofA Global Research

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Supply

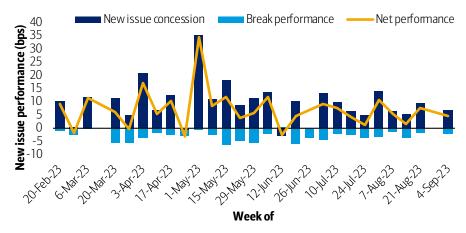
US IG gross issuance totaled \$57.5bn this week, consisted of \$25.7bn financials, \$17.5bn high-quality industrials and \$14.4bn BBB industrials. Given \$930bn of gross issuance, \$497.9bn of maturities, net issuance is tracking \$376bn YTD. The strong supply should momentum continue next week given the relatively stable market conditions, although the second week of September is typically much slower (Figure 47). Hence, we look for issuance in \$25-\$35bn range, with likely less activity on Wednesday September 16 due to the release of the August CPI report.

New issue performance improved this week (compared with the week of Aug 21st). The average new issue concession decreased to 6.9bps from 9.4bps last week, while the average break performance tightened to 2.2bps tighter this week from 1.8bps tighter last week. As a result, the overall new issue performance, which we measure as new issue concession plus break performance, decreased to 4.7bps this week from 7.6bps wider last week (Figure 46). This week's new issues are trading 2bps tighter on average from pricing.



Figure 46: Weekly new issue supply performance

For the week of Sep $4\,2023$: new issue concession = 6.9bps; break performance = -2.2bps; net performance = 4.7bps.

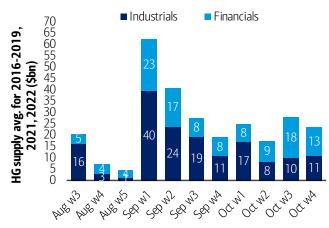


Source: BofA Global Research

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Figure 47: Weekly Supply seasonality

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

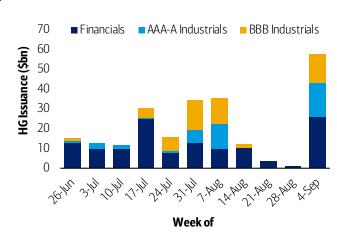


Source: Bloomberg, BofA Global Research

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Figure 48: Weekly Supply

This week's supply consisted of \$25.7bn financials, \$17.5bn high-quality industrials and \$14.4bn BBB industrials.

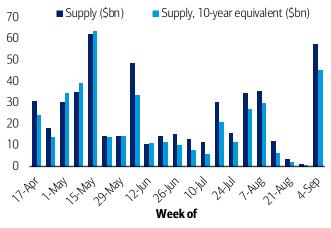


Bloomberg, BofA Global Research



Figure 49: Weekly gross and 10-year equivalent supply volumes

10-year equivalent supply = \$45.4bnWTD

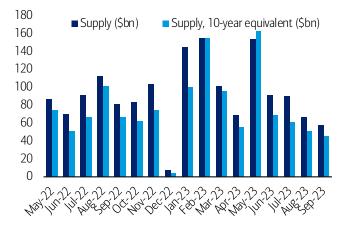


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Figure 50: Monthly gross and 10-year equivalent supply volumes

10-year equivalent supply = \$45.4bn in September



BofA Global Research, Bloomberg

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Figure 51: Recent new issue pricing and new issue concessions

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

						_	Рх	New Issue		Current
Date	Ticker	Name	Tenor		Moody's/S&P Rating	Coupon (%)	Spread (bps)	Conc.	* Break performance	spread (bps)
2023-09-05	BHP	BHP Billiton Finance USA Ltd	3	رب 850	A1/A-	5.25	65	n.a.	-]	(ops) 67
2023-09-05	BHP	BHP Billiton Finance USA Ltd	5	700	A1/A-	5.1	85	n.a.	0	87
2023-09-05	BHP	BHP Billiton Finance USA Ltd	7	900	A1/A-	5.25	100	n.a.	0	99
2023-09-05	BHP	BHP Billiton Finance USA Ltd	10	1,500	A1/A-	5.25	110	11	0	109
2023-09-05	BHP	BHP Billiton Finance USA Ltd	30	800	A1/A-	5.5	125	n.a.	-8	113
2023-09-05			10	350	Aa2/A+	5.35	110	7	n.a.	109
2023-09-05		63	31	1,000	Aa2/A+	5.85	147	2	n.a.	139
2023-09-05	CBAAU	Commonwealth Bank of Australia	2	600	Aa3/AA-	FRN	SOFR+63	n.a.	n.a.	61
2023-09-05	CBAAU	Commonwealth Bank of Australia/New York NY	2	900	Aa3/AA-	5.499	55	13	-2	52
2023-09-05	CDEL	Corp Nacional del Cobre de Chile	10	1,300	A3/NA	5.95	170	n.a.	n.a.	172
2023-09-05	CDEL	Corp Nacional del Cobre de Chile	30	700	A3/NA	6.3	195	n.a.	n.a.	176
2023-09-05	CSX	CSX Corp	10	600	A3/BBB+	5.2	95	4	1	96
2023-09-05	DBSSP	DBS Group Holdings Ltd	2	750	Aa2/NA	FRN	SOFR+63	n.a.	n.a.	n.a.
2023-09-05	DBSSP	DBS Group Holdings Ltd	2	750	Aa2/NA	5.479	53	n.a.	n.a.	n.a.
2023-09-05	DE	John Deere Capital Corp	2	350	A2/A	5.3	38	4	n.a.	35
2023-09-05	DE	John Deere Capital Corp	3	550	A2/A	5.15	52	6	2	51
2023-09-05	DE	John Deere Capital Corp	10	1,000	A2/A	5.15	90	n.a.	-2	86
2023-09-05	DUK	Duke Energy Corp	10	600	Baa2/BBB	5.75	150	-1	-3	152
2023-09-05	DUK	Duke Energy Corp	30	750	Baa2/BBB	6.1	173	-4	2	175
2023-09-05	INTNED	ING Groep NV	4	500	Baa1/A-	FRN	SOFR+156	n.a.	n.a.	147
2023-09-05	INTNED	ING Groep NV	4NC3	1,250	Baa1/A-	6.083	142	3	-3	143
2023-09-05	INTNED	ING Groep NV	11NC10	1,250	Baa1/A-	6.114	185	n.a.	-4	184
2023-09-05	JBSSBZ	JBS USA LUX SA / JBS USA Food Co / JBS Luxembourg	11	1,600	Baa3/BBB-	6.75	250	24	n.a.	246
2023-09-05	JBSSBZ	JBS USA LUX SA / JBS USA Food Co / JBS Luxembourg	30	900	Baa3/BBB-	7.25	290	n.a.	n.a.	287
2023-09-05	MET	Metropolitan Life Global Funding I	5	600	Aa3/AA-	5.4	105	n.a.	-1	104
2023-09-05	MITHCC	Mitsubishi HC Finance America LLC	5	500	A3/A-	5.807	143	n.a.	n.a.	n.a.
2023-09-05	PM	Philip Morris International Inc	5	650	A2/A-	5.25	105	-2	0	107
2023-09-05	PM	Philip Morris International Inc	7	700	A2/A-	5.5	135	13	2	136
2023-09-05	PM	Philip Morris International Inc	10	1,000	A2/A-	5.625	160	12	2	161
2023-09-05	SO	Southern Co/The	6	600	Baa2/BBB	5.5	113	2	-1	113
2023-09-05	SO	Southern Co/The	11	700	Baa2/BBB	5.7	148	6	-2	150
2023-09-05	SUMITR	Sumitomo Mitsui Trust Bank Ltd	3	500	A1/A	FRN	SOFR+115	n.a.	n.a.	n.a.
2023-09-05		Sumitomo Mitsui Trust Bank Ltd	3	500	A1/A	5.65	100	n.a.	-3	98
2023-09-05	SUMITR	Sumitomo Mitsui Trust Bank Ltd	5	500	A1/A	5.55	122	n.a.	-5	118
2023-09-05	SWEDA	Swedbank AB	3	1,000	Baa1/A-	6.136	148	n.a.	-1	147
2023-09-05	UBS	UBS AG/London	2	500	Aa3/A+	FRN	SOFR+93	n.a.	n.a.	89
2023-09-05	UBS	UBS AG/London	2	1,000	Aa3/A+	5.8	85	9	0	84

Figure 51: Recent new issue pricing and new issue concessions

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

				Moody's/S&P	•	Px Spread	New Issue Conc.	* Break	Current spread
Date Ticker	Name	Tenor	•	Rating	(%)	(bps)		erformance	
2023-09-05 UBS	UBS AG/London	5	1,500	Aa3/A+	5.65	128	n.a.	2	127
2023-09-05 UNANA	Unilever Capital Corp	5	700	A1/A+	4.875	55	n.a.	n.a.	55
2023-09-05 UNANA	Unilever Capital Corp	10	800	A1/A+	5	85	16	n.a.	81
2023-09-05 VW	Volkswagen Group of America Finance LLC	2	500	A3/BBB+	FRN	SOFR+93	n.a.	n.a.	91
2023-09-05 VW	Volkswagen Group of America Finance LLC	2	800	A3/BBB+	5.8	85	n.a.	n.a.	84
2023-09-05 WW	Volkswagen Group of America Finance LLC	3	900	A3/BBB+	5.7	105	n.a.	n.a.	104
2023-09-05 WW	Volkswagen Group of America Finance LLC	5	700	A3/BBB+	5.65	130	n.a.	n.a.	129
2023-09-05 WW	Volkswagen Group of America Finance LLC	10	500	A3/BBB+	5.9	165	n.a.	5	167
2023-09-05 WEC	WEC Energy Group Inc	3	600	Baa1/BBB+	5.6	93	12	-4	88
2023-09-06 AIB	AIB Group PLC	6NC5	1,000	A3/BBB	6.608	217	n.a.	-9	209
2023-09-06 BACR	Barclays PLC	4NC3	300	Baa1/BBB+	FRN	SOFR+188	n.a.	n.a.	n.a.
2023-09-06 BACR	Barclays PLC	4NC3	1,450	Baa1/BBB+	6.496	175	11	-4	171
2023-09-06 BACR	Barclays PLC	6NC5	1,250	Baa1/BBB+	6.49	205	7	-1	204
2023-09-06 BACR	Barclays PLC	11NC10	1,500	Baa1/BBB+	6.692	240	6	-1	239
2023-09-06 BKH	Black Hills Corp	11	450	Baa2/BBB+	6.15	195	n.a.	n.a.	198
2023-09-06 CABKSM	CaixaBank SA	4NC3	1,000	Baa3/BBB	6.684	195	n.a.	-7	188
2023-09-06 CABKSM	CaixaBank SA	11NC10	1,000	Baa3/BBB	6.84	255	n.a.	-7	248
2023-09-06 GMT	GATX Corp	11	300	Baa2/BBB	6.05	180	12	-6	175
2023-09-06 IDA	Idaho Power Co	31	350	A2/A-	5.8	150	7	n.a.	147
2023-09-06 MMC	Marsh & McLennan Cos Inc	10	600	A3/A-	5.4	115	8	1	116
2023-09-06 MMC	Marsh & McLennan Cos Inc	30	1,000	A3/A-	5.7	135	1	-3	133
2023-09-06 NESNVX	Nestle Holdings Inc	5	500	Aa3/AA-	5	57	1	n.a.	56
2023-09-06 NESNVX	Nestle Holdings Inc	7	500	Aa3/AA-	5	67	-1	n.a.	n.a.
2023-09-06 NESNVX	Nestle Holdings Inc	10	500	Aa3/AA-	5	77	1	n.a.	n.a.
2023-09-06 TOYOTA	Toyota Motor Credit Corp	2	400	A1/A+	FRN	SOFR+65	n.a.	n.a.	n.a.
2023-09-06 TOYOTA	Toyota Motor Credit Corp	2	600	A1/A+	5.6	58	n.a.	-10	57
2023-09-06 TOYOTA	Toyota Motor Credit Corp	5	750	A1/A+	5.25	85	19	-8	84
2023-09-07 BRASKM	Braskem Netherlands Finance BV	7	850	NA/BBB-	-	n.a.	n.a.	n.a.	n.a.
2023-09-07 GILD	Gilead Sciences Inc	10	1,000	A3/BBB+	5.25	100	3	n.a.	n.a.
2023-09-07 GILD	Gilead Sciences Inc	30	1,000	A3/BBB+	5.55	120	n.a.	n.a.	n.a.
2023-09-07 LII	Lennox International Inc	5	500	Baa2/BBB	5.5	113	n.a.	-2	111
2023-09-07 NDSN	Nordson Corp	5	350	Baa2/BBB	5.6	122	n.a.	-6	116
2023-09-07 NDSN	Nordson Corp	10	500	Baa2/BBB	5.8	157	n.a.	-9	148
2023-09-07 SPGI	S&P Global Inc	10	750	A3/NA	5.25	100	6	-2	98

Source: BofA Global Research, Bloomberg

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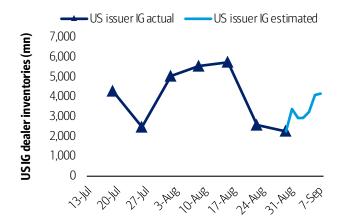
Dealer inventories

Below we estimate dealer inventories for the IG corporate bonds based on TRACE data. The actual inventories of US issuer bonds based on NY Fed survey, as well as the estimated change since the latest Fed report are plotted in Figure 52 and Figure 53. We estimate the corresponding DV01 equivalent in Figure 53. More details by sector and maturity are available in Figure 54 and Figure 55. Finally, note that the data for the current date is through about 4:40 p.m. Eastern Standard Time.



Figure 52: Estimated dealer inventories of IG corporate bonds.

We estimate IG dealer inventories of US issuer bonds increased to 4.2bn currently from 2.3bn on Aug-30.

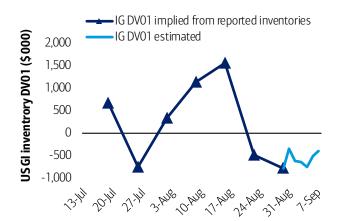


Note: data for US issuer bonds only, maturities 13M or longer. Actual dealer inventory data is from Primary Dealer Statistics survey by the NY Fed. The subsequent change in inventory is estimated based on TRACE.

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

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Figure 53: Estimated dealer inventory DV01 for IG corporate bonds. We estimate IG dealer inventory DV01 of US issuer bonds increased to-



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

\$0.4mn currently from -\$0.8bn on Aug-30.

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Figure 54: Estimated changes in IG dealer inventories by maturity and broad sector.

We estimate IG dealer inventories increased \$303mn today and increased \$1,996mn over the prior week.

Net dealer buy (\$mn)							Net dealer DV01 change (\$thousand)					Trading volumes on 7-Sep-23 (\$mn)			
Sector	7-Sep	6-Sep	1 W	2 W	4 W	7-Sep	6-Sep	1 W `	2 W	4 W	Buy	Sell	Dealer	Total	
High grade (13M+)	303	1,616	1,996	4,192	-1,760	165	540	419	1,459	-1,017	11,050	10,747	6,641	28,438	
<3yr	124	553	804	1,546	-2,357	6	102	136	258	-500	2,042	1,918	1,214	5,174	
3-5yr	26	323	550	838	70	9	140	217	261	-53	1,994	1,968	1,295	5,257	
5-11yr	120	1,141	1,368	2,142	1,788	50	752	881	1,271	1,192	3,708	3,588	2,211	9,508	
11+yr	33	-401	-726	-334	-1,260	100	-453	-814	-331	-1,656	3,306	3,273	1,921	8,499	
Fin	24	690	821	1,085	141	27	368	420	174	501	4,096	4,072	2,225	10,394	
Non-Fin	279	926	1,175	3,107	-1,901	138	172	-1	1,285	-1,518	6,954	6,675	4,416	18,044	
Fixed	311	1,585	2,005	4,333	-1,508	139	526	383	1,504	-924	10,832	10,520	6,554	27,906	
Floating	-8	30	-9	-140	-251	26	14	36	-46	-93	218	227	87	532	
US issuers	73	841	773	2,918	-3,255	96	246	-57	1,111	-1,760	8,315	8,242	5,446	22,003	
DM Yankees	132	696	1,014	1,166	1,275	19	243	369	306	619	2,323	2,191	1,125	5,638	
FM Yankees	98	79	209	109	220	51	52	107	41	124	412	314	70	796	

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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Figure 55: Estimated changes in IG dealer inventories by sector.

We estimate today IG dealer inventories increased \$124mn for Banks/Brokers and declined -\$69mn for Energy.

	Net dealer buy (\$mn)					Net o	dealer DV	01 chang	e (\$thou	Trading volumes on 7-Sep-23 (\$mn)				
Sector	7-Sep	6-Sep	1 W	2 W	4 W	7-Sep	6-Sep	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Aerospace/Defense	11	12	-32	-38	-270	6	-16	-67	-56	-134	185	174	138	497
Automobiles	68	82	211	226	62	5	9	55	78	71	266	198	183	648
Banks/Brokers	124	408	607	1,014	741	20	163	187	100	614	2,727	2,603	1,406	6,736
Basic Materials	-22	138	36	100	196	-8	121	66	75	162	473	495	262	1,231
Commercial Services	-34	149	60	68	44	-15	74	15	-22	-63	119	153	92	365
Energy	-69	-34	-218	-386	-725	-93	-112	-355	-503	-627	717	786	505	2,008
Finance	-67	183	84	-35	-546	8	122	118	-5	-231	688	754	469	1,910
Food, Bev, & Bottling	-11	19	23	280	-164	42	-58	7	185	-30	336	346	182	864
Health Care	244	76	395	1,010	-747	228	46	237	753	-279	1,490	1,246	779	3,515
Industrial Products	-1	167	290	507	326	-8	159	228	349	312	284	285	251	821
Insurance	23	32	162	170	357	32	41	140	131	286	404	381	220	1,005
Media & Entertainment	107	10	301	448	-42	81	-40	111	310	-6	421	313	208	942
REITs	-57	66	-32	-64	-411	-34	42	-26	-52	-168	277	334	131	742
Retail	-30	-84	-167	171	-320	-36	-102	-147	132	-187	364	394	334	1,093

Figure 55: Estimated changes in IG dealer inventories by sector.We estimate today IG dealer inventories increased \$124mn for Banks/Brokers and declined -\$69mn for Energy.

		Net de	(\$mn)		Net dealer DV01 change (\$thousand)					Trading volumes on 7-Sep-23 (\$mn)				
Sector	7-Sep	6-Sep	1 W	2 W	4 W	7-Sep	6-Sep	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Technology	46	-87	-171	23	-255	17	-89	-177	-28	-55	753	707	476	1,936
Telecom	56	-61	-41	19	-417	14	-110	-162	-134	-390	400	344	152	896
Tobacco	-9	139	151	102	89	-18	72	65	48	59	158	167	137	462
Transportation	4	57	-23	-5	-137	23	36	-12	-23	-216	191	187	119	497
Utilities	-115	269	285	471	427	-122	145	104	81	-91	635	751	494	1,880
Other	33	73	72	112	33	21	37	29	42	-43	161	128	103	391

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

Source: BofA Global Research, FINRA, TRACE.

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Common abbreviations:

IG: Investment Grade

HG: High Grade

LQD: iShares iBoxx \$ Investment Grade Corporate Bond ETF

DV01: Dollar value of a basis point

CDX IG: The Markit CDX North America Investment Grade Index

CDX HY: Markit CDX North America High Yield Index

ECB: European Central Bank

QE: Quantitative Easing

CSPP: corporate sector purchase programme

CPI: Consumer Price Index

FOMC: The Federal Open Market Committee



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