

# Credit Market Strategist

# No recession, no good

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Strong data has led to re-pricing of US recession risks lower. Equities have rallied, equity vol has dropped, and credit spreads have compressed. The flipside is that markets now price the Fed to keep rates higher for longer. A mild recession poses little risk to IG fundamentals, given strong balance sheets. In contrast tail risks from the high interest rates and tighter monetary policy clearly matter more. Such risks include "something breaking" such as the US bank stress in March, pressure on the CRE market, and a possibility of a much harder lending than expected. As a result, a delayed US recession creates upside risks to IG spreads in 2H-2023. Similarly, getting a recession sooner should instead cut tail risks, and lead to tighter IG spreads.

### Which ratings make money at times of stress

During periods of market stress the widening in credit spreads is offset by a decline in Treasury yields. For the three market downturns since 2010 BBBs delivered positive returns, on average, while returns for HY bonds were negative. Only the low BBBs lost money on average during market stress, while returns for mid and high-BBBs were positive on average.

#### Low BBBs: less is more

Positive rating actions this year depleted the share of low-BBB rated bonds to 13%. Historically issuers rated low-BBB accounted for a big share of downgrades to high yield. The YtD decline in the share of non-financial low-rated BBBs implies a 6.2% decrease in downgrade risk to HY.

#### Rating upgrades: faster now, slower later

The share of bonds on positive outlook / watch declined further in May from the record high levels in 1Q-2023, hinting at a potential slowdown in the pace of upgrades.

#### Higher M&A volumes in May

M&A announcements increased to \$188bn in May – the highest since May 2022 – from \$147bn in April.

#### IG market technicals

**Supply**: \$48.5bn of issuance this week, expect \$15-20bn next week. **Flows**: +\$1.72bn inflow this past week ending on June 7. **Weekly technicals**: expect \$9.0bn of coupon payments, \$2.7bn of calls and \$0.7bn tender offers to become effective next week. Bond maturities: \$10.5bn this week, \$20.9bn next week. **Dealer inventories**: +\$3,150mn past week ended Thursday. Details inside.

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

#### 09 June 2023

Credit Strategy United States

# Data Analytics



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#### Recent credit strategy research

Publication	Name
Situation Room	A positive week for flows
Situation Room	Which ratings make money at
	times of stress
Situation Room	Low BBBs: less is more
Situation Room	Rating upgrades: faster now,
	slower later
Monthly HG	May '23: Declining recession risk
Market Review	
Credit Market	May '23 Credit Investor Survey:
Strategist	It's all about recession
Credit Market	Summer 2022 snapshot of the
Strategist	US IG corporate market

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Refer to important disclosures on page 26 to 28.

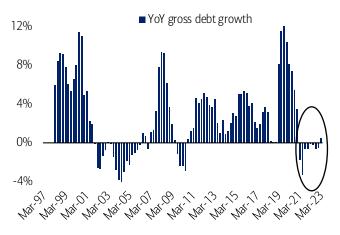
# No recession, no good

Strong data has led to re-pricing of US recession risks lower. Equities have rallied, equity vol has dropped, and credit spreads have compressed. The flipside is that markets now price the Fed to keep rates higher for longer. A mild recession poses little risk to IG fundamentals, given strong balance sheets. In contrast tail risks from the high interest rates and tighter monetary policy clearly matter more. Such risks include "something breaking" such as the US bank stress in March, pressure on the CRE market, and a possibility of a much harder lending than expected. As a result, a delayed US recession creates upside risks to IG spreads in 2H-2023. Similarly, getting a recession sooner should instead cut tail risks, and lead to tighter IG spreads.

#### Little impact from a US recession

The potential 2023/2024 recession has been priced-in for about a year, and companies had ample time to prepare. Hence the little surprise when it finally arrives means little impact on spreads as well. Moreover, the stronger balance sheets provide an additional buffer against recession risks. IG issuers have cut debt, and the resulting positive impact on credit quality led to further rating upgrades so far this year, concentrated among BBB-rated issuers (Figure 1, Figure 2).

Figure 1: IG companies cut debt in 2022 The median IG issuer cut gross debt during each quarter in 2022, while gross debt increased marginally in 1Q-2023.



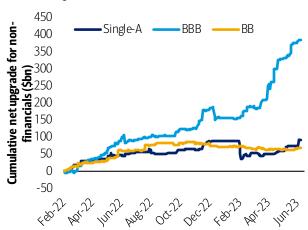
Note: median values for US non-financial issuers, ex. Utilities

Source: BofA Global Research, Bloomberg,

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#### Figure 2: IG ratings improved this year, particularly for BBBs

Cumulative upgrades for non-financials since Feb 2022 have reached \$475br for IG, including \$383bn for BBBs (notional \* notches).



Source: BofA Global Research, Bloomberg

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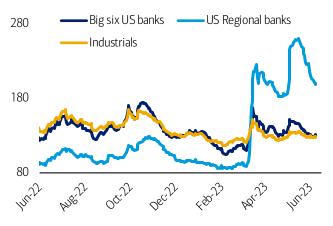
#### Big impact from tail risks

In contrast to a recession, other tail risks should be more important drivers of IG spreads in 2H-2023 instead. While the most recent example of such risks - the US bank stress is receding, the spread impact remains large (Figure 3, Figure 4). Concerns about CRE (commercial real estate) continue to build (Figure 5). Another known risk is that a higher for longer Fed increases the chance of a deep, rather than shallow, US recession. Hence, the potential for market-moving tail risks remains elevated as long as the Fed is in restrictive territory and the interest rates are high.



#### Figure 3: Regional bank risks are receding

US regional bank spreads peaked in mid-May and have by now re-traced most of May widening.

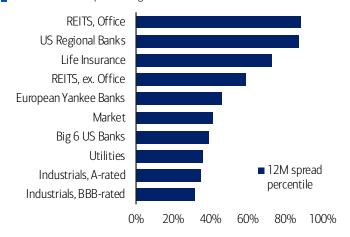


Source: BofA Global Research, ICE Data Indices, LLC

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### Figure 4: CRE and regional-bank related sectors remain wide

Most of the underperforming broad sectors in IG are

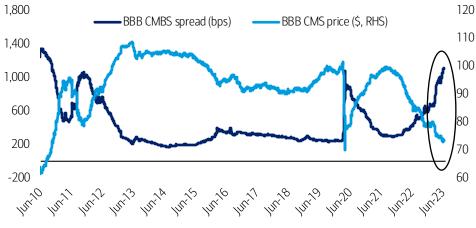


Source: BofA Global Research, ICE Data Indices, LLC

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#### Figure 5: BBB CMBS spreads continue to widen

BBB CMBS spread widened further 170bps to over 1,100bps from late April.



Source: ICE Data Indices, LLC

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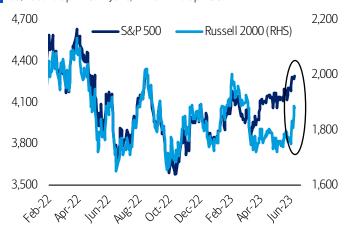
#### Higher stocks, fewer Fed cuts

Lower US recession risks have been positive for stocks so far in June, particularly the small caps, and has helped push equity implied volatility to the lowest levels since 1Q-2020 (Figure 6, Figure 7). On the flip side markets are now pricing about 25bps of Fed rate cuts in 2023, down from about 70bps of cuts priced in early May. The priced rate cuts are now as nearly as low as in early March, at the peak of concerns about US economy re-accelerating (Figure 8, Figure 9).



#### Figure 6: Stocks rallied in June

S&P 500 is up 2.7% in June, while RTY is up 7.5%.

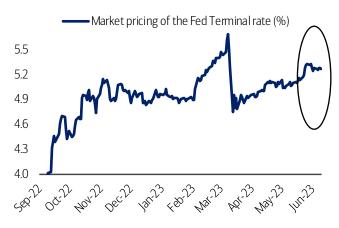


Source: Bloomberg.

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#### Figure 8: Market pricing of the Fed terminal rate

Market pricing of the Fed terminal increased by 16bps since mid-May.

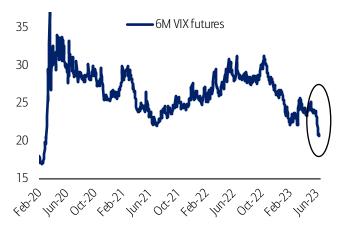


Source: BofA Global Research, Bloomberg.

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#### Figure 7: Equity vol has collapsed

6M VIX futures dropped to the lowest levels since 1Q-2020.

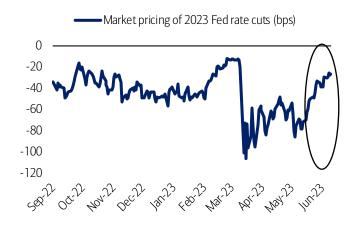


Source: Bloomberg.

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#### Figure 9: Market pricing of Fed cuts in 2023

Market pricing of Fed cuts in 2023 declined by about 40bps since mid-May.



Source: BofA Global Research, Bloomberg.

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#### Lower recession risk = compression

Tail risks remaining high is negative for IG spreads. Stronger US growth / lower recession risks should instead be positive for the risker parts of the credit market. Hence, we have already seen compression between IG and HY, and between CCCs and BBs, although that has been a bit more volatile in May (Figure 10, Figure 11).



#### Figure 10: Compression between IG and HY

The ratio of HY to IG spreads declined from close-to-typical levels in April.

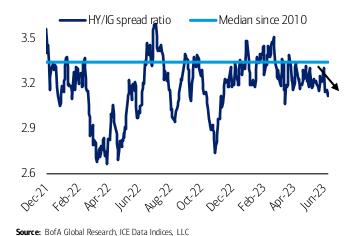
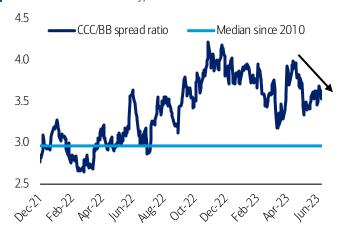


Figure 11: Some compression for CCCs

The ratio of CCC to BB spreads peaked most recently in early April, but the ratio still remains above the typical levels.



Source: BofA Global Research, ICE Data Indices, LLC

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Previously published here

<u>Situation Room: Which ratings make money at times of stress 07 June</u> 2023

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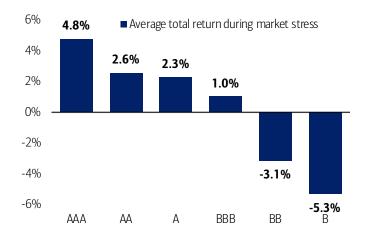
### Which ratings make money at times of stress

During periods of market stress the widening in credit spreads is offset by a decline in Treasury yields. During three market downturns since 2010 (European sovereign crisis in 2011, commodity crisis in 2015, Fed rate hiking cycle in 2018), not surprisingly IG, including BBBs, delivered positive total returns, on average, while returns for HY bonds were negative. Zooming in to BBBs, only the low-BBBs lost money in terms of total returns, on average, during market stress periods, while returns for mid and high-BBBs were instead positive. Finally, note that we do not include the 2020 Covid pandemic in our sample, as Treasury yields unusually also increased due to a liquidity crunch. We do not anticipate a similar liquidity crunch conditions during a potential US recession in late 2023 / 2024.



#### Figure 12: Total returns during periods of market stress

On average total returns were positive for IG bonds and negative for HY bonds.



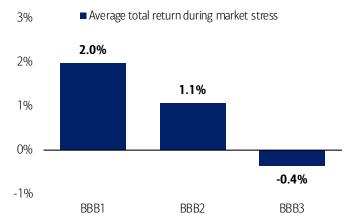
Note: based on European sovereign crisis in 2011, commodity crisis in 2015, Fed rate hiking cycle in 2018.

Source: BofA Global Research, ICE Data indices, LLC

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#### Figure 14: BBBs: Total returns during periods of market stress

On average low BBBs lost money during the three episodes of market stress since 2010.



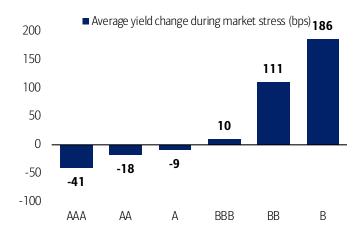
Note: based on European sovereign crisis in 2011, commodity crisis in 2015, Fed rate hiking cycle

Source: BofA Global Research, ICE Data indices, LLC

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#### Figure 13: Yield changes during periods of market stress

On average yields were lower for AAA to A-rated bonds, and higher for BBB through B-rated bonds.



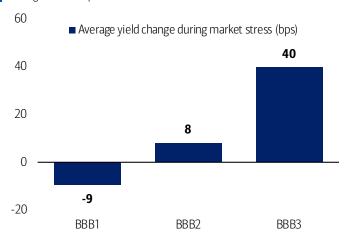
Note: based on European sovereign crisis in 2011, commodity crisis in 2015, Fed rate hiking cycle in 2018.

**Source:** BofA Global Research, ICE Data indices, LLC

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#### Figure 15: BBBs: Yield changes during periods of market stress

On average yields were lower of high BBBs, higher for mid and low BBBs during the three episodes of market stress since 2010.



Note: based on European sovereign crisis in 2011, commodity crisis in 2015, Fed rate hiking cycle in 2018

Source: BofA Global Research, ICE Data indices, LLC

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#### Figure 16: Average credit performance during periods of market stress

The table summarizes total returns by rating during the three periods of market stress since 2010.

					Total returns										
Period start	Period end	IG spread change	HY spread change	AAA	AA	A	BBB1	BBB2	BBB3	BB	В				
Mar-11	Sep-11	105	355	8.7%	4.6%	4.8%	5.5%	5.0%	1.7%	-2.8%	-5.2%				
Nov-15	Feb-16	58	224	2.4%	1.0%	0.5%	-0.8%	-2.5%	-3.0%	-5.0%	-7.4%				
Oct-18	Dec-18	34	152	3.2%	2.2%	1.6%	1.3%	0.7%	0.2%	-1.7%	-3.3%				
Avg		66	244	4.8%	2.6%	2.3%	2.0%	1.1%	-0.4%	-3.1%	-5.3%				

Source: BofA Global Research, ICE Data indices, LLC



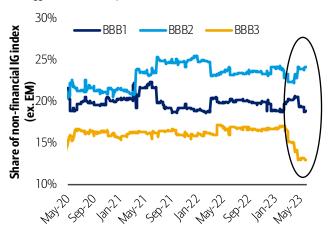
#### Previously published here

Situation Room: Low BBBs: less is more 06 June 2023

#### Low BBBs: less is more

Positive rating actions this year depleted the share of low-BBB rated bonds to 13% currently from 17% at the end of 2022, for non-financial issuers (Figure 17). Not surprisingly, historically issuers rated low-BBB accounted for a big share of downgrades to high yield. Since 2000, bonds rated low BBB have been 5.6 times more likely to be downgraded to HY within 6 months than those rated mid-BBB, and this number jumps to 9.0 times if looking at data for the last 10 years. Based on the historical rates since 2000, the YtD decline in the share of non-financial low-rated BBBs implies a 6.2% decrease in downgrade risk to HY. Based on the more recent last 10 years only, fewer share of low BBBs implies a 7.6% decrease in downgrade risk to HY.

**Figure 17: Share of BBB- in the ICE US IG index**Data suggests a recent drop in the share of low BBB in the index

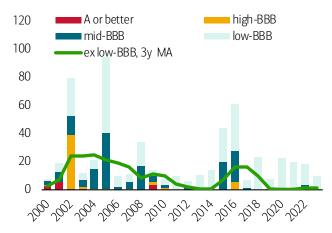


Source: BofA Global Research, ICE Data indices, LLC, Bloomberg.



#### Figure 18: Downgrades to HY by rating 6mo prior, non-financials (\$bn)

More recently fallen angels were almost exclusively rated low BBB six months prior to the downgrade.

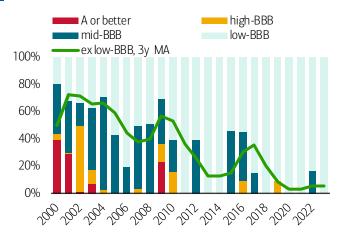


Source: BofA Global Research, ICE Data indices, LLC, Bloomberg.

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#### Figure 20: 6mo prior rating for downgrades to HY, non-financials

Non-BBB3 bonds account for a shrinking share of non-financials downgrades

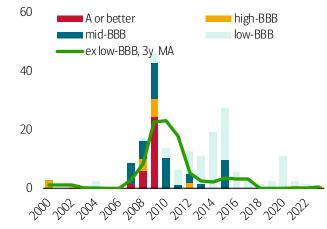


Source: BofA Global Research, ICE Data indices, LLC, Bloomberg.

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#### Figure 19: Downgrades to HY by rating 6mo prior, financials (\$bn)

Downgrades of financials to HY largely took place during the GFC

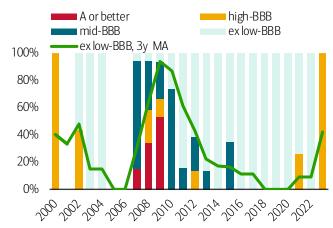


Source: BofA Global Research, ICE Data indices, LLC, Bloomberg.

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#### Figure 21: 6mo prior rating for downgrades to HY, financials

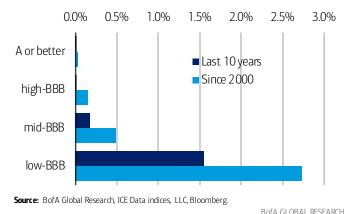
For financials, none of the recent downgrades to HY came from low BBBs



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

## Figure 22: 6M historical probabilities of downgrade to HY, non-

Across all ratings the probabilities of downgrade to HY have been lower these last  $10\,\mathrm{years}$  for non-financials



**Figure 23: 6M historical probabilities of downgrade to HY, financials** Across all ratings the probabilities of downgrade to HY have been lower these last 10 years for financials



#### Methodology

For each bond downgraded to HY we track the rating 6 months prior to the downgrade. Our dates correspond to the downgrade date. We calculate 6M probabilities of downgrade by taking the historical ratio of number of bonds downgraded to HY within 6 months for each rating versus all bonds of that rating. Finally, we calculate the % change in downgrade risk to HY as the % change in the probability of downgrade to HY within 6 months between the old (as of Dec 2022) and current (May 2023) index composition, using historical probabilities and weighing them by the AUM in each rating level.

#### Previously published here

Situation Room: Rating upgrades: faster now, slower later 06 June 2023

### Rating upgrades: faster now, slower later

Strong ratings momentum continued in May, this time including financials. However, the share of bonds on positive outlook / watch declined further in May from the record high levels in 1Q-2023, hinting at a potential slowdown in the pace of upgrades.

Net upgrades accelerated to +\$80bn in May from +\$32bn in April (notches \* notional). The increase was due to the banking sector's +\$21bn of net upgrades after a big -\$53bn of net downgrades in April. Other contributors to this increase included the net upgrades for the Telecom (+\$22bn), Health Care (+\$12bn) and Industrial Products (+\$10bn) sectors. Also, no sector experienced more than -\$1.5bn of net downgrades in May, with most net downgrades concentrated in Consumer Products and Transportation (Figure 32).

Net upgrades were stronger on the combination of slower overall rating actions, but a higher share of upgrades relative to downgrades. The overall pace of rating actions moderated but remained elevated in May at \$132bn, from \$212bn in April (Figure 28). On the other hand, the share of upgrades rose to near the top end of historical range at 80% in May, up from 58% in April (Figure 29).

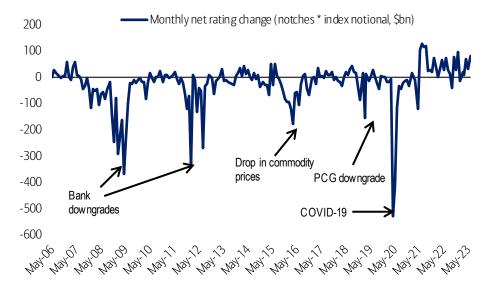


The outlook for future rating actions decreased but remained positive. The share of ratings on positive outlook/watch moderated to 1.8% in May from record-high 3.0% in March and February (Figure 30). In contrast, the share of rating on negative outlook/watch remained near record lows at 2.1% in May (Figure 31).

Finally, no bonds were downgraded to HY and \$27.4bn upgraded to IG in May, coming close to the highest level on record of \$27.5bn in March 2022. (Figure 35).

Figure 24: On net IG rating improved in May

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



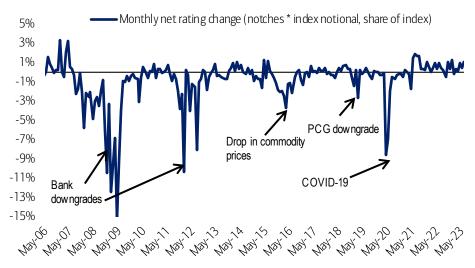
Note: net rating change equals upgrades less downgrades. Based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO.

Source: BofA Global Research, Bloomberg.

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Figure 25: Net upgrades improved to 1.0% of index notional in May

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.

Source: BofA Global Research, Bloomberg.

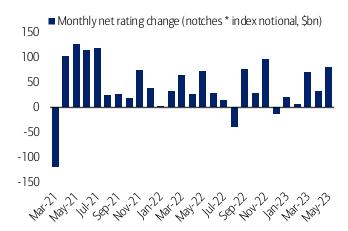
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#### Figure 26: IG bonds accelerated in their net upgrades in May

Net upgrades accelerated to +\$80bn in May from +\$32.3bn in March, above \$34bn monthly average over the past 12 months.



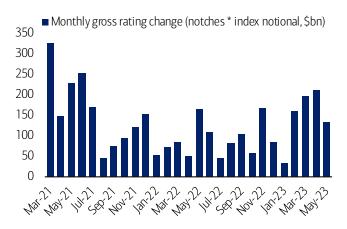
Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO

Source: BofA Global Research

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#### Figure 28: Gross rating actions moderated in May

Gross rating actions moderated to \$132bn in April from \$212bn in March.



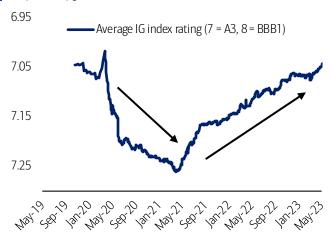
Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO

Source: BofA Global Research

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# **Figure 27: Index rating has retraced 106% of downgrades since 2020**The average index rating has been increasing rapidly up to Aug-2021, while

The average index rating has been increasing rapidly up to Aug-2021, while the pace of upgrades moderated in 2022 and so far in 2023.



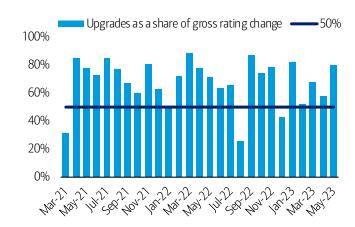
Note: based on the average of Moody's, S&P and Fitch, if available. We also include the watch as 2/3 of a notch and the outlook as 1/3 of a notch. Restricted to DM bonds in ICE BofA IG corporate index COAO, ex. downgrades to HY and upgrades from HY since 2019.

Source: BofA Global Research

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#### Figure 29: Share of upgrades increased to 80% in May

Upgrades accounted for 80% of total rating actions in May – up from 58% in April.



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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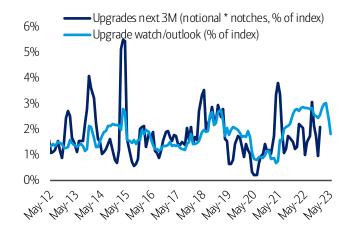
#### Rating watches/outlooks point to more upgrades

Our tracker for IG corporate bonds on a positive watch or outlook dropped further to 1.8% of the index in May (\$143bn) from 2.3% of the index in April (\$183bn). Despite this decrease the current level remains relatively high, indicating that rating agencies continue to signal a strong pace of upgrades over the next three months (Figure 30). The tracker for IG corporate bonds on a negative watch / outlook stayed flat at 2.1% of the index notional (\$164bn) in April, remaining near historically low levels suggesting low downgrade risk (Figure 31).



#### Figure 30: Positive watch/outlook is at historical highs.

The volume of IG corporate bonds on positive watch/outlook decreased in May but remains relatively high



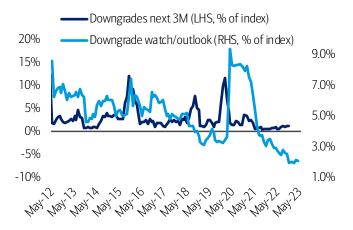
Note: watch/outlook is computed as 0.66 \* notional for a watch and 0.33 \* notional for an outlook. Upgrades are tracking rating changes only (ignoring outlook and watch changes).

Source: BofA Global Research

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#### Figure 31: Negative watch/outlook is near record lows

The volume of IG corporate bonds on negative watch/outlook remains near record low levels in 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

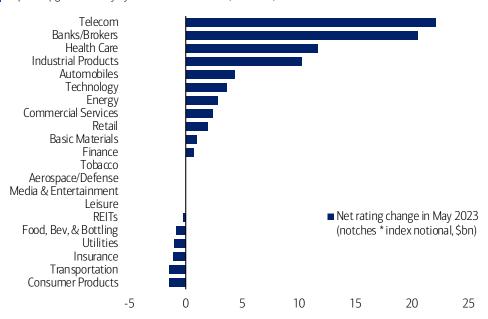
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#### Sector/issuer level

Sectors with most upgrades in May included Telecom (\$22.1bn), Banks/Brokers (\$20.5bn), Health Care (+\$11.7bn) and Industrial Products (+\$10.3bn). Sectors with most downgrades in May included Consumer Products (-\$1.5bn) and Transportation (-\$1.5bn). Issuers with the biggest April upgrades included TMUS (T-Mobile Us Inc, Figure 33). For issuers with the biggest April downgrades see Figure 34.

Figure 32: May 2023 net rating changes by sector (notional \* notches, \$bn)

Top net upgrades in May by volume were Telecom (+\$22.1bn).



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 32: May 2023 net rating changes by sector (notional \* notches, \$bn)

Top net upgrades in May by volume were Telecom (+\$22.1bn).

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Figure 33: Issuers with largest ratings upgrades in May-23

Top 15 issuers by rating upgrades.

Ticker	Sector	Issuer notional (Sbn)	Rating change: notches	Rating change: notional * notches, Sbn
BAC	Banks/Brokers	174.9	0.1	19.8
TMUS	Telecom	54.5	0.3	18.2
BACR	Banks/Brokers	38.9	0.2	8.7
CAT	Industrial Products	23.1	0.3	7.7
MBGGR	Automobiles	11.0	0.4	4.0
LLY	Health Care	11.4	0.3	3.8
NXPI	Technology	10.2	0.3	3.4
GILD	Health Care	20.3	0.2	3.3
EPD	Energy	27.1	0.1	3.0
RSG	Commercial Services	8.8	0.3	2.9
ETN	Industrial Products	4.7	0.5	2.4
NBNAUS	Telecom	4.0	0.5	2.0
ATDBCN	Retail	4.0	0.5	2.0
DT	Telecom	8.6	0.2	1.9
BAYNGR	Health Care	15.1	0.1	1.6
	BAC TMUS BACR CAT MBGGR LLY NXPI GILD EPD RSG ETN NBNAUS ATDBCN DT	BAC Banks/Brokers TMUS Telecom BACR Banks/Brokers CAT Industrial Products MBGGR Automobiles LLY Health Care NXPI Technology GILD Health Care EPD Energy RSG Commercial Services ETN Industrial Products NBNAUS Telecom ATDBCN Retail DT Telecom	Ticker         Sector         (\$bn)           BAC         Banks/Brokers         174.9           TMUS         Telecom         54.5           BACR         Banks/Brokers         38.9           CAT         Industrial Products         23.1           MBGGR         Automobiles         11.0           LLY         Health Care         11.4           NXPI         Technology         10.2           GILD         Health Care         20.3           EPD         Energy         27.1           RSG         Commercial Services         8.8           ETN         Industrial Products         4.7           NBNAUS         Telecom         4.0           ATDBCN         Retail         4.0           DT         Telecom         8.6	Ticker         Sector         (\$bn)         notches           BAC         Banks/Brokers         174.9         0.1           TMUS         Telecom         54.5         0.3           BACR         Banks/Brokers         38.9         0.2           CAT         Industrial Products         23.1         0.3           MBGGR         Automobiles         11.0         0.4           LLY         Health Care         11.4         0.3           NXPI         Technology         10.2         0.3           GILD         Health Care         20.3         0.2           EPD         Energy         27.1         0.1           RSG         Commercial Services         8.8         0.3           ETN         Industrial Products         4.7         0.5           NBNAUS         Telecom         4.0         0.5           ATDBCN         Retail         4.0         0.5           DT         Telecom         8.6         0.2

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

Source: BofA Global Research

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**Figure 34: Issuers with largest ratings downgrades in May-23** Top 15 issuers by rating downgrades.

Ticker	Sector	Issuer notional (\$bn)	Rating change: notches	Rating change: notional * notches, Sbn
	Banks/Brokers	(3011) 26.4	-0.2	
USB				-5.9
MMP	Energy	5.0	-0.7	-3.3
CNRCN	Transportation	7.3	-0.2	-1.2
KEY	Banks/Brokers	10.7	-0.1	-1.2
ALL	Insurance	5.2	-0.2	-1.2
ETR	Utilities	20.2	0.0	-1.0
EL	Consumer Products	5.1	-0.2	-0.8
TSN	Food, Bev, & Bottling	7.7	-0.1	-0.8
IFF	Basic Materials	7.7	-0.1	-0.8
CL	Consumer Products	4.1	-0.2	-0.7
FHN	Banks/Brokers	0.8	-0.8	-0.7
SRE	Utilities	20.1	0.0	-0.6
BR	Commercial Services	2.3	-0.2	-0.5
EXC	Utilities	32.2	0.0	-0.5
WEC	Utilities	8.9	-0.1	-0.4

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

Source: BofA Global Research

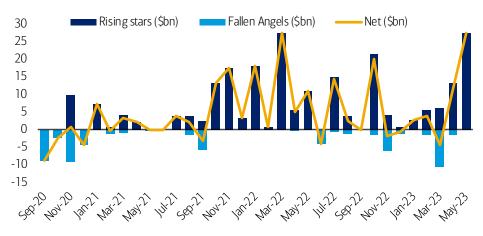
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#### Rising stars and fallen angels

Based on ICE BofA indices ex. EM \$27.4bn of bonds were upgraded from HY to IG in May (rising stars), coming close to the highest level on record of \$27.5bn in March 2022. On the other hand, no bonds were downgraded from IG to HY (fallen angels) in May (Figure 35, Figure 36, Figure 37).

Figure 35: Monthly rising star and fallen angel volumes

\$27.4.bn of rising stars, \$0.0bn fallen angels in May (ex. EM).



Note: excluding EM issuers.

Source: BofA Global Research, ICE Data Indices, LLC



#### Figure 36: May rising stars

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

						Avg. Yield	Avg. OAS
Ticker	Sector	Rating	N Bonds	Par, \$mn	Avg. Price	(%)	(bps)
OXY	Energy	BBB3	23	15,269	98.06	6.02	212
NSANY	Automobiles	BBB3	8	9,750	87.37	7.28	328
MAT	Consumer Products	BBB3	5	2,350	90.53	6.50	258

Source: BofA Global Research, ICE Data Indices, LLC

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#### Figure 37: May 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							
		CE D	1.0				

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: Rating upgrades: faster now, slower later 06 June 2023

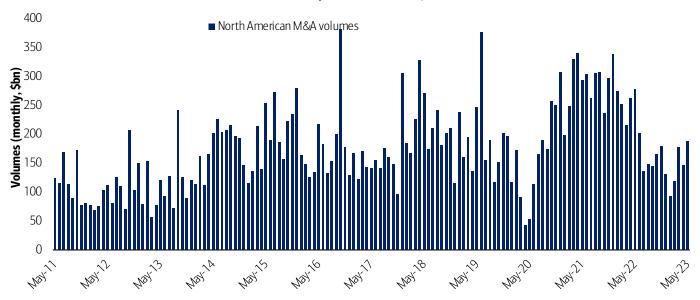
### Higher M&A volumes in May

North American M&A announcements increased to \$188bn in May – the highest since May 2022 – from \$147bn in April (Figure 38). The pipeline of announced deals with potential IG funding implications, on the other hand, declined to \$313bn in May as a number of large deals were funded during the month, from \$372bn in April (deal NAV, Figure 39). M&A-related IG issuance jumped to \$40.5bn in May from just \$0.5bn in April (Figure 40). See details of the current deal list in the Pipeline of M&A deals with IG issuance implications section.



#### Figure 38: Monthly North American M&A volumes

North American M&A announcement volume increased to \$188bn in May from and \$147bn in April.

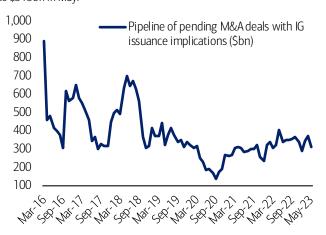


Note: limited to pending and closed deals only. Cancelled deals are excluded.

Source: Bloomberg

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# Figure 39: Pipeline of pending M&A deals with IG funding implications The pipeline of pending M&A deals with US IG funding implications declined to \$313bn in May.

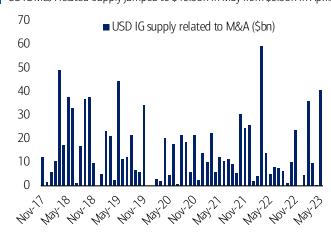


Source: BofA Global Research, Bloomberg

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#### Figure 40: US IG M&A related supply

US IG M&A-related supply jumped to \$40.5bn in May from \$0.5bn in April.



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 <a href="Kroger Co.: Stocking the cart; re-leveraging for rival 17 October 2022">Kroger Co.: Stocking the cart; re-leveraging for rival 17 October 2022</a>).



Our criteria for inclusion in the list of announced deals listed in Figure 41 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 41: 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
29-Mar-22	UNH US	UnitedHealth Group Inc	LHCG US	LHC Group Inc	6.2	Feb-23
17-Jun-22	UNH US	UnitedHealth Group Inc	EMIS LN	EMIS Group PLC	1.4	Mar-23
15-Nov-22	EL US	Estee Lauder Cos Inc/The	993366Z US	Tom Ford	2.3	Apr-23
27-Mar-23	ET US	Energy Transfer LP	1579203D US	Lotus Midstream LLC	1.5	May-23
16-Feb-23	BP/LN	BP PLC	TA US	TravelCenters of America Inc	3.0	May-23
28-Oct-22	NEE US	NextEra Energy Inc	n.a.	Portfolio of operating landfil	1.1	Jun-23
18-Jan-22	MSFT US	Microsoft Corp	ATVI US	Activision Blizzard Inc	67.9	Jun-23
6-Mar-23	O US	Realty Income Corp	n.a.	415 single tenant convenience	1.5	Jun-23
21-Oct-20	AGR US	Avangrid Inc	PNM US	PNM Resources Inc	7.6	Jul-23
2-May-23	DD US	DuPont de Nemours Inc	0062841D US	Spectrum Plastics Group Inc	1.8	Sep-23
16-Apr-23	MRK US	Merck & Co Inc	RXDX US	Prometheus Biosciences Inc	8.8	Sep-23
27-Apr-23	SU CN	Suncor Energy Inc	2253611D CN	TotalEnergies EP Canada Ltd	5.5	Sep-23
18-Apr-23	GSKLN	GSK PLC	BLUCN	BELLUS Health Inc	1.5	Sep-23
14-May-23	OKE US	ONEOK Inc	MMP US	Magellan Midstream Partners LP	18.9	Sep-23
26-May-23	COP US	ConocoPhillips	5981330Z CN	Surmont Sand & Gravel Ltd	3.0	Sep-23
26-May-22	AVGO US	Broadcom Inc	VMW US	VMware Inc	70.2	Nov-23
15-Sep-22	ADBE US	Adobe Inc	1349863D US		20.0	Dec-23
18-Dec-22	LHX US	L3Harris Technologies Inc	AJRD US	Aerojet Rocketdyne Holdings In	4.7	Dec-23
6-Mar-23	VST US	Vistra Corp	ENGH US	Energy Harbor Corp	6.8	Dec-23
26-Apr-23	CARR US	Carrier Global Corp		Viessmann Climate Solutions SE	12.0	Dec-23
3-Apr-23	4614Z US	Mars Inc	HSKA US	Heska Corp	1.3	Dec-23
14-Oct-22	KR US	Kroger Co/The	ACI US	Albertsons Cos Inc	25.4	Jan-24
12-Apr-23	EMR US	Emerson Electric Co	NATI US	National Instruments Corp	8.2	Mar-24
15-Feb-22	INTC US	Intel Corp	TSEM IT	Tower Semiconductor Ltd	5.4	n.a.
24-May-21	3694243Z CN	OMERS Private Equity Inc		International Schools Partners	2.3	n.a.
24-Jun-21	V US	Visa Inc	1065201D SS		2.1	n.a.
24-Nov-21	BKNG US	Booking Holdings Inc	3686264Z SS		1.8	n.a.
12-Nov-21	BKNG US	Booking Holdings Inc		Consumer Club Inc	1.2	n.a.
24-Nov-21	BKNG US	Booking Holdings Inc	3686264Z SS		1.8	n.a.
15-Jan-22	4614Z US	Mars Inc		NomNomNow Inc	1.0	n.a.
5-Aug-22	AMZN US	Amazon.com Inc	IRBT US	iRobot Corp	1.6	n.a.
21-Nov-22	NSC US	Norfolk Southern Corp		Cincinnati Southern Railway Co	1.6	n.a.
13-Mar-23	1990508D KY	Olympus Water Holding TLP	1524092D US	Diamond BC BV	4.6	n.a.

Source: BofA Global Research, Bloomberg

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Previously published here

Situation Room: A positive week for flows 08 June 2023



#### **Flows**

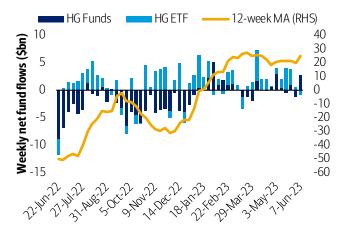
#### A positive week for flows

Flows for US HG funds and ETFs turned positive again this past week ending on June 7 with a +\$1.72bn inflow, up from a -\$0.70bn outflow in the prior week. This increase was entirely due to inflows to HG funds (to +\$2.67bn from -1.25bn), while flows to HG ETFs turned negative (to -\$0.95bn from +\$0.55bn). All the inflow was from ex short-term HG (to +\$1.94bn from +\$1.57bn), although outflows short-term moderated this week (to +\$0.22bn from +\$2.26bn).

In contrast to HG, flows moderated for equities this past week after seeing strong inflows the prior week (to +\$3.95bn from +\$15.14bn). However, flows were relatively strong for the remaining broad sectors, including HY (to +\$2.47bn from -\$0.23bn), loans (to +\$0.31bn from -\$0.38bn), global EM bonds (to +\$0.09bn from -\$0.98bn) and munis (to +\$0.51bn from -\$0.93bn). Finally, money markets reported a +\$15.33bn inflow this past week, down from +\$23.45bn inflow a week earlier.

Figure 42: High grade fund and ETF flows, \$bn

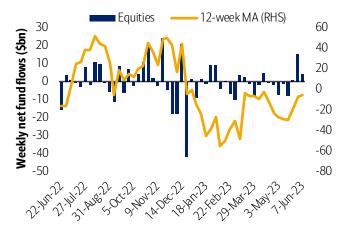
HG ETF -\$0.95bn, HG Funds +\$2.67



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

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Figure 43: Weekly equity fund flows, \$bn Equities +\$3.95bn



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



#### Figure 44: 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	0.12%	2.0%	70.7
High grade: ex short-term	0.19%	3.6%	100.9
High yield: total	1.40%	-3.5%	-11.6
High yield: ETFs only	3.41%	-12.6%	-8.4
Loans	0.73%	-9.1%	-11.0
EM	0.03%	-0.3%	-1.7
Munis	0.13%	0.7%	6.8
All fixed income	0.32%	2.0%	117.7
Money markets	0.32%	11.5%	616.3
Equities	0.06%	-0.2%	-28.3

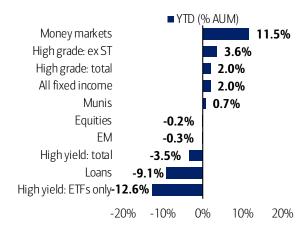
Note: Last week flow as % of AUM is based on AUM for weekly reporting funds / ETFs only. YTD flow as % of AUM is based on AUM for the full fund/ ETF universe as of December 31 2020. Global EM funds, US-domiciled funds only for other fund types.

Source: EPFR Global, BofA Global Research

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#### Figure 45: Year to date fund flows, % of AUM

HY ETFs have had the biggest outflows so far in 2023.



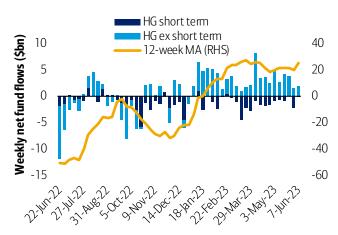
Note: Global EM funds, US-domiciled funds only for other fund types.

Source: EPFR Global, BofA Global Research

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#### Figure 46: Weekly high grade fund flows, \$bn

HG short-term -\$0.22bn, HG ex short-term +\$1.94

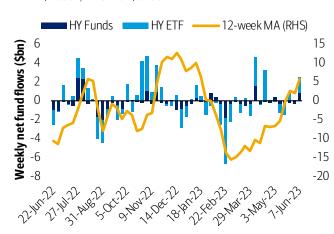


Source: EPFR Global. Note: data are for US-domiciled funds only.

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### Figure 47: Weekly high yield fund flows, \$bn

HY ETFs +\$1.69bn, HY funds +\$0.78bn

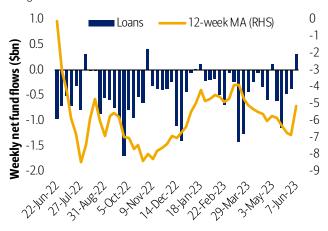


Source: EPFR Global. Note: data are for US-domiciled funds only.



### Figure 48: Weekly loan fund flows, \$bn

Leveraged loans +\$0.31bn

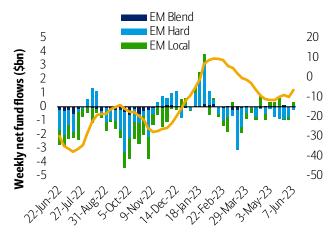


Source: EPFR Global. Note: data are for US-domiciled funds only.

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### Figure 49: Weekly EM fund flows, \$bn

Global EM bonds +\$0.09bn

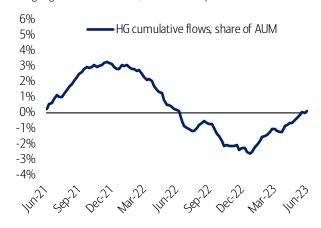


Source: EPFR Global. Note: data are for US-domiciled funds only.



Figure 50: Cumulative % flows in HG over the last 2 years

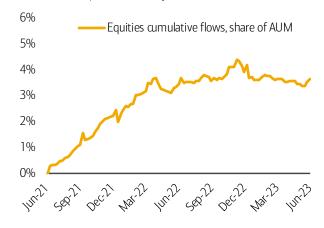
Following large outflows in 2022, HG flows turn positive in 2023



Source: EPFR Global, BofA Global Research

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# **Figure 52: Cumulative % flows in equities over the last 2 years** Flows moderate in equities after two years of inflows

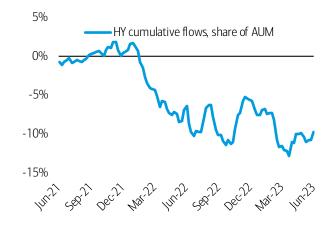


Source: EPFR Global, BofA Global Research

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### Figure 51: Cumulative % flows in HY over the last 2 years

2022 and 2023 have seen consequent outflows in HY

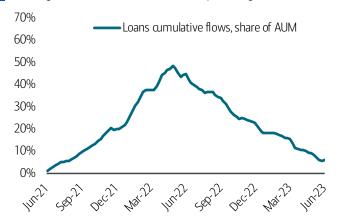


Source: EPFR Global, BofA Global Research

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#### Figure 53: Cumulative % flows in loans over the last 2 years

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



Source: EPFR Global, BofA Global Research

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#### Appendix: defining high grade

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

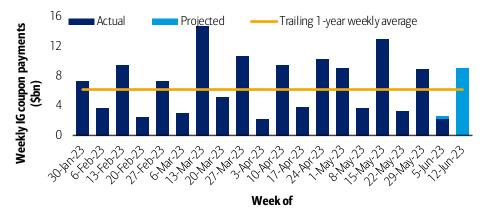
### Weekly technicals

The US IG corporate bond market is expected to generate \$9.0bn in coupon payments next week, above the trailing 1-year weekly average of \$6.2bn (Figure 54). In addition, \$2.7bn of calls and a \$0.7bn tender offers are expected to become effective next week. Bond maturities: \$10.5bn this week, \$20.9bn next week.



#### Figure 54: Weekly USIG coupon payments

Expect \$9.0bn of coupon payments next week, above the \$6.2bn trailing 1-year weekly average.



Source: ICE Data Indices, LLC, BofA Global Research

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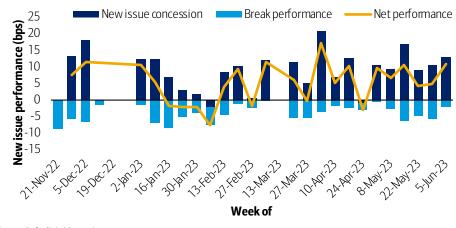
### Supply

US IG gross issuance jumped to \$48.5bn this week, consisted of \$32.0bn financials, \$4.1bn high-quality industrials and \$12.4bn BBB industrials. Given \$51.0bn of gross issuance, \$23.6bn of maturities and \$1.1bn of additional redemptions, net issuance is tracking \$26.4bn MTD. The very heavy issuance this past week suggests volumes were likely front-loaded ahead of the Fed and the CPI next week. Hence, we look for supply to slow significantly to \$15-\$20bn range next week – more in line with seasonal averages.

New issue performance weakened this week. The average new issue concession increased to 12.9bps from 10.6bps last week, while the average break performance weakened to 2.1bps tighter this week from 5.7bps tighter last week. As a result, the overall new issue performance, which we measure as new issue concession plus break performance, widened to 10.8bps this week from 4.9bps last week (Figure 55). This week's new issues are trading 2bps tighter on average from pricing.

#### Figure 55: Weekly new issue supply performance

For the week of Jun 5 2023: new issue concession = 12.9bps; break performance = -2.1bps; net performance = 10.8bps.



**Source:** BofA Global Research



#### Figure 56: Weekly Supply seasonality

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

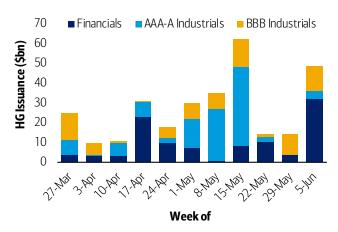


Source: Bloomberg, BofA Global Research

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#### Figure 57: Weekly Supply

This week's supply consisted of \$32.0bn financials, \$4.1bn high-quality industrials and \$12.4bn BBB industrials.

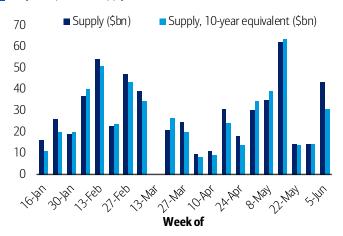


Source: Bloomberg, BofA Global Research

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### Figure 58: Weekly gross and 10-year equivalent supply volumes

10-year equivalent supply = \$30.8bn WTD

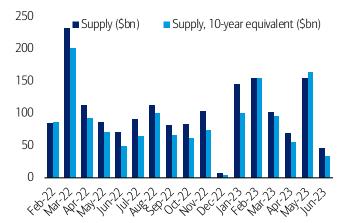


Source: BofA Global Research, Bloomberg

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### Figure 59: Monthly gross and 10-year equivalent supply volumes

10-year equivalent supply = \$33.3bn in June



Source: BofA Global Research, Bloomberg

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#### Figure 60: Recent new issue pricing and new issue concessions

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

<b>Date</b> 2023-06-05	<b>Ticker</b> BNP	<b>Name</b> BNP Paribas SA	<b>Tenor</b> 6NC5	<b>Size</b> (\$mm) 1,500	Moody's/S&P Rating Aa3/A+	<b>Coupon</b> (%) 5.335	Px Spread (bps)	New Issue Conc. (bps) n.a.	* Break performance -1	Current spread (bps)
2023-06-05	BNS	Bank of Nova Scotia/The	2	400	A2/A-	FRN	0	n.a.	n.a.	n.a.
2023-06-05	BNS	Bank of Nova Scotia/The	2	1,100	A2/A-	5.45	100	7	-4	96
2023-06-05	BNS	Bank of Nova Scotia/The	5	750	A2/A-	5.25	147	15	-2	143
2023-06-05	BNSF	Burlington Northern Santa Fe LLC	31	1,600	A3/AA-	5.2	130	10	n.a.	128
2023-06-05	COF	Capital One Financial Corp	6NC5	1,750	Baa1/BBB	6.312	248	11	2	247
2023-06-05	COF	Capital One Financial Corp	11NC10	1,750	Baa1/BBB	6.377	268	3	1	271
2023-06-05	DE	John Deere Capital Corp	2	600	A2/A	4.95	50	10	-5	43
2023-06-05	DE	John Deere Capital Corp	3	300	A2/A	FRN	SOFR+79	n.a.	n.a.	n.a.
2023-06-05	DE	John Deere Capital Corp	3	600	A2/A	4.75	65	13	-5	60
2023-06-05	DE	John Deere Capital Corp	7	1,000	A2/A	4.7	95	12	n.a.	95
2023-06-05	DG	Dollar General Corp	5	500	Baa2/BBB	5.2	137	21	n.a.	n.a.

#### Figure 60: Recent new issue pricing and new issue concessions

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

				Size	Moody's/S&P	Coupon	Px Spread	New Issue Conc.	* Break	Current spread
Date	Ticker	Name	Tenor	(\$mm)	Rating	(%)	(bps)	(bps)	performance	(bps)
2023-06-05	DG	Dollar General Corp	10	1,000	Baa2/BBB	5.45	177	9	n.a.	179
2023-06-05	DUK	Piedmont Natural Gas Co Inc	10	350	A3/BBB+	5.4	170	n.a.	-3	167
2023-06-05	HPE	Hewlett Packard Enterprise Co	1	250	Baa2/BBB	5.9	95	n.a.	n.a.	n.a.
2023-06-05	HPE	Hewlett Packard Enterprise Co	5	550	Baa2/BBB	5.25	145	n.a.	n.a.	n.a.
2023-06-05	MQGAU	Macquarie Bank Ltd	3	300	A1/A+	FRN	SOFR+124	n.a.	n.a.	n.a.
2023-06-05	MQGAU	Macquarie Bank Ltd	3	700	A1/A+	5.208	110	n.a.	n.a.	107
2023-06-05	MQGAU	Macquarie Group Ltd	11NC10	750	A1/A+	5.887	220	n.a.	n.a.	223
2023-06-05	NWMLIC	Northwestern Mutual Global Funding	5	700	Aaa/AA+	4.9	107	n.a.	-4	103
2023-06-05	RGA	Reinsurance Group of America Inc	10	400	Baa1/A	6	235	n.a.	6	239
2023-06-05	TFC	Truist Financial Corp	4NC3	1,500	A3/A-	6.047	193	29	n.a.	175
2023-06-05	TFC	Truist Financial Corp	11	1,750	A3/A-	5.867	218	n.a.	n.a.	208
2023-06-06	BACARD	Bacardi Ltd / Bacardi-Martini BV	6	400	Baa3/BBB-	5.25	140	-4	-4	173
2023-06-06	BACARD	Bacardi Ltd / Bacardi-Martini BV	10	700	Baa3/BBB-	5.4	175	n.a.	-4	171
2023-06-06	BACARD	Bacardi Ltd / Bacardi-Martini BV	20	400	Baa3/BBB-	5.9	190	n.a.	-4	186
2023-06-06	CQP	Cheniere Energy Partners LP	10	1,400	Ba1/BBB-	5.95	228	n.a.	n.a.	223
2023-06-06	FBINUS	Fortune Brands Innovations Inc	10	600	Baa2/BBB	5.875	220	27	n.a.	215
2023-06-06	IPG	Interpublic Group of Cos Inc/The	10	300	Baa2/BBB	5.375	185	22	n.a.	182
2023-06-06	NAB	National Australia Bank Ltd	2	650	Aa3/AA-	FRN	SOFT+76	n.a.	n.a.	n.a.
2023-06-06	NAB	National Australia Bank Ltd/New York	2	850	Aa3/AA-	5.2	70	10	-3	64
2023-06-06	NAB	National Australia Bank Ltd/New York	5	1,000	Aa3/AA-	4.9	110	21	-3	102
2023-06-06	NYLIFE	New York Life Global Funding	5	750	Aaa/AA+	4.9	107	11	n.a.	n.a.
2023-06-06	ORCINC	OWL Rock Core Income Corp	5	500	Baa3/BBB-	7.95	425	n.a.	n.a.	418
2023-06-07	AKERBP	Aker BP ASA	5	500	Baa2/BBB	5.6	170	-8	n.a.	n.a.
2023-06-07	AKERBP	Aker BP ASA	10	1.000	Baa2/BBB	6	225	n.a.	n.a.	222
2023-06-07	ASBBNK	ASB Bank Ltd	3	650	A1/AA-	5.346	115	n.a.	n.a.	n.a.
2023-06-07	BNCN	Brookfield Capital Finance LLC	10	550	A3/A-	6.087	230	n.a.	-4	225
2023-06-07	MASSMU	MassMutual Global Funding II	5	600	Aa3/AA+	5.05	115	n.a.	-4	111
2023-06-07	MCK	McKesson Corp	5	400	Baa1/BBB+	4.9	102	n.a.	n.a.	n.a.
2023-06-07	MCK	McKesson Corp	10	600	Baa1/BBB+	5.1	140	n.a.	n.a.	n.a.
2023-06-07	NGGLN	National Grid PLC	5	700	Baa2/BBB	5.602	167	n.a.	n.a.	n.a.
2023-06-07	NGGLN	National Grid PLC	10	800	Baa2/BBB	5.809	202	n.a.	n.a.	n.a.
2023-06-07	PNC	PNC Financial Services Group Inc/The	3NC2	1,000	A3/A-	5.812	127	21	-5	122
2023-06-07	PNC	PNC Financial Services Group Inc/The	6NC5	2.500	A3/A-	5.582	167	10	-2	164
2023-06-07	SWEDA	Swedbank AB	3	400	Aa3/A+	FRN	SOFR+138	n.a.	n.a.	n.a.
2023-06-07	SWEDA	Swedbank AB	3	850	Aa3/A+	5.472	125	n.a.	n.a.	123
2023-06-07	USB	US Bancorp	6NC5	1.750	A3/A	5.775	185	12	-4	181
2023-06-07	USB	US Bancorp	11NC10	1,750	A3/A	5.836	205	2	-3	201
2023-06-07	VALEBZ	Vale Overseas Ltd	10	1,500	Baa3/BBB-	6.125	245	18	n.a.	623
2023-06-07	ALLY	Ally Financial Inc	6NC5	850	Baa3/BBB-	6.992	313	25	n.a.	n.a.
2023-06-08	NWG	NatWest Group PLC	6NC5	1,250	A3/BBB+	5.808	195	5	0	11.a. 195
2023-06-08	SANUSA	Santander Holdings USA Inc	6NC5	500	Baa3/BBB+	6.565	270	32	0	270
2023-06-08	SHBASS	Svenska Handelsbanken AB	3	500	Aa2/AA-	FRN	SOFT+125			
2023-06-08	SHBASS	Svenska Handelsbanken AB Svenska Handelsbanken AB	3	700	Aa2/AA- Aa2/AA-	5.25	50F1+125 113	n.a. 5	n.a. 1	n.a. 114
2023-06-08	SHBASS	Svenska Handelsbanken AB Svenska Handelsbanken AB	5 5	1,000	Aa2/AA- A3/A	5.25 5.5	113 175		1 0	114 175
			5 5	450			338	n.a.		
2023-06-08	VST	Palomino Funding Trust I	5	40U	Baa3/BBB-	7.233	<i>3</i> 38	n.a.	n.a.	n.a.

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

**Source:** BofA Global Research, Bloomberg

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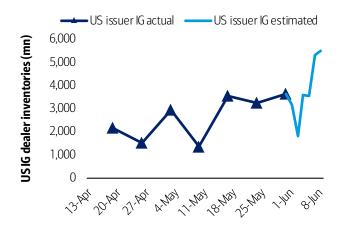
#### **Dealer inventories**

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 61 and Figure 62. We estimate the corresponding DV01 equivalent in Figure 62. More details by sector and



maturity are available in Figure 63 and Figure 64. Finally, note that the data for the current date is through about 4:40 p.m. Eastern Standard Time.

**Figure 61: Estimated dealer inventories of IG corporate bonds.** We estimate IG dealer inventories of US issuer bonds increased to \$5.5bn currently from \$3.6bn on May-31.

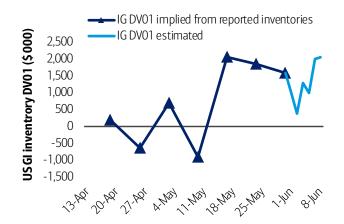


Note: data for US issuer bonds only, maturities 13M or longer. Actual dealer inventory data is from Primary Dealer Statistics survey by the NY Fed. The subsequent change in inventory is estimated based on TRACE.

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

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**Figure 62: Estimated dealer inventory DV01 for IG corporate bonds.** We estimate IG dealer inventory DV01 of US issuer bonds increased to \$2.1mn currently from \$1.6bn on May-31.



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

We estimate IG dealer inventories increased \$497mn today and increased \$3,461mn over the prior week.

		Net o	lealer buy	(\$mn)		Net	dealer D	V01 chang	e (\$thous	Trading volumes on 8-Jun-23 (\$mn)				
Sector	8-Jun	7-Jun	1 W	2 W	4 W	8-Jun	7-Jun	1 W	2 W	4 W	Buy	Sell	Dealer	Total
High grade (13M+)	497	2,384	3,461	5,764	10,572	150	1,240	1,556	2,052	5,376	10,352	9,855	5,809	26,016
<3yr	191	560	950	1,473	1,132	42	96	157	177	100	1,745	1,554	982	4,281
3-5yr	76	505	566	1,396	3,077	28	184	220	482	1,073	1,936	1,860	1,202	4,998
5-11yr	147	1,064	1,895	2,756	4,015	97	674	1,178	1,520	2,112	3,974	3,827	2,296	10,097
11+yr	83	255	49	139	2,348	-17	286	1	-127	2,091	2,696	2,614	1,329	6,640
Fin	294	1,297	1,745	2,632	3,673	73	477	631	998	1,733	3,956	3,662	2,264	9,882
Non-Fin	203	1,087	1,716	3,132	6,899	77	763	925	1,054	3,643	6,396	6,193	3,545	16,134
Fixed	498	2,314	3,258	5,706	10,627	171	1,216	1,546	2,110	5,457	10,254	9,756	5,749	25,759
Floating	-1	70	203	58	-55	-21	24	10	-58	-81	98	99	60	257
US issuers	182	1,753	2,324	4,242	6,096	55	1,000	1,011	1,338	2,949	7,684	7,501	4,517	19,702
DM Yankees	256	670	1,115	1,483	3,660	65	287	546	730	2,003	2,177	1,920	841	4,938
EM Yankees	58	-39	22	39	815	30	-47	0	-16	424	491	433	451	1,376

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 64: Estimated changes in IG dealer inventories by sector.

We estimate today IG dealer inventories increased \$292mn for Banks/Brokers and declined -\$64mn for Energy.

		Net de	ealer buy	(\$mn)		Net dealer DV01 change (\$thousand)					Trading volumes on 8-Jun-23 (\$mn)			
Sector	8-Jun	7-Jun	1 W	2 W	4 W	8-Jun	7-Jun	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Aerospace/Defense	-22	69	130	36	273	-25	58	111	-45	117	156	178	98	431
Automobiles	22	-41	39	113	261	19	-15	17	10	84	200	179	130	508
Banks/Brokers	292	1,057	1,455	2,281	2,972	110	404	649	943	1,502	2,654	2,362	1,673	6,689
Basic Materials	65	139	99	126	445	48	122	41	35	221	343	278	179	800
Commercial Services	20	-3	44	-12	-75	17	-13	45	-25	-87	198	178	55	431
Energy	-64	40	-9	241	1,403	-45	25	-20	135	1,026	594	658	344	1,596
Finance	3	187	170	228	410	-5	61	-42	66	255	448	445	263	1,155
Food, Bev, & Bottling	103	21	106	346	945	84	30	78	258	589	331	229	168	728
Health Care	-54	334	302	392	607	-65	220	160	86	166	842	895	556	2,294



**Figure 64: Estimated changes in IG dealer inventories by sector.**We estimate today IG dealer inventories increased \$292mn for Banks/Brokers and declined -\$64mn for Energy.

	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 8-Jun-23 (\$mn)			
Sector	8-Jun	7-Jun	1 W	2 W	4 W	8-Jun	7-Jun	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Industrial Products	27	45	80	-216	-402	27	34	51	-302	-462	240	213	144	598
Insurance	-105	24	-25	-23	54	-67	-20	-46	-115	-97	123	228	126	477
Media & Entertainment	67	90	47	193	247	87	44	6	-17	69	587	520	256	1,363
REITs	32	30	73	74	164	34	31	68	102	71	238	206	149	592
Retail	-17	193	407	745	782	-42	191	315	479	616	371	389	250	1,010
Technology	190	45	476	627	1,062	118	9	261	303	655	679	489	365	1,532
Telecom	65	-46	208	833	991	52	-21	210	631	810	496	431	225	1,152
Tobacco	-9	66	10	17	207	-1	33	-2	5	120	27	36	47	110
Transportation	-21	-83	-77	-106	-94	-22	-75	-80	-108	-134	132	154	147	433
Utilities	-37	163	-33	-298	242	-9	99	-116	-350	-139	698	734	413	1,845
Other	-9	56	7	214	126	-2	22	12	121	157	86	95	78	259

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

CRE: commercial real estate AUM: assets under management

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