

Situation Room

Inflows to risk

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Flows for US HG funds and ETFs moderated to +\$1.11bn this past week ending on July 12 from a big +\$6.82bn inflow in the prior week. Flows were lower for both HG funds (to +\$0.25bn from +\$4.67bn) and ETFs (to +\$0.86bn from +\$2.15bn). Similarly, HG flows weakened for ex short-term HG (to +\$2.90bn from +\$6.92bn) and for short-term (to -\$1.79bn from -\$0.10bn). Flows tend to follow returns. That means the big swings in interest rates in July could result in volatile flows over the next four weeks. Away from HG flows generally improved for risk assets. Hence flows remained strong or improved for equities (to +\$12.58bn from +\$12.28bn), high yield (to +\$1.99bn from +\$0.13bn) and loans (to +\$0.17bn from +\$0.11bn). Flows also improved for munis (to +\$0.25bn from -\$0.54bn) but weakened for global EM bonds (to -\$0.08bn from +\$0.22bn). Finally, money markets reported a -\$18.29bn outflow this past week following a +\$47.72bn inflow a week earlier.

Daily credit snapshot

US IG issuance totaled \$3.0bn across xx deals today, \$11.5bn WTD and \$24.3bn MTD. The average new issue concession was 13.5bps today, while the average break performance was 2.0bps tighter today. This week's new issues are trading 2.0bps tighter on average from pricing. S&P 500 closed +0.85%, 10-year Treasury yields -9bps, CDX IG +1.4bps, CDX HY -\$0.21pts, and cash bond spreads quoted -/+ 2bps today, LQD closed 1.49bps wider today.

Daily dealer inventories update

\$2,115mn (notional), \$968,000 (DV01) today. Maturities and sectors inside.

Daily foreign demand tracker

We track dealer-to-affiliate volumes on Trace that are correlated with foreign buying.

Credit Market Strategist data and charts

13 July 2023

Credit Strategy United States Cross Product

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Credit Strategy

See Team Page for List of Analysts

See page 19 for abbreviations

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Refer to important disclosures on page 20 to 22.

Research Overview — The Situation

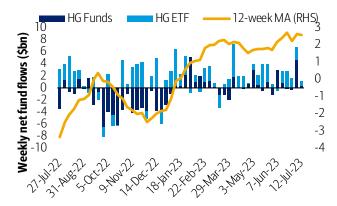
Inflows to risk

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Figure 1: High grade fund and ETF flows, \$bn

HG ETF +\$0.86bn, HG Funds +\$0.25

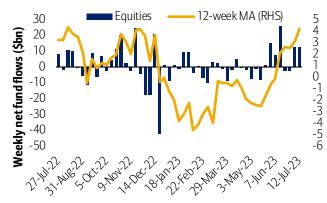


 $\textbf{Source:} \ \ \mathsf{EPFR} \ \mathsf{Global.} \ \mathsf{Note:} \ \mathsf{data} \ \mathsf{are} \ \mathsf{for} \ \mathsf{US-domiciled} \ \mathsf{funds} \ \mathsf{only}.$

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Figure 2: Weekly equity fund flows, \$bn

Equities +\$12.58bn



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



Figure 3: 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%	2.0%	73.3
High grade: ex short-term	0.19%	3.9%	108.0
High yield: total	0.86%	-2.1%	-7.0
High yield: ETFs only	2.96%	-9.6%	-6.4
Loans	0.21%	-6.8%	-8.1
EM	-0.02%	-0.1%	-0.7
Munis	0.05%	1.1%	9.6
All fixed income	0.23%	2.2%	130.8
Money markets	-0.31%	9.0%	479.4
Equities	0.13%	0.1%	21.4

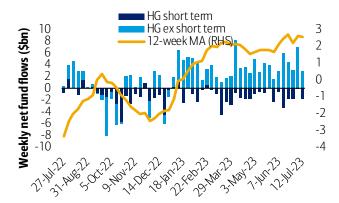
Note: Last week flow as % of AUM is based on AUM for weekly reporting funds / ETFs only. YTD flow as % of AUM is based on AUM for the full fund/ ETF universe as of December 31 2020. Global EM funds, US-domiciled funds only for other fund types.

Source: EPFR Global, BofA Global Research

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Figure 5: Weekly high grade fund flows, \$bn

HG short-term -\$1.79bn, HG ex short-term +\$2.90

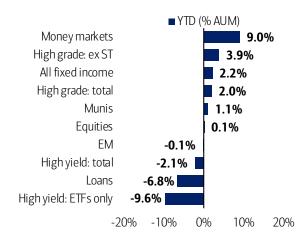


Source: EPFR Global. Note: data are for US-domiciled funds only.

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Figure 4: Year to date fund flows, % of AUM

HY ETFs have had the biggest outflows so farin 2023.



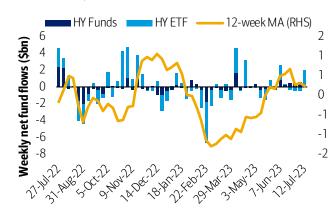
Note: Global EM funds, US-domiciled funds only for other fund types.

Source: EPFR Global, BofA Global Research

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Figure 6: Weekly high yield fund flows, \$bn

HY ETFs +\$1.87bn, HY funds +\$0.13bn

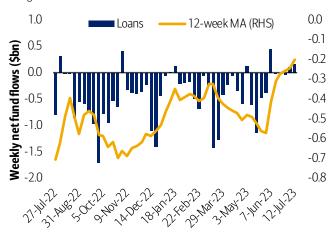


Source: EPFR Global. Note: data are for US-domiciled funds only.



Figure 7: Weekly loan fund flows, \$bn

Leveraged loans +\$0.17bn

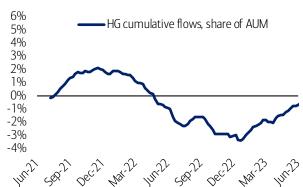


Source: EPFR Global. Note: data are for US-domiciled funds only.

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Figure 9: Cumulative % flows in HG over the last 2 years

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

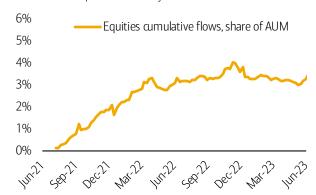


Source: EPFR Global, BofA Global Research

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Figure 11: Cumulative % flows in equities over the last 2 years

Flows moderate in equities after two years of inflows

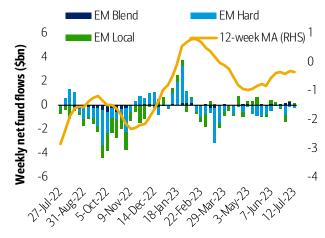


Source: EPFR Global, BofA Global Research

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Figure 8: Weekly EM fund flows, \$bn

Global EM bonds -\$0.08bn

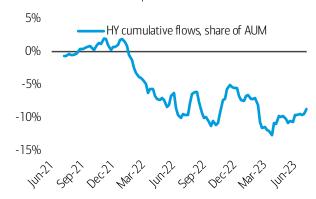


Source: EPFR Global. Note: data are for US-domiciled funds only

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Figure 10: Cumulative % flows in HY over the last 2 years

2022 and 2023 have seen consequent outflows in HY

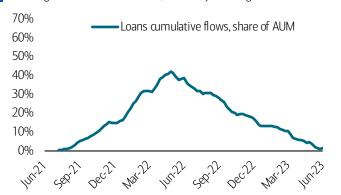


Source: EPFR Global, BofA Global Research

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Figure 12: 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.

Credit Strategy

Daily credit snapshot

US IG issuance totaled \$3.0bn across xx deals today, \$11.5bn WTD and \$24.3bn MTD. The average new issue concession was 13.5bps today, while the average break performance was 2.0bps tighter today. This week's new issues are trading 2.0bps tighter on average from pricing.

S&P 500 closed +0.85%, 10-year Treasury yields -9bps, CDX IG +1.4bps, CDX HY - \$0.21pts, and cash bond spreads quoted -/+ 2bps today, LQD closed 1.49bps wider today.

Figure 13: Recent new issue pricing and new issue concessions

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

				C!	M 1-1-/C0 D	C	D., C.,	New Issue	* Door ole	Current
Date	Ticker	Name	Tenor	Size (\$mm)	Moody's/S&P Rating	Coupon (%)	Px Spread (bps)	Conc. (bps)	* Break performance	spread (bps)
2023-07-10	MET	MetLife Inc	10	1,000	A3/A-	5.375	145	n.a.	-1	144
2023-07-10	TD	Toronto-Dominion Bank/The	3	450	A1/A	FRN	SOFR+108	n.a.	n.a.	109
2023-07-10	TD	Toronto-Dominion Bank/The	3	1,800	A1/A	5.532	98	8	-2	98
2023-07-10	TD	Toronto-Dominion Bank/The	5	1,250	A1/A	5.523	128	18	0	129
2023-07-11	DE	John Deere Capital Corp	5	1,500	A2/A	4.95	75	21	-6	69
2023-07-11	KOHNPW	Korea Hydro & Nuclear Power Co Ltd	5	500	Aa2/AA	5	90	n.a.	n.a.	n.a.
2023-07-11	PACLIF	Pacific Life Global Funding II	5	450	Aa3/AA-	5.5	128	n.a.	n.a.	n.a.
2023-07-11	RABOBK	Cooperatieve Rabobank UA/NY	2	650	Aa2/A+	FRN	SOFR+70	n.a.	n.a.	66
2023-07-11	RABOBK	Cooperatieve Rabobank UA/NY	2	850	Aa2/A+	5.5	65	10	-2	63
2023-07-13	AYR	Aircastle Ltd	5	650	Baa3/BBB-	6.5	260	n.a.	n.a.	n.a.
2023-07-13	RY	Royal Bank of Canada	3	350	A1/A	FRN	SOFR+108	n.a.	n.a.	n.a.
2023-07-13	RY	Royal Bank of Canada	3	1,000	A1/A	5.2	98	9	-2	96
2023-07-13	RY	Royal Bank of Canada	5	1,000	A1/A	5.2	128	18	-2	126

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

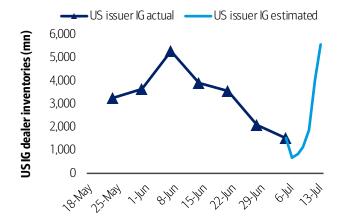


Daily dealer inventories update

Below we estimate dealer inventories for the IG corporate bonds based on TRACE data. The actual inventories of US issuer bonds based on NY Fed survey, as well as the estimated change since the latest Fed report are plotted in Figure 14 and Figure 15. We estimate the corresponding DV01 equivalent in Figure 15. More details by sector and maturity are available in Figure 16 and Figure 17. Finally, note that the data for the current date is through about 4:40 p.m. Eastern Standard Time.

Figure 14: Estimated dealer inventories of IG corporate bonds.We estimate IG dealer inventories of US issuer bonds increased to \$5.6bn

We estimate IG dealer inventories of US issuer bonds increased to \$5.6br currently from \$1.5bn on Jul-05.



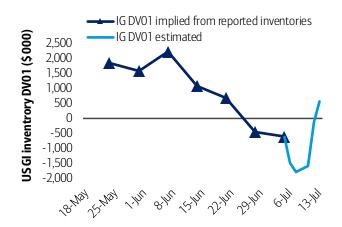
Note: data for US issuer bonds only, maturities 13M or longer. Actual dealer inventory data is from Primary Dealer Statistics survey by the NY Fed. The subsequent change in inventory is estimated based on TRACE.

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

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Figure 15: Estimated dealer inventory DV01 for IG corporate bonds.

We estimate IG dealer inventory DV01 of US issuer bonds increased to \$0.6mn currently from -\$0.6bn on Jul-05.



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

We estimate IG dealer inventories increased \$2,115mn today and increased \$7,159mn over the prior week.

		Net d	ealer buy	(\$mn)		Net	Net dealer DV01 change (\$thousand)					Trading volumes on 13-Jul-23 (\$mn)					
Sector	13-Jul	12-Jul	1 W	2 W	4 W	13-Jul	12-Jul	1 W	2 W	4 W	Buy	Sell	Dealer	Total			
High grade (13M+)	2,115	2,420	7,159	6,154	6,243	968	1,629	3,073	2,561	2,977	13,226	11,111	6,540	30,877			
<3yr	716	507	2,290	2,043	1,977	128	94	424	375	425	2,369	1,653	1,132	5,153			
3-5yr	424	509	1,837	1,553	960	145	177	640	545	256	2,490	2,066	1,243	5,799			
5-11yr	720	554	2,247	2,033	1,338	455	353	1,246	1,162	394	4,831	4,111	2,491	11,433			
11+yr	255	849	785	524	1,968	240	1,005	763	479	1,901	3,536	3,281	1,675	8,492			
Fin	508	397	2,074	2,310	2,678	190	277	764	880	1,226	4,554	4,046	2,267	10,867			
Non-Fin	1,607	2,023	5,085	3,844	3,565	778	1,351	2,309	1,681	1,751	8,672	7,065	4,274	20,011			
Fixed	2,195	2,367	7,134	6,084	6,012	972	1,612	3,052	2,520	2,907	13,074	10,879	6,445	30,398			
Floating	-80	52	25	70	231	-4	16	21	41	70	152	232	95	479			
US issuers	1,538	2,149	4,900	3,892	2,672	703	1,467	2,074	1,513	1,250	10,450	8,913	5,348	24,711			
DM Yankees	530	248	2,018	1,974	2,803	236	171	870	906	1,333	2,403	1,873	1,016	5,292			
EM Yankees	47	23	241	288	768	29	-10	129	143	394	373	326	176	874			

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 17: Estimated changes in IG dealer inventories by sector.

We estimate today IG dealer inventories increased \$370mn for Banks/Brokers and increased \$43mn for Energy.

	Net dealer buy (\$mn)					Net dealer DV01 change (\$thousand)					Trading volumes on 13-Jul-23 (\$mn)					
Sector	13-Jul	12-Jul	1 W	2 W	4 W	13-Jul	12-Jul	1 W	2 W	4 W	Buy	Sell	Dealer	Total		
Aerospace/Defense	13	-3	8	106	8	23	32	70	167	112	151	139	99	389		



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Sector	13-Jul	12-Jul	1 W	2 W	4 W	13-Jul	12-Jul	1 W	2 W	4 W	Buy	Sell	Dealer	Total		
Automobiles	76	64	258	147	619	18	10	43	3	182	290	214	114	618		
Banks/Brokers	370	-64	1,676	2,644	2,565	170	11	586	1,035	1,073	3,037	2,667	1,564	7,268		
Basic Materials	106	75	313	366	489	14	55	139	245	266	520	414	248	1,182		
Commercial Services	3	20	111	132	16	-11	-4	16	15	-49	109	107	57	273		
Energy	43	149	415	134	365	-62	53	122	53	215	861	819	492	2,172		
Finance	11	268	163	-198	537	-30	172	81	-49	378	708	697	404	1,808		
Food, Bev, & Bottling	130	97	382	321	189	83	65	166	78	43	498	368	216	1,083		
Health Care	223	410	889	761	387	245	353	573	596	306	1,359	1,137	821	3,317		
Industrial Products	138	79	445	249	167	63	37	194	88	81	304	166	166	636		
Insurance	40	113	130	-24	-149	-9	52	67	-38	-73	397	356	140	893		
Media & Entertainment	121	165	205	341	389	37	161	66	154	272	696	575	184	1,455		
REITs	87	79	105	-113	-275	60	42	31	-68	-152	412	326	159	897		
Retail	59	174	147	35	-441	83	117	160	103	-181	480	421	363	1,264		
Technology	267	150	748	597	1,718	131	1	212	-21	1,032	965	697	506	2,168		
Telecom	229	188	581	599	332	102	146	370	401	295	919	690	268	1,878		
Tobacco	8	14	112	45	159	-3	7	72	14	149	82	73	50	205		
Transportation	42	136	117	24	-195	34	97	94	44	-260	224	182	107	513		
Utilities	105	292	213	46	-441	12	197	-62	-247	-571	1,035	930	502	2,467		
Other	46	13	139	-61	-197	10	25	73	-12	-142	178	132	81	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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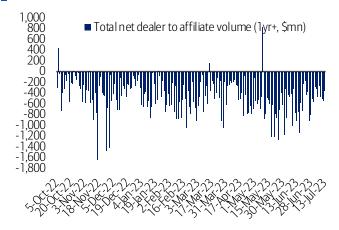
Daily foreign demand tracker

We believe net dealer-to-affiliate volumes from Trace are correlated with foreign buying of US HG corporate bonds - i.e., negative numbers mean foreign investor buying (US dealers taking down inventory in favor of foreign affiliates). For supporting material see our "primer" on tracking foreign inflows (See: Credit Market Strategist: One year round-trip in spreads 15 July 2016). Figure 18 shows the overall daily dealer-to-affiliate volumes while Figure 19, Figure 20 and Figure 21 show subsets of this data. In particular Figure 19 shows net dealer-to-affiliate volumes for longer maturity (12+ years) bonds, Figure 20 displays volumes reported to Trace before 8am NY time (biased toward Asian buying) and Figure 21 shows the subset of net trades reported between 8am and noon (biased toward European buying).



Figure 18: Net dealer buying from affiliate (1yr+)

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

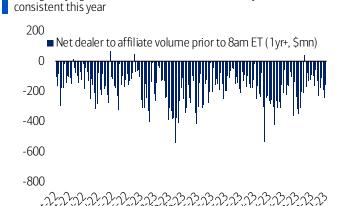


Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.

Source: Bloomberg, TRACE

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Figure 20: Net dealer-to-affiliate trading volumes before 8am ET Foreign buying before 8am NY time is dominated by Asia and has been



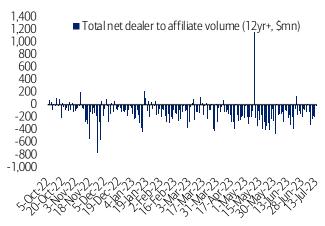
Note: Morning share of daily trading volume is correlated with secondary market activity of foreign investors due to different time zones.

Source: BofA Global Research, TRACE

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Figure 19: Net dealer buying from affiliate (12yr+)

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

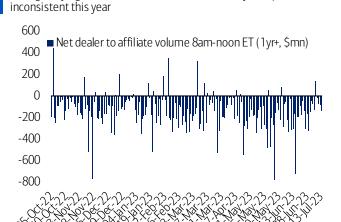


Note: Net dealer-to-affiliate volumes are correlated with foreign buying/selling. Negative numbers indicate foreign buying.

Source: Bloomberg, TRACE

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Figure 21: Net dealer-to-affiliate trading volumes 8am - noon ETForeign buying 8am-noon NY time is dominated by Europe and has been



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

Source: BofA Global Research, TRACE

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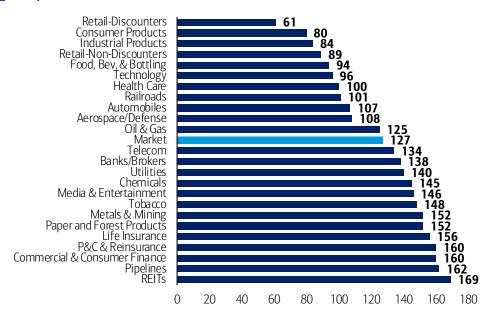
Credit Market Strategist data and charts



High Grade Spreads by Sector

Figure 22: High grade spreads by sector (bps)

Sector spreads for BofA US IG Corporate Index COA0 as of July 12, 2023. Results include subordinated and hybrid securities.



Source: BofA Global Research, ICE Data Indices, LLC

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High grade sector historical performance

Figure 23: High Grade Sector Performance as of July 12, 2023

Sector spreads and performance for BofA HG U.S. Corporate Master COAO. Results include subordinated and hybrid securities

								Exce	ess R	eturn	(bps)	•		Chan ps)	ige	Total Return
			Duratio				% Mkt									
Sector	Rating	OAS	n	Yield	Price	Face (\$bn)	Value	MTD	QTD	YTD	YOY	MTD	QTD	YTD	YOY	QTD
Aerospace/Defense	BBB1	108	8.0	5.26	92.5	144.3	1.72	29	29	272	684	-3	-3	-19	-60	-1
Automobiles	BBB1	107	3.9	5.47	93.6	183.5	2.22	26	26	220	418	-6	-6	-22	-42	48
Banks/Brokers	A3	138	4.6	5.80	92.1	1,870.0	22.28	2	2	163	317	0	0	-6	-14	16
Basic Materials	BBB2	147	7.0	5.66	91.8	339.0	4.03	25	25	199	617	-3	-3	-14	-53	9
Building Materials	BBB2	132	7.3	5.52	89.0	22.4	0.26	36	36	269	606	-2	-2	-27	-55	15
Chemicals	BBB2	145	7.2	5.66	90.1	133.1	1.55	31	31	204	497	-4	-4	-11	-31	12
Homebuilders	BBB2	133	4.7	5.59	92.0	15.3	0.18	31	31	324	672	-7	-7	-35	-82	46
Metals & Mining	BBB1	152	7.6	5.65	93.8	120.0	1.46	17	17	188	780	-2	-2	-16	-74	-8
Paper and Forest Products	BBB2	152	5.5	5.77	92.6	48.2	0.58	21	21	141	534	-2	-2	-3	-48	26
Commercial Services	A3	111	8.6	5.25	87.6	108.2	1.22	25	25	247	497	-4	-4	-18	-37	-13
Consumer Products	A2	80	6.4	4.98	92.0	75.3	0.89	33	33	208	406	-6	-6	-16	-28	27
Energy	BBB1	140	7.5	5.59	91.5	700.2	8.29	34	34	228	591	-5	-5	-12	-40	10
Oil & Gas	A3	125	7.7	5.42	90.7	409.2	4.80	30	30	206	561	-3	-3	-9	-36	5
Pipelines	BBB2	162	7.2	5.82	92.6	291.1	3.50	38	38	260	633	-5	-5	-16	-47	18
Finance	A3	141	5.2	5.74	90.7	443.3	5.19	26	26	164	388	-5	-5	-9	-32	32
Commercial & Consumer Finance	BBB1	160	3.8	6.04	92.7	160.0	1.92	26	26	157	391	-7	-7	-7	-36	49
Finance-Other Services	A3	130	6.1	5.57	89.6	283.3	3.28	26	26	167	386	-4	-4	-9	-29	21
Food, Bev, & Bottling	A3	94	7.9	5.10	91.3	316.4	3.74	24	24	230	559	-3	-3	-19	-47	-4
Health Care	A3	100	8.5	5.17	90.4	843.6	9.85	32	32	185	419	-4	-4	-11	-28	-5
Industrial Products	A3	84	6.2	5.11	91.7	207.9	2.46	21	21	184	411	-4	-4	-13	-33	15
Insurance	A2	158	7.1	5.82	89.8	366.0	4.25	22	22	127	379	-3	-3	3	-14	5
Insurance-Other	BBB1	151	7.8	5.63	89.2	35.6	0.41	22	22	184	472	-3	-3	-4	-22	-5
Life Insurance	A2	156	6.3	5.87	90.1	230.2	2.68	21	21	102	338	-3	-3	4	-12	13
Multi-Line Insurance	BBB1	172	8.5	5.95	91.3	23.1	0.27	22	22	109	470	-3	-3	8	-15	-17
P&C & Reinsurance	А3	160	8.6	5.73	88.9	77.1	0.89	26	26	180	426	-3	-3	-1	-18	-10
Leisure	BBB2	152	4.1	5.79	93.0	28.8	0.35	12	12	280	928	-2	-2	-41	-137	37
Media & Entertainment	BBB1	146	8.5	5.59	86.9	339.6	3.82	31	31	327	517	-4	-4	-24	-42	-6



Figure 23: High Grade Sector Performance as of July 12, 2023

Sector spreads and performance for BofA HG U.S. Corporate Master COAO. Results include subordinated and hybrid securities

								Fvce	ss R	eturn	(hns)	Эþ		cnan ps)	ge	Return
Media-Cable	BBB1	155	9.4	5.65	85.8	156.2	1.74	35	35 N	266	468	-4	-4	-13	-31	-14
Media-Diversified	BBB1	139	7.8	5.55	87.8	183.5	2.09	27	27	379	562	-4	-4	-33	-51	0
Real Estate Dev & Mgt	А3	179	5.7	5.83	89.1	8.0	0.09	16	16	165	235	-2	-2	1	-1	26
REITs	BBB1	169	5.5	5.88	87.6	282.0	3.19	28	28	115	351	-5	-5	1	-25	36
Retail	A2	87	7.8	5.06	89.8	323.6	3.75	32	32	175	408	-5	-5	-12	-33	5
Food & Drug Retailers	BBB2	137	7.7	5.57	87.4	28.3	0.32	23	23	146	426	-2	-2	-4	-28	-1
Retail-Discounters	A1	61	7.3	4.81	94.1	59.0	0.72	34	34	127	304	-4	-4	-7	-23	12
Retail-Non-Discounters	А3	89	8.0	5.06	89.0	236.4	2.71	32	32	190	430	-4	-4	-12	-31	3
Technology	A2	96	7.7	5.14	89.3	561.9	6.48	24	24	255	506	-4	-4	-18	-35	-1
Telecom	BBB2	134	8.5	5.43	87.7	335.5	3.81	1	1	234	410	-1	-1	-15	-30	-35
Tobacco	BBB1	148	6.6	5.74	90.8	87.8	1.03	69	69	350	983	-9	-9	-35	-101	56
Transportation	BBB1	120	8.9	5.39	90.0	194.6	2.27	49	49	207	569	-4	-4	-16	-46	5
Railroads	А3	101	10.9	5.13	87.9	108.8	1.24	63	63	178	539	-6	-6	-10	-33	-7
Transportation-Other	BBB1	142	6.4	5.71	92.6	85.8	1.03	31	31	241	603	-2	-2	-25	-62	19
Utilities	А3	140	8.3	5.55	89.3	785.5	9.07	32	32	128	449	-3	-3	-4	-31	-3
Market	A3	127	6.8	5.52	90.5	8,545.0	100.00	22	22	193	447	-3	-3	-11	-32	8

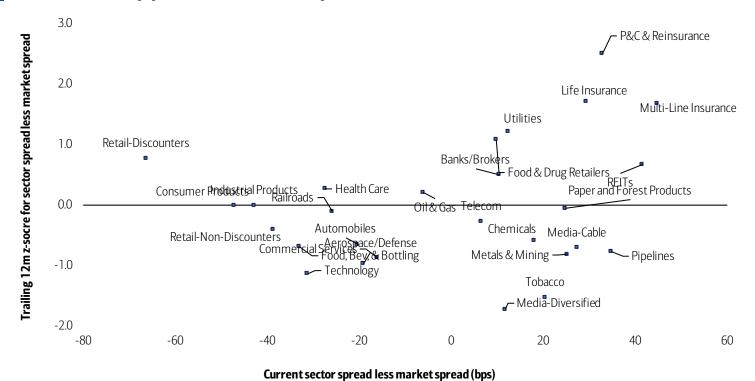
Source: ICE Data Indices, LLC, BofA Global Research

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Sector performance and relative value

Figure 24: Trailing 12 month spread Z-score vs. current sector spread differential to the market

Retail-Discounters are trading tight and Multi-Line Insurance are trading wide relative to the market.



cui i cire sector spi cua iess market spi cu

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Source: ICE Data Indices, LLC, BofA Global Research

Supply statistics

Figure 25: High grade supply summary, \$bn

US IG supply by broad market sectors

Sector	WTD	MTD	QTD	YTD
US Financials	2.1	2.1	2.1	145.5
US Industrials	1.5	3.3	3.3	387.7
European Financials	1.5	5.3	5.3	74.7
European Industrials	0.0	0.0	0.0	20.1
EM Yankees	0.5	0.5	0.5	21.6
Non-Euro Non-EM Yankees	5.9	13.2	13.2	90.4
Total	11.5	24.3	24.3	739.8

Source: BofA Global Research

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Figure 27: Cumulative High grade supply YTD, \$bn YTD US IG supply by broad market sectors and YoY comps

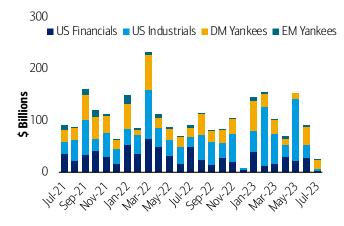
Sector	YTD 2020	YTD 2021	YTD 2022	YTD 2023
Financials	408.8	395.3	416.3	298.6
AAA-A Industrials	396.4	230.7	125.9	226.4
BBB Industrials	472.8	260.4	215.8	214.9
Total	1,278.0	886.3	758.0	739.8
%-change		-31%	-14%	-2%
US	990.8	591.8	520.8	533.2
Europe	125.2	125.5	94.1	94.8
EM	75.7	82.5	42.8	21.6
Other DM	86.3	86.6	100.4	90.4

Source: BofA Global Research

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Figure 26: HG monthly issuance, \$bn

Monthly US IG supply by broad market sectors

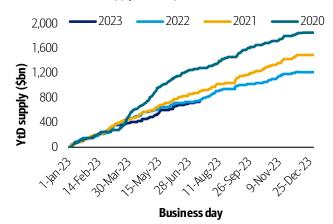


Source: BofA Global Research

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Figure 28: Cumulative High grade supply, \$bn

Cumulative YTD US IG supply YoY comps

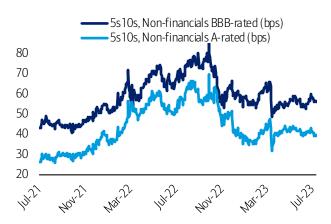


Source: BofA Global Research

Corporate spread curves

Figure 29: 5s10s non-financial corporate spread curves

5s10s spread curves have flattened YTD



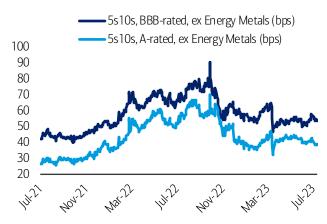
Note: the spread curve calculation is restricted to issuers that have bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual issuer curves.

Source: BofA Global Research, ICE Data Indices, LLC

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Figure 31: 5s10s ex Energy Metals corporate spread curves

5s10s ex energy and metals spread curves have flattened YTD



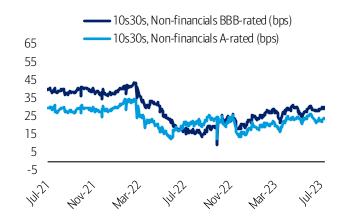
Note: the spread curve calculation is restricted to issuers that have bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual issuer curves.

Source: BofA Global Research, ICE Data Indices, LLC

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Figure 30: 10s30s non-financial corporate spread curves

10s30s spread curves have steepened a bit YTD



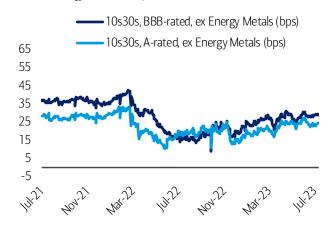
Note: the spread curve calculation is restricted to issuers that have bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual issuer curves.

Source: BofA Global Research, ICE Data Indices, LLC

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Figure 32: 10s30s ex Energy Metals corporate spread curves

10s30s ex energy and metals spread curves have flattened YTD



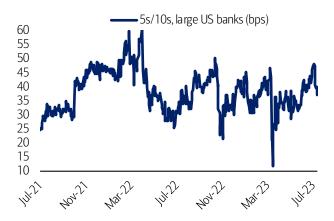
Note: the spread curve calculation is restricted to issuers that have bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual issuer curves.

Source: BofA Global Research, ICE Data Indices, LLC



Figure 33: 5s10s Banks corporate spread curves

5s10s large US bank spread curves have steepened a bit YTD



Note: the spread curve calculation is restricted to the top four US banks that have senior bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual issuer curves.

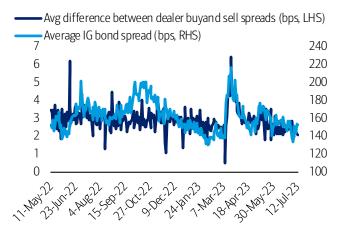
Source: BofA Global Research, ICE Data Indices, LLC

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Liquidity tracker

Figure 35: Difference between dealer buy and sell spreads

Difference between dealer buy and sell spreads remains moderate and in line with IG bond spreads



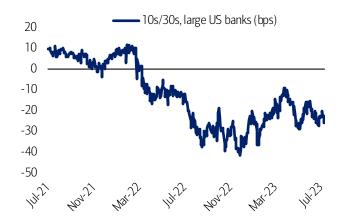
Note: based on Finra Trace dealer-to-client buy and sell trades of at least \$1mn and BofA credit trader runs for ICE BofA US IG corporate COAO index bonds, and plotting daily average difference between dealer buy and sell trade spreads for the same bond on the same day.

Source: Finra Trace, BofA Global Research

BofA GLOBAL RESEARCH

Figure 34: 10s30s Banks corporate spread curves

10s30s large US bank spread curves have flattened YTD



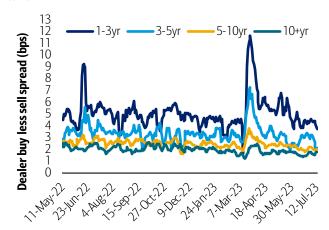
Note: the spread curve calculation is restricted to the top four US banks that have senior bonds outstanding for both the short and the long tenors. For spread levels we use only on-the-run bonds (one for each tenor), outstanding for at most three years. The aggregate market spread curve is a simple average of individual issuer curves.

Source: BofA Global Research, ICE Data Indices, LLC

BofA GLOBAL RESEARCH

Figure 36: Difference between dealer buy and sell spreads by maturity Difference between dealer buy and sell spreads remains moderate across the

Difference between dealer buy and sell spreads remains moderate across the curve



Note: based on Finra Trace dealer-to-client buy and sell trades of at least \$1mn and BofA credit trader runs for ICE BofA US IG corporate COAO index bonds, and plotting daily average difference between dealer buy and sell trade spreads for the same bond on the same day.

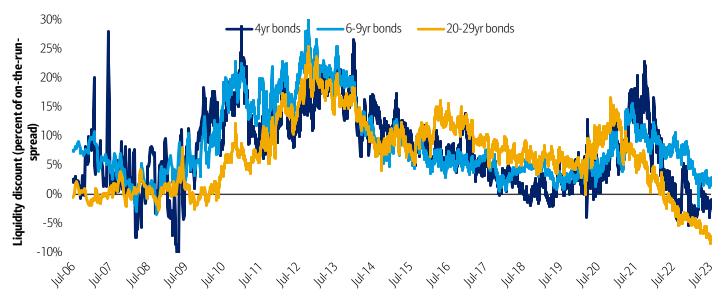
Source: Finra Trace, BofA Global Research



Liquidity discounts

Figure 37: Liquidity premium in high grade spreads

The chart shows liquidity discounts for off-the-run bonds relative to recent on-the-runs, going back to 2006.

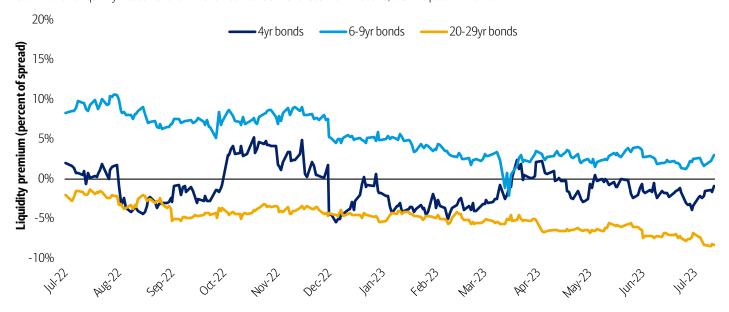


Note: Liquidity premium is the spread difference between old bonds that have rolled down to the 9, 8, 7, 6 and 4-year tenors and on-the-run 10, 5, and 3-year bonds, adjusted for the credit curve. **Source:** BofA Global Research, ICE Data Indices, LLC

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Figure 38: Liquidity discount in high grade spreads: last 12M

The chart shows liquidity discounts for off-the-run bonds relative to recent on-the-runs, over the past 12 monts.



Note: Liquidity discount is the spread difference between old bonds that have rolled down to the 9, 8, 7, 6 and 4-year tenors and on-the-run 10, 5, and 3-year bonds, adjusted for the credit curve **Source:** BofA Global Research, ICE Data Indices, LLC

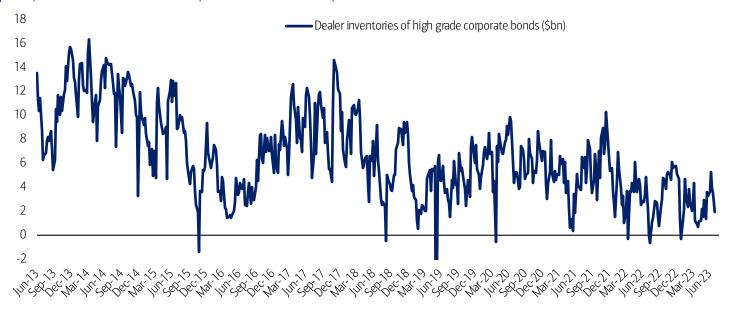
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Dealer inventories



Figure 39: Dealer inventories of high grade corporate bonds (\$bn)

Fed reported dealer inventories of US IG corporate bonds at \$1.2bn as of Apr 12 2023.



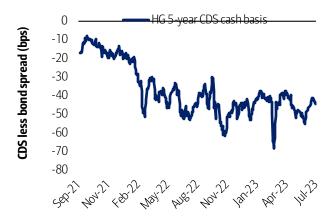
Source: BofA Global Research, Federal Reserve Bank

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CDS cash basis

Figure 40: 5-year CDS cash basis

US IG CDS cash basis at 2bps currently



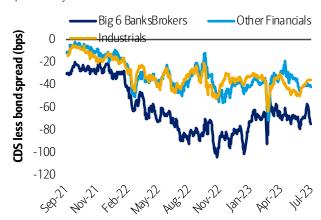
Note: CDS-Cash basis is currently based on spreads of the following 30 issuers: AIG, AXP, BAC, BMY, C, CAT, CMCSA, COF, CVS, DE, DIS, GE, GM, GS, HD, IBM, JPM, LOW, MET, MO, MS, ORCL, PFE, PRU, SPG, T, VZ, WFC, WMT.

Source: BofA Global Research, ICE Data Indices, LLC, Markit

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Figure 41: 5-year CDS cash basis by broad sector

Banks CDS cash basis at-6bps, other financials at 8bps and industrials at 3bps currently



Note: CDS-Cash basis is currently based on spreads of the following 30 issuers: AIG, AXP, BAC, BMY, C, CAT, CMCSA, COF, CVS, DE, DIS, GE, GM, GS, HD, IBM, JPM, LOW, MET, MO, MS, ORCL, PFE, PRU, SPG, T, VZ, WFC, WMT.

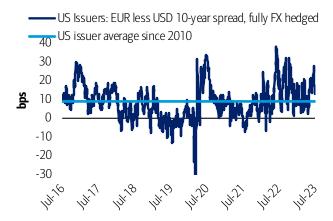
Source: BofA Global Research, ICE Data Indices, LLC, Markit



USD EUR relative value

Figure 42: US issuers: relative EUR and USD spreads

Relative value between fully currency hedged EUR and USD spreads for US issuers



Note: the chart plots issuer-matched spreads on a fully currency hedged basis. We use maturity-matched cross currency basis swaps to fully currency hedge principal and interest rate payments, and forward FX rates to fully hedge the stream of spread payments. We also adjust for the difference in quoting conventions with a 3 to 6M Euribor swap.

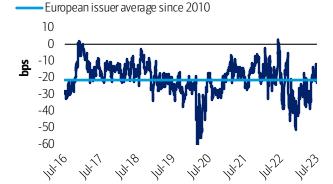
Source: BofA Global Research, ICE Data Indices, LLC, Bloomberg

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Figure 43: European issuers: relative EUR and USD spreads

Relative value between fully currency hedged EUR and USD spreads for European issuers

European Issuers: EUR Iess USD 10-year spread, fully FX hedged



Note: the chart plots issuer-matched spreads on a fully currency hedged basis. We use maturity-matched cross currency basis swaps to fully currency hedge principal and interest rate payments, and forward FX rates to fully hedge the stream of spread payments. We also adjust for the difference in quoting conventions with a 3 to 6M Euribor swap.

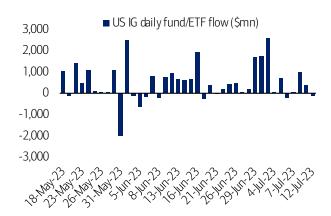
Source: BofA Global Research, ICE Data Indices, LLC, Bloomberg

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Mutual fund flows

Figure 44: Daily US IG bond fund and ETF flows (\$mn)

Strong daily inflows to US IG bond funds and ETFs

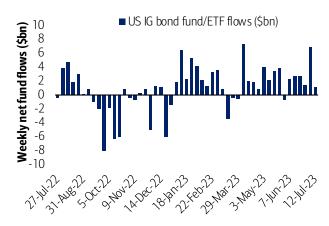


Source: EPFR Global, BofA Global Research

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Figure 45: Weekly high grade fund flows, \$bn

US IG bond fund/ETF flows, \$bn +\$1.11

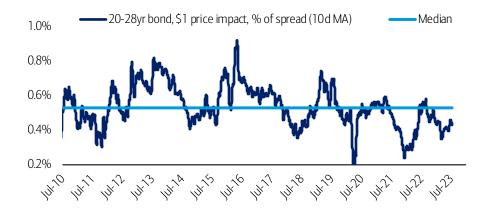


Source: EPFR Global, BofA Global Research



Figure 46: Market pricing of the dollar price impact on spreads

Currently the average impact of dollar price for 20-28yr bonds is 0.43% of spread, compared to the typical value of 0.53%.

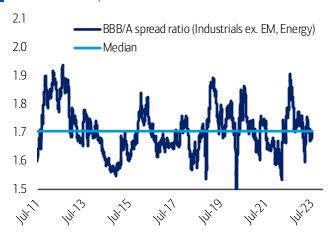


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Figure 47: BBB/A Industrial spread ratio

The current BBB/A spread ratio is 1.75 vs. 1.71 median.

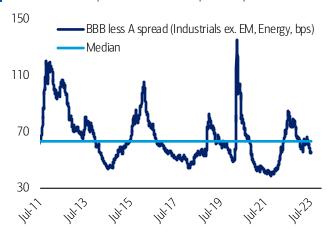


Source: BofA Global Research, ICE Data Indices, LLC.

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Figure 48: BBB/A Industrial spread difference

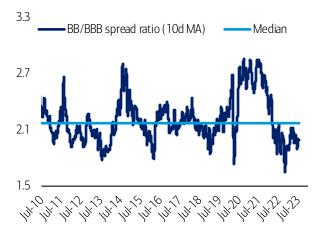
The current BBB/A spread difference is 62bps vs. 63bps median.



Source: BofA Global Research, ICE Data Indices, LLC.

Figure 49: BB/BBB spread ratio

The current BB/BBB spread ratio is 1.99 vs. 2.17 median.

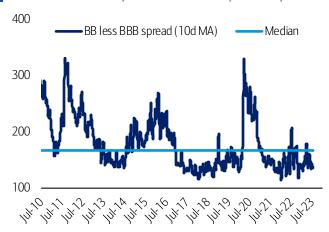


Source: BofA Global Research, ICE Data Indices, LLC. Note: based on maturity and sector-matched spreads. Ex. Financials, Energy.

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Figure 50: BB less BBB spreads

The current BB less BBB spread difference is 133bps vs. 167bps median.



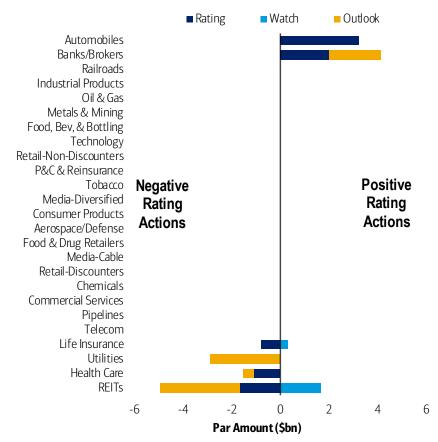
Source: BofA Global Research, ICE Data Indices, LLC. Note: based on maturity and sector-matched spreads. Ex. Financials, Energy.

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Rating actions summary

Figure 51: Weekly rating actions by sector, notional value in HG Master index

Banks/Brokers contributed the most to positive rating actions while Oil & Gas contributed the most to negative rating actions this week



Note: Data include rating action by any of the three agencies (Moody's, S&P, Fitch).

Source: BofA Global Research, ICE Data Indices, LLC



Common abbreviations: IG: Investment Grade

HG: High Grade LQD: IShares iBoxx \$ Investment Grade Corporate Bond ETF

DV01: Dollar value of a basis point

CDX IG: The Markit CDX North America Investment Grade Index CDX HY: Markit CDX North America High Yield Index

ECB: European Central Bank

QE: Quantitative Easing
CSPP: corporate sector purchase programme

Unched: Unchanged CPI: Consumer Price Index

FOMC: The Federal Open Market Committee



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