BofA SECURITIES

Situation Room

Sector outlook

15 November 2023

Credit Strategy
United States
Cross Product

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Sector outlook

The biggest drivers of our top-down sector outlook are relative value, the outlook for lower interest rates which should support financial sector spreads, and a preference for less cyclical sectors given the expectations for slower growth. We look for spreads to widen only modestly to our 6M spread target of 130bps on the ICE BofA US IG index, so we prefer wider sectors with better carry. As a result, we are underweight most tight, defensive sectors. Given strong balance sheets and a benign outlook for US growth in 2024, we also prefer BBBs over single-As.

Details

Combining our top-down views, bottom-up views of our credit analyst team and valuations we update our sector outlook as follows. Overweight: Aerospace/Defense, Banks, Energy, Health Care, REITs, Telecom and Utilities. Underweight: Consumer Products, Food, Bev & Bottling, Industrial Products, Railroads, Retail and Technology.

Exhibit 1: High Grade Sector Views Summary
US IG credit strategy sector views matrix

Overweight	View	Market weight	View	Underweight	View
Aerospace/Defense	**Over**	**Automobiles**	**Market**	**Consumer Products**	**Under**
Banks/Brokers	**Over**	**Basic Materials**	**Market**	**Food, Bev, & Bottling**	**Under**
Energy	**Over**	Chemicals	Market	**Industrial Products**	**Under**
Oil & Gas	Market	Metals & Mining	Market	**Railroads**	**Under**
Pipelines	Over	**Insurance**	**Market**	**Retail**	**Under**
Health Care	**Over**	Life Insurance	Market	Discounters	Under
REITs	**Over**	P&C & Reinsurance	Market	Non-Discounters	Under
Telecom	**Over**	**Media & Entertainment**	**Market**	**Technology**	**Under**
Utilities	**Over**	**Tobacco**	**Market**		

Source: BofA Global Research

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In this report

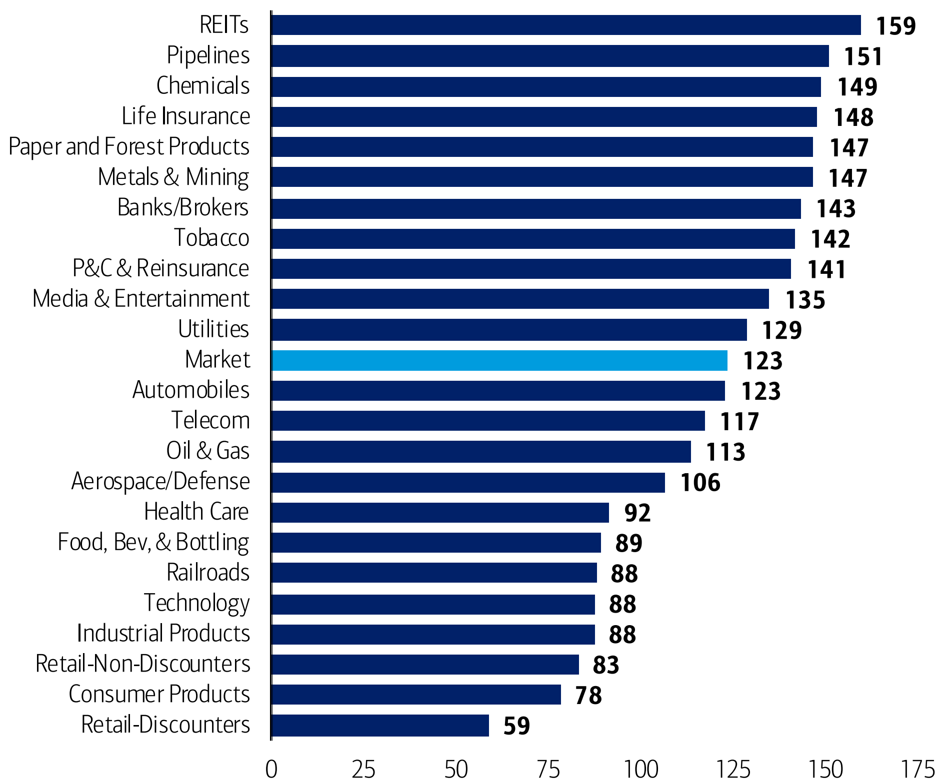
Timestamp: 15 November 2023 10:45PM EST

Sector relative value

Adjusting for duration, REITs (159bps), Pipelines (151bps) and Chemicals (149bps) offer the widest spread in the ICE BofA US IG index as of November 14. On the other end of the spectrum the tightest sectors are Retail – Discounters (59bps), Consumer Products (78bps), and Retail Non-Discounters (83bps, Exhibit 2).

In terms of performance over the past 12 months, and adjusting for beta (i.e. looking at the ratio of sector spreads to the market), sectors underperforming the market the most are Chemicals, Utilities, Autos and Industrial Products. On the other hand, sectors trading the richest relative to the 12M average are Technology, Media & Entertainment and Telecom (Exhibit 3).

Exhibit 2: Sector spreads, adjusted for duration (bps)
REITs and Pipelines offer some of the widest spreads in IG, while Retail-Discounters and Consumer Products - some of the tightest.



Note: for each sector we compute spread difference vs. the market for four maturity buckets: 1 to 3.5yr, 3.5 to 5.5yr, 5.5 to 11yr, and 11+yr. Sector spread adjusted for duration is the weighted average spread difference for the four buckets plus the index spread.
Source: BofA Global Research, ICE Data Indices, LLC

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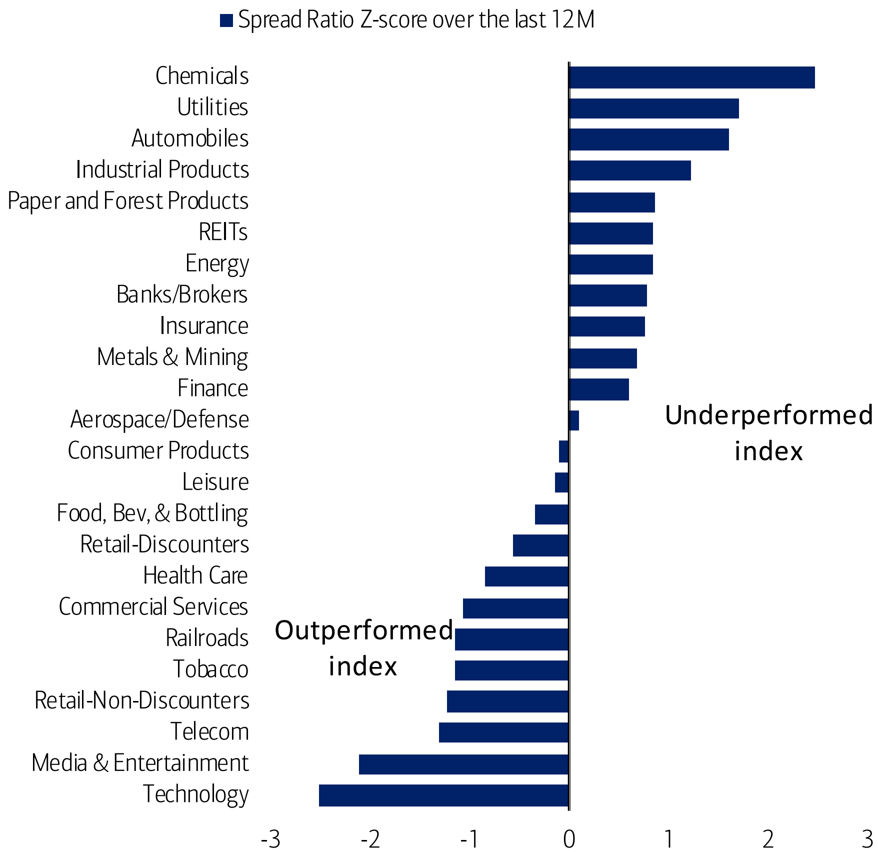
Exhibit 3: Sector performance relative to the index over the past 12M
Chemicals, Utilities, and Autos are trading cheap vs. the prior 12M, while Technology, Media & Entertainment and Telecom are trading rich.



Note: the z-score is based on the ratio of sector spread to the index over the past 12 months.
Source: BofA Global Research, ICE Data Indices, LLC

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Top-down views

Here we list seven factors that we expect to impact valuations for non-financial sectors. We then show the simple average aggregate of the factors, expressed in terms of z-scores.

- **BBB over Single-A**. Despite a relatively benign outlook for the US economy (Credit Market Strategist: Nov '23 Credit Investor Survey: positioning for a mild recession), BBBs trade cheap to single-As. Hence we prefer BBBs over single-As (see Situation Room: Trades for declining rates risk).

- **Domestic over global.** The expected 2024 GDP growth is ether lower (+0.5% for Euro area) or riskier (+4.8% for China) compared to the US (+1.5%).

- **High liquidity**. We look for spreads to remain around 130bps on the ICE BofA US IG index. That's not enough for investors to reach out the liquidity curve in search of yield. We prefer to remain in more liquid issuers.

- **Credit analyst recommendations**. Fundamentals and credit selection should matter more as US economy is expected to slow in 2024. We prefer sectors with more Overweight credit recommendations from our credit analyst team.

- **Less cyclical**. Risks to US growth mean we prefer non-cyclical sectors that outperform in a slower economy. For details see Figure 11 in the report: Credit Market Strategist: From bank stress to growth risks 26 March 2023.

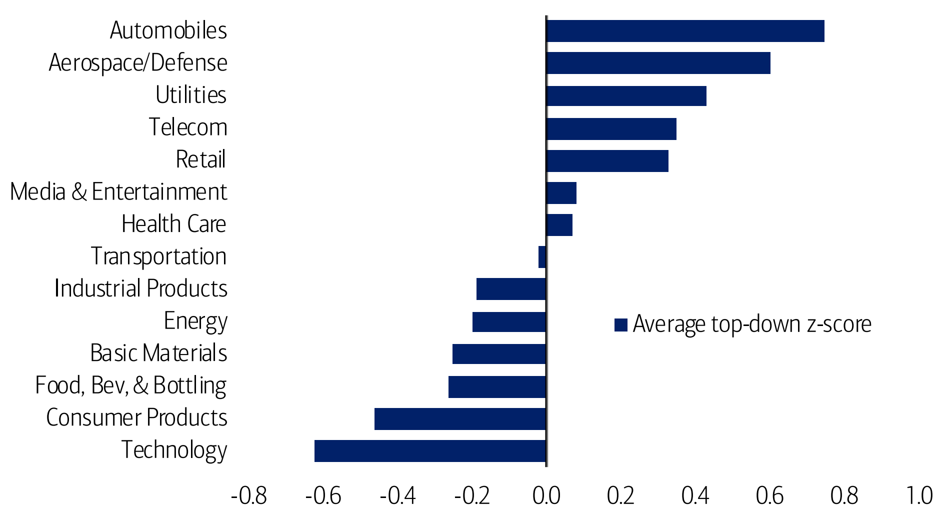
- **12M performance**. Performance over the past 12M was to a big extent driven by the underperformance of financial sectors on higher rates, chemicals on de-stocking, Utilities on supply and Autos on strikes. We would like to take the other side of this trade and overweight the underperforming sectors for better relative value.

- **Shorter bonds.** IG spread curves have flattened significantly on higher interest rates. While we look for 30yr technicals to remain strong, back-end spreads offer relatively unattractive relative value. We prefer sectors with a higher share of bonds 5yr and in.

We normalize each of the six factors in terms of a z-score for our set of 14 non-financial sectors. Based on the average of the scores, the most attractive sectors in our top-down analysis are Autos, Aerospace/Defense and Utilities. The least attractive sectors are Tech, Consumer Products and Food, Bev, & Bottling (Exhibit 4).

Exhibit 4: Sector average top-down factor z-score

Sectors that rank the most attractive in terms of top-down factors are: Autos and Aerospace/Defense. Sectors than rank least attractive are Tech and Consumer Products.



Note: the six factors include: BBB share, share of US issuers / domestic revenues, average issuer bond trading volumes, average analyst recommendation (UW, MW, OW), sector relative spread performance relative to economic growth (cyclicality), relative performance over the past 12M, and the share of bonds 5yr and in.

Source: BofA Global Research

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Exhibit 5: Sector average top-down z-score details

The table lists z-scores for each of the sectors and for each of the seven factors. Note: higher z-scores denote more attractive value.

Sector	BBB share	Share of foreign issuers / revenues	Average bond trading volumes	Average credit analyst rec	Cyclical score	12M relative performance	Share of 1-5yr bonds	Average
Aerospace/Defense	1.4	1.0	0.5	0.4	0.8	0.1	-0.1	0.6
Automobiles	0.0	0.0	0.7	1.6	-1.6	1.6	3.1	0.7
Telecom	2.2	0.6	1.6	-1.3	1.6	-1.3	-1.0	0.3
Retail	-0.6	0.9	0.2	1.1	1.0	-0.3	-0.1	0.3
Utilities	-0.6	1.1	-0.7	0.9	1.3	1.7	-0.8	0.4
Health Care	-0.2	0.8	-0.4	1.2	0.4	-0.8	-0.6	0.1

Exhibit 5: Sector average top-down z-score details
The table lists z-scores for each of the sectors and for each of the seven factors. Note: higher z-scores denote more attractive value.

Sector	BBB share	Share of foreign issuers / revenues	Average bond trading volumes	Average credit analyst rec	Cyclical score	12M relative performance	Share of 1-5yr bonds	Average
Media & Entertainment	-0.5	1.2	2.3	-0.3	0.7	-2.1	-0.7	0.1
Transportation	0.3	0.8	-0.8	-1.8	1.2	0.6	-0.4	0.0
Food, Bev, & Bottling	-0.7	-0.9	-0.4	0.2	0.6	-0.3	-0.4	-0.3
Industrial Products	-1.1	-1.0	-0.9	-0.8	0.1	1.2	1.2	-0.2
Basic Materials	1.5	-1.7	-1.2	-0.5	-2.0	2.3	-0.2	-0.3
Energy	0.2	-0.5	-0.6	0.1	-1.0	0.8	-0.5	-0.2
Consumer Products	-1.3	-1.2	-0.9	0.0	-0.3	-0.1	0.5	-0.5
Technology	-0.7	-1.3	0.5	0.0	-0.4	-2.5	0.0	-0.6

Source: BofA Global Research

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Sector detail

We provide brief commentary on each of our sector views below.

Aerospace/Defense: overweight. Defense credits have strong fundamentals and benefit from increased defense spending. In aerospace the biggest sector issuer – Boeing Co (BA) – has a market weight recommendation from our analyst Doug Karson. Given the defensive nature of the sector and spreads relatively attractive relative to other non-financials, we move the sector up to overweight.

Autos: marketweight. Autos are cyclical, but currently benefit from the post-Covid chip shortage and high car prices. That benefit should run out over time. We keep the sector at marketweight.

Banks/Brokers: overweight. Banks have underperformed significantly due to the US bank stress and higher interest rates. However, banks now trade at some of the cheapest levels vs. industrials since the European Sovereign crisis in 2013, while lower interest rates and Fed rate cuts expected for 2024 should reduce tail risks for the sector (see Situation Room: Bank spreads vs rates).

Chemicals – marketweight. Sector fundamentals continue to be negatively impacted by destocking, although that could improve starting in 2024. The sector offers some of the wider spreads in IG and has underperformed significantly over the past 12 months. However, we expect Chemicals sector spreads to remain relatively weak in the near term.

Consumer products: underweight. The sector trades at some of the tightest spreads in IG and is comprised of defensive consumables and credit metrics/ratings are strong. However, such a defensive sector is unlikely to outperform in a soft landing / mild recession scenario. It also scores low from a top-down perspective.

Food, Beverage & Bottling: **underweight**. It's a defensive sector and should be less impacted by the expected slower US economic growth, but valuations are also tight. The sector is at risk of higher M&A. The impact of GLP-1 is unlikely in the near term.

Healthcare – overweight. Healthcare/Pharma is a defensive sector with declining re-leveraging event risk. Healthcare spread is no longer as cheap as it was in early 2023, but still offers attractive value relative to other defensive non-financial sectors.

Healthcare sector fundamentals remain very strong across Pharma, Devices and Insurance subsectors. On top on that the risk of re-leveraging to fund M&A – the key risk for the sector – has been lower under the current administration due to the stricter antitrust enforcement. Hospital capacity utilization continues to increase from Covid lows.

Industrial products: underweight. This is a relatively tight sector that ranks low on our top-down analysis. Some issuers are subject to re-leveraging event risk and have significant maturities to refinance in the coming year. On the other hand, the sector benefits from defense spending and is resilient against weaker economic growth.

Insurance - Life: marketweight. Sector spreads widened materially post SVB but have since re-traced some of that widening. Still, the sector offers some of the wider spreads in IG currently. On the other hand, Life Insurance is subject to risks related to CRE, while credit quality is declining as management is focused on returning money to shareholders with capital released from balance sheet de-risking.

Insurance - P&C: marketweight. Sector currently offers wider spreads, but fundamentals are challenged by rising claims.

Media & Entertainment: marketweight. The sector derives much of the revenue from advertising and is therefore cyclical and should be negatively impacted by slower economic growth in addition to secular challenges related to the transition to streaming platforms. On the other hand, the sector offers wider spreads and is moving closer to resolving the disruptions related to the move to streaming.

Metals & Mining: marketweight. The longer-term outlook for metals is strong due to the energy transition, but more risks exist in the near term as copper new mines are coming on-line while demand fluctuates due to China growth risks and high energy costs in Europe.

Oil & Gas: marketweight. The outlook for E&P and refining fundamentals remains strong. Even in case US growth slows more than expected, oil prices are unlikely to fall materially below the 70 $/bbl on the back of potential OPEC cuts and US demand to refill strategic reserves. However, spreads already reflect this strong fundamental outlook and could be volatile in a downside scenario despite strong fundamentals.

Pipelines: overweight. Unlike Oil & Gas, pipelines offer attractive relative value compared to the IG index. Fundamentals should remain strong. The sector is also relatively liquid.

Railroads: underweight. The sector has strong and stable fundamentals, but it trades tight and has outperformed the market over the past 12M. The sector benefits from strong demand from yield sensitive investors in the back end of the curve, but that technical has mostly played out.

REITs: overweight. The fundamentals are strong, except in the office sub-sector. Spreads are attractive after underperforming significantly on the general CRE concerns. Note that REITs tend to own the highest quality assets, compared to other holders such as insurance companies.

Retail discounters: underweight. The sector remains the tightest sector in the index. We expect credit fundamentals to remain very strong, but keep our underweight view on rich valuations.

Retail Non-discounters: underweight. Sector trades tight and is also relatively defensive but is exposed to the weaking consumer. We are underweight on tight valuations.

Technology: underweight. Tech is a defensive sector, it trades tight and remains subject to re-leveraging event risk. It also ranks low in our top-down analysis.

Telecom: overweight. The biggest issuers are de-leveraging, and the sector is relatively defensive. However, sectors spreads have tightened recently, particularly in the back end, and offer less value, while leverage at the two largest issuers is high.

Tobacco: marketweight. Tobacco is one of the widest sectors in IG, but it is subject to secular challenges, weak investor demand notably for long duration, has significant regulatory risks (menthol, nicotine reduction) and ongoing issuance needs. ESG influence continues to increase as an overhang. Balance sheets are improving despite some pressures on consumers.

Utilities: overweight. The sector offers spreads comparable to the market and defensive fundamentals. On top of that Utilities are also defensive against inflation and higher energy costs, as they can pass higher costs to consumers. Management normally directs any earnings upside to shareholders. However, the typical hold-co rating has now declined to mid-BBB, which tends to be the lowest acceptable for management. As a result, we look for management to defend ratings going forward, including by issuing more equity. The negatives for the sector include poor liquidity and persistent issuance needs.

Daily credit snapshot

US IG issuance totaled $14.6bn across 8 deals today, $19.1bn WTD and $73.2bn MTD. The average new issue concession was 17.5bps today, while the average break performance was 7.8bps tighter today. This week's new issues are trading 8.0bps tighter on average from pricing.

S&P 500 closed +0.16%, 10-year Treasury yields +8bps, CDX IG +0.7bps, CDX HY -$0.12pts, and cash bond spreads quoted -1-3bp today, LQD closed 3.10bps tighter today.

Exhibit 6: Recent new issue pricing and new issue concessions
List of new issues in the IG corporate bond market today along with performance metrics.

Date	Ticker	Name	Tenor	Size ($mm)	Moody's/S&P Rating	Coupon (%)	Px Spread (bps)	New Issue Conc. (bps)	* Break performance	Current spread (bps)
2023-11-13	FSK	FS KKR Capital Corp	5	400	Baa3/NA	10.25	338	n.a.	n.a.	332
2023-11-13	HNDA	American Honda Finance Corp	5	800	A3/A-	10.25	100	9	n.a.	n.a.
2023-11-13	OBDCII	Blue Owl Capital Corp II	3	350	Baa3/BBB-	10.25	388	n.a.	n.a.	n.a.
2023-11-13	ORLY	OReilly Automotive Inc	3	750	Baa1/BBB	10.25	95	n.a.	-6	86
2023-11-13	TTXCO	TTX Co	10	350	NA/A	10.25	120	n.a.	-7	111
2023-11-14	ARCC	Ares Capital Corp	3	300	Baa3/BBB-	7	265	n.a.	n.a.	n.a.
2023-11-14	HIW	Highwoods Realty LP	10	350	Baa2/BBB	11.25	338	n.a.	n.a.	n.a.
2023-11-14	IQV	IQVIA Inc	5	1,250	Baa3/BBB-	12.25	185	n.a.	n.a.	n.a.
2023-11-15	AEE	Ameren Corp	3	600	Baa1/BBB	5.7	105	n.a.	-9	96
2023-11-15	CARR	Carrier Global Corp	2	1,000	Baa3/BBB	14.25	90	n.a.	-6	84
2023-11-15	CARR	Carrier Global Corp	10	1,000	Baa3/BBB	15.25	140	n.a.	-7	133
2023-11-15	CARR	Carrier Global Corp	30	1,000	Baa3/BBB	6.2	152	n.a.	-8	144
2023-11-15	CCDJ	Federation des Caisses Desjardins du Quebec	5	1,250	Aa2/NA	5.467	159	n.a.	n.a.	n.a.
2023-11-15	DB	Deutsche Bank AG/New York NY	6NC5	1,500	Baa1/BBB-	6.819	230	n.a.	-9	221
2023-11-15	GLPI	GLP Capital LP / GLP Financing II Inc	10	400	Ba1/BBB-	6.75	245	n.a.	n.a.	n.a.
2023-11-15	SCHW	Charles Schwab Corp/The	6NC5	1,300	NA/A-	6.196	165	n.a.	n.a.	n.a.
2023-11-15	TOYOTA	Toyota Motor Credit Corp	3	900	A1/A+	5.4	75	n.a.	n.a.	n.a.
2023-11-15	TOYOTA	Toyota Motor Credit Corp	7	1,100	A1/A+	5.55	105	17	n.a.	n.a.
2023-11-15	TPR	Tapestry Inc	2	500	Baa2/BBB	7.05	220	n.a.	n.a.	n.a.
2023-11-15	TPR	Tapestry Inc	3	750	Baa2/BBB	7	240	n.a.	n.a.	n.a.
2023-11-15	TPR	Tapestry Inc	5	1,000	Baa2/BBB	7.35	290	n.a.	n.a.	n.a.
2023-11-15	TPR	Tapestry Inc	7	1,000	Baa2/BBB	7.7	320	18	n.a.	n.a.
2023-11-15	TPR	Tapestry Inc	10	1,250	Baa2/BBB	7.85	340	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 closing spread on the first day of trading.

Source: BofA Global Research, Bloomberg

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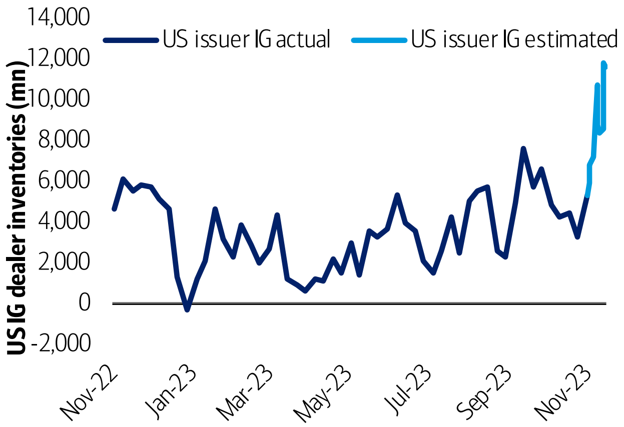
Daily dealer inventories update

Below we estimate dealer inventories for the IG corporate bonds based on TRACE data. The actual inventories of US issuer bonds based on NY Fed survey, as well as the estimated change since the latest Fed report are plotted in Exhibit 7 and Exhibit 8. We estimate the corresponding DV01 equivalent in Exhibit 8. More details by sector and maturity are available in Exhibit 9 and Exhibit 10. Finally, note that the data for the current date is through about 4:40 p.m. Eastern Standard Time.

Exhibit 7: Estimated dealer inventories of IG corporate bonds.
We estimate IG dealer inventories of US issuer bonds increased to $11.6bn currently from $5.3bn on Nov-01.



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

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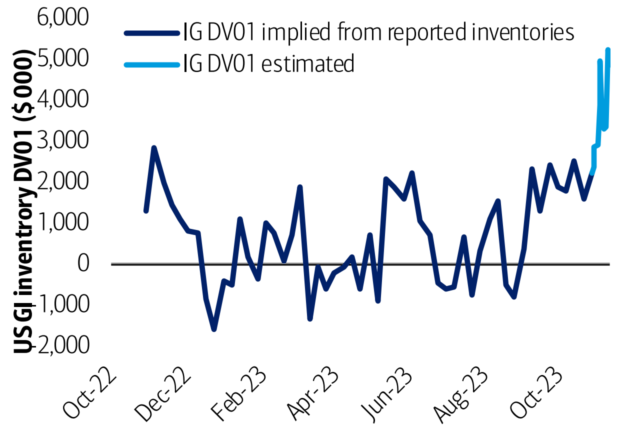
Exhibit 8: Estimated dealer inventory DV01 for IG corporate bonds.
We estimate IG dealer inventory DV01 of US issuer bonds increased to $4.9mn currently from $2.2bn on Nov-01.



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

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Exhibit 9: Estimated changes in IG dealer inventories by maturity and broad sector.
We estimate IG dealer inventories declined -$196mn today and increased $960mn over the prior week.

	Net dealer buy ($mn)					Net dealer DV01 change ($thousand)					Trading volumes on 15-Nov-23 ($mn)			
Sector	15-Nov	14-Nov	1 W	2 W	4 W	15-Nov	14-Nov	1 W	2 W	4 W	Buy	Sell	Dealer	Total
High grade (13M+)	**-196**	**3,926**	**960**	**7,525**	**12,478**	**-437**	**2,210**	**-167**	**3,001**	**4,566**	**10,219**	**10,415**	**8,217**	**28,850**
<3yr	31	754	463	2,369	4,444	-5	127	66	391	674	2,045	2,014	1,678	5,737
3-5yr	221	1,146	979	2,287	3,678	84	407	330	799	1,332	2,207	1,986	1,711	5,904
5-11yr	-185	1,136	-464	2,110	2,925	-201	667	-439	1,235	1,571	3,643	3,828	2,795	10,267
11+yr	-264	891	-18	759	1,431	-314	1,009	-125	577	989	2,323	2,587	2,033	6,943
Fin	93	1,479	57	799	3,827	52	733	-21	356	1,414	4,066	3,973	3,069	11,108
Non-Fin	-289	2,447	902	6,726	8,651	-489	1,477	-147	2,645	3,151	6,153	6,442	5,147	17,742
Fixed	-124	3,926	1,019	7,413	12,304	-414	2,195	-175	2,853	4,457	10,061	10,185	8,145	28,391
Floating	-72	0	-59	112	175	-22	15	8	149	109	158	230	72	460
US issuers	-165	3,193	953	6,375	9,163	-353	1,871	-80	2,676	3,408	7,634	7,799	6,587	22,021
DM Yankees	11	665	22	991	3,097	-51	307	-71	282	1,174	2,277	2,265	1,510	6,051
EM Yankees	-43	68	-15	159	219	-33	33	-17	43	-16	308	351	120	778

Note: data for maturities 13M or longer. Changes in inventories are estimated based on TRACE.
Source: BofA Global Research, FINRA, TRACE.

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Exhibit 10: Estimated changes in IG dealer inventories by sector.
We estimate today IG dealer inventories increased $103mn for Banks/Brokers and increased $59mn for Energy.

	Net dealer buy ($mn)					Net dealer DV01 change ($thousand)					Trading volumes on 15-Nov-23 ($mn)			
Sector	15-Nov	14-Nov	1 W	2 W	4 W	15-Nov	14-Nov	1 W	2 W	4 W	Buy	Sell	Dealer	Total
Aerospace/Defense	-23	75	54	162	89	2	59	54	115	-61	119	142	172	432
Automobiles	83	162	170	1,095	1,722	7	61	-1	340	549	500	417	315	1,232

Exhibit 10: Estimated changes in IG dealer inventories by sector.
We estimate today IG dealer inventories increased $103mn for Banks/Brokers and increased $59mn for Energy.

	Net dealer buy ($mn)					Net dealer DV01 change ($thousand)					Trading volumes on 15-Nov-23 ($mn)			
Banks/Brokers	103	855	-264	148	2,222	35	494	-6	273	786	2,890	2,786	2,112	7,788
Basic Materials	-114	94	-159	171	589	-78	37	-112	57	276	311	424	278	1,013
Commercial Services	-38	27	-175	-14	-21	-8	-9	-124	-36	-98	150	188	116	454
Energy	59	263	720	1,560	2,141	-8	80	347	758	1,189	761	702	473	1,937
Finance	84	296	92	114	801	41	82	-70	-87	260	641	556	489	1,686
Food, Bev, & Bottling	-21	197	6	71	-54	-38	115	-27	-37	-141	292	313	233	838
Health Care	-73	531	-141	474	581	-132	477	-188	38	-48	1,046	1,119	982	3,147
Industrial Products	37	77	40	438	481	-15	110	-38	198	301	425	388	252	1,064
Insurance	-41	123	58	276	309	4	60	1	96	205	278	319	239	837
Media & Entertainment	-118	56	-163	664	711	-123	6	-213	317	335	332	450	302	1,083
REITs	-54	205	171	261	495	-28	96	55	74	164	257	311	229	797
Retail	-32	193	130	482	347	-22	109	102	260	118	304	336	352	992
Technology	-9	223	269	371	583	-62	179	176	167	302	634	643	542	1,818
Telecom	86	192	213	423	-85	50	106	108	240	-176	404	318	251	972
Tobacco	25	19	65	49	207	8	7	17	-26	50	149	124	126	400
Transportation	-24	16	-124	26	208	-17	-1	-126	-75	97	94	118	86	298
Utilities	-98	262	-103	583	1,000	-41	117	-195	224	353	523	621	572	1,715
Other	-31	63	100	172	149	-12	25	71	106	107	110	141	96	346

Note: data for maturities 13M or longer. Changes in inventories are estimated based on TRACE.
Source: BofA Global Research, FINRA, TRACE.

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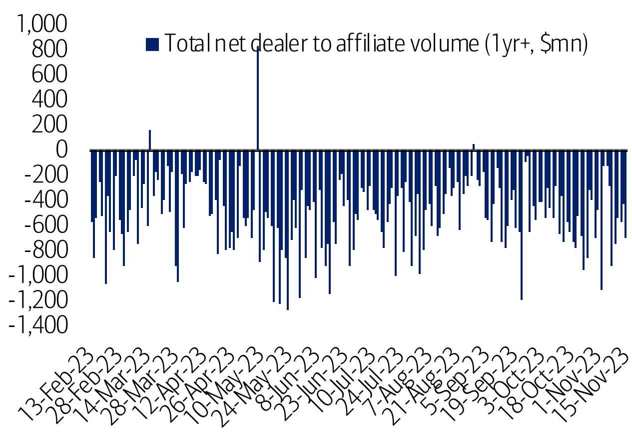
Daily foreign demand tracker

We believe net dealer-to-affiliate volumes from Trace are correlated with foreign buying of US HG corporate bonds - i.e., negative numbers mean foreign investor buying (US dealers taking down inventory in favor of foreign affiliates). For supporting material see our "primer" on tracking foreign inflows (See: Credit Market Strategist: One year round-trip in spreads 15 July 2016). Exhibit 11 shows the overall daily dealer-to-affiliate volumes while Exhibit 12, Exhibit 13 and Exhibit 14 show subsets of this data. In particular Exhibit 12 shows net dealer-to-affiliate volumes for longer maturity (12+ years) bonds, Exhibit 13 displays volumes reported to Trace before 8am NY time (biased toward Asian buying) and Exhibit 14 shows the subset of net trades reported between 8am and noon (biased toward European buying).

Exhibit 11: Net dealer buying from affiliate (1yr+)
Exhibit shows inconsistent overall foreign buying of US IG corporate bonds for some time.



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

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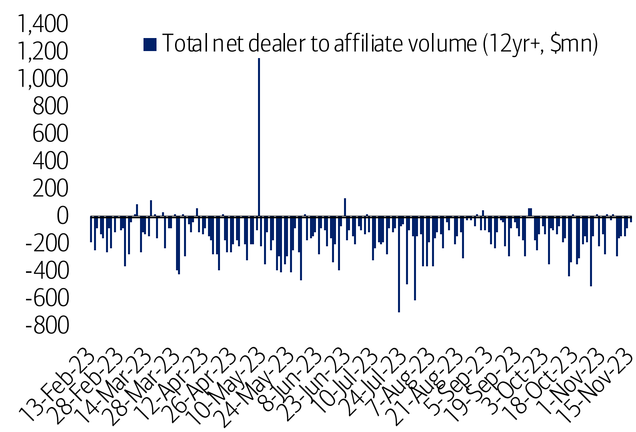
Exhibit 12: Net dealer buying from affiliate (12yr+)
Foreign buying of longer maturity US IG corporate bonds has been consistent this year



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

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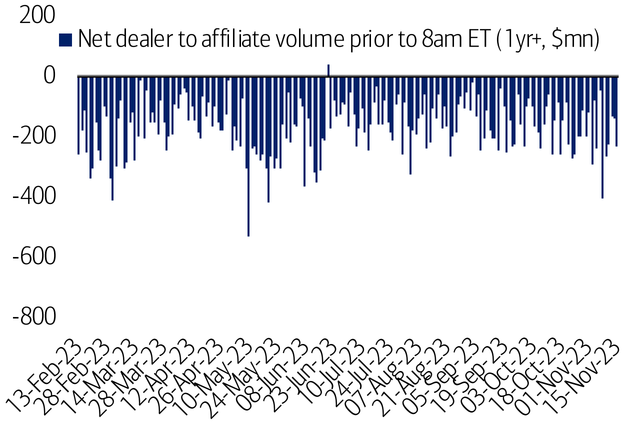
Exhibit 13: Net dealer-to-affiliate trading volumes before 8am ET
Foreign buying before 8am NY time is dominated by Asia and has been consistent this year



Note: Morning share of daily trading volume is correlated with secondary market activity of foreign investors due to different time zones.
Source: BofA Global Research, TRACE

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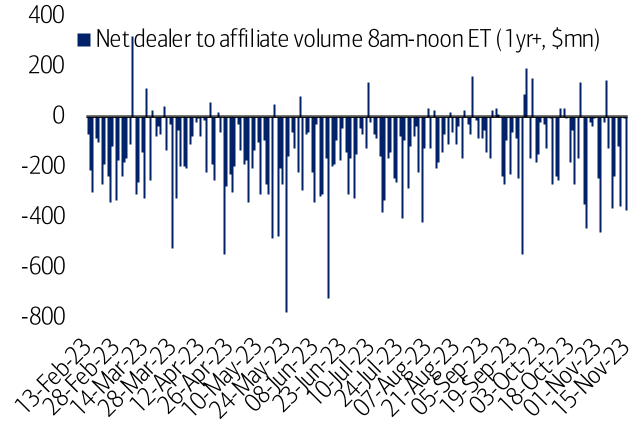
Exhibit 14: Net dealer-to-affiliate trading volumes 8am - noon ET
Foreign buying 8am-noon NY time is dominated by Europe and has been inconsistent this year



Note: Morning share of daily trading volume is correlated with secondary market activity of foreign investors due to different time zones.
Source: BofA Global Research, TRACE

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Common abbreviations:
IG: Investment Grade
HG: High Grade
LQD: iShares iBoxx $ Investment Grade Corporate Bond ETF
DV01: Dollar value of a basis point
CDX IG: The Markit CDX North America Investment Grade Index
CDX HY: Markit CDX North America High Yield Index
ECB: European Central Bank
QE: Quantitative Easing
CSPP: corporate sector purchase programme
Unched: Unchanged
CPI: Consumer Price Index
FOMC: The Federal Open Market Committee

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