

High Grade Basic Materials Weekly

Week ended March 15, 2024

Industry Overview

HG Basic Materials spreads finished 8 bps tighter w-o-w

HG Basic Materials spreads finished 8 bps tighter w-o-w, modestly outperforming the Corp Index (-6 bps, OAS basis). All subsectors outperformed or performed roughly in-line, excluding Construction Materials / Homebuilders which closed only 4 bps tighter w-o-w. In Chemicals, FMC Corp (FMC) outperformed and closed ~18 bps tighter w-o-w after the company got a first time BBB-/Stable rating from Fitch. Separately, in Metals, Freeport-McMoRan (FCX) tightened ~10 bps w-o-w, outperforming other on the run miners given a strong rally in copper prices and its higher beta nature.

HG Basic Materials outperformed the Corp Index

HG Basic Materials (+61 bps of excess returns) outperformed the Corp Index (+44 bps bps) w-o-w. All subsectors outperformed, ex. Construction Materials / Homebuilders which performed roughly in in-line.

NUE & STLD guidance; LEN earnings; FMC Fitch rating

Nucor (NUE) and Steel Dynamics (STLD) announced 1Q24 guidance this week. NUE expects adj earnings of \$3.55-3.65/share (consensus of \$3.70/share) and largely affirmed previously announced segment guidance. Notably the company repurchased ~\$1b of shares quarter to date which is well ahead of its pace in 2023 (~\$1.55b total). We think this is manageable, however, given NUE's net cash position. We remain MW the name on fair trading levels vs peers. Separately, STLD posted a stronger 1Q24 pre-release with adj earnings above consensus (\$3.51-3.55/share vs estimates of \$3.32/share). Quarter to date, the company repurchased \$279mm of shares vs ~\$1.5b total in 2023. Overall, we view STLD's stronger than expected guidance positively and believe fundamentals should remain well supported going forward. Though we like the name, we maintain our MW rec on fair trading levels vs NUE and the Corp Index. At the long end, we still see value, however, and affirm our OW rec on STLD's notes due 2050. Away from steel produces, Lennar (LEN) reported F1Q24 earnings above consensus estimates and guided F2Q24 deliveries higher than expected. The company had a net cash position at quarter-end and affirmed plans to pay down its April 2024 debt maturity (\$454mm) with cash. Last, we note Fitch's updated Metals & Mining price outlook and FMC's first-time rating from Fitch of BBB- (outlook stable). We also include our [4Q23 aggregate sheets](#) later in this report, which we published earlier this week.

Metals prices up; Copper rallies on China smelter cuts

Metals prices were higher w-o-w led by a strong rally in copper over refreshed supply concerns. On Wednesday, Reuters reported that China's top copper smelters agreed to production cuts at some loss-making plants, leading to a price rally for the electrification metal given expectations for continued market tightness. In the US, February CPI inflation data beat expectations though activity data suggests the economy is not overheating, according to [BofA's econ team](#). BofA maintains calls for rate cuts to start in June but notes there are risks that cuts could be pushed further into 2H24.

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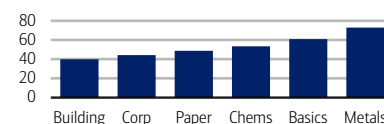
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Exhibit 1: WTD Excess Returns (bps)

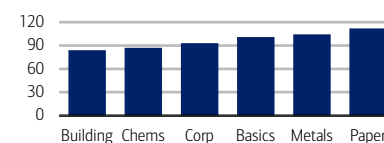
Basic materials outperformed this week



Source: BofA Global Research, ICE Data Indices, LLC
BofA GLOBAL RESEARCH

Exhibit 2: YTD Excess Return (bps)

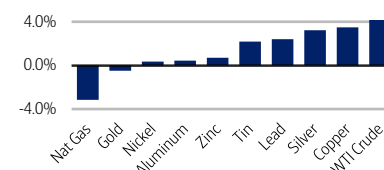
Basic materials have outperformed YTD



Source: BofA Global Research, ICE Data Indices, LLC
BofA GLOBAL RESEARCH

Exhibit 3: W-o-w Commodity Performance

WTI Crude gained the most w-o-w at 4.2%; while Nat Gas gained the least at -3.2%



Source: BofA Global Research, Bloomberg
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News & Views

NUE announced 1Q24 earnings guidance below consensus

On Thursday, Nucor (NUE) announced 1Q24 earnings guidance of \$3.55-3.65/share (consensus of \$3.70/share). The company provided the following 1Q24 outlooks for its business segments:

- **Steel Mills:** expect higher earnings q-o-q due to higher average selling prices and volumes (unch'd)
- **Steel Products:** expect lower earnings q-o-q due to lower selling prices and volumes (prev. saw lower earnings due to lower selling prices)
- **Raw Materials:** expect comparable earnings q-o-q (prev. saw higher earnings)

Capital returns

Quarter to date, NUE returned \$1.13b to shareholders through dividends and share repurchases (~\$1b in share repurchases). Recall, the company returned \$1.55b in share repurchases in 2023.

Continue to view the name positively; remain MW on fair value trading levels

We believe NUE's credit story is unch'd despite a softer 1Q24 guide. The guide was not overly surprising given steel prices have fallen steeply since starting the year at ~\$1,200/ton (now trade around \$800/ton). Regardless, we think fundamentals should remain strong and maintain our positive view on the name. Importantly, we note that share repurchases look high vs the pace in 2023, though we think this is manageable given NUE's net cash position (at YE23). Compared to peers, the company's notes trade somewhat rich vs the Single-A Index but that is likely offset by NUE's industry bellwether status and strong balance sheet. We remain MW.

STLD announced 1Q24 earning guidance above consensus

On Friday, Steel Dynamics (STLD) announced 1Q24 earnings guidance of \$3.51-3.55/share (consensus of \$3.32). The company provided the following 1Q24 outlooks for its business segments:

- **Steel Operations:** Expect meaningfully stronger profitability q-o-q based on higher shipments. Calling out that auto, non-residential, energy and industrial sectors continue to lead demand.
- **Steel Fabrication:** Expect historically strong but lower earnings q-o-q based on softer shipments and metal spread contraction (price declines and higher costs). Noting that steel joist and deck backlogs extend in 3Q24 (prev saw backlogs through 1H24).
- **Metals Recycling:** Expect higher results q-o-q based on substantially stronger realized product pricing and increased volumes.

Capital returns

Quarter to date, STLD repurchased \$279mm of shares (repurchased ~\$1.5b in FY23) and announced an 8% dividend raise for 1Q24 to \$0.46/share.

Strong pre-release is positive but spreads remain at fair value; stay MW

We view STLD's stronger than expected guidance pre-release positively and believe fundamentals should remain supported going forward. We also appreciate STLD's capital discipline as share repurchases are largely in-line with the cadence of returns in 2023. Though we like the name, we believe STLD's notes trade at fair value given spreads ~20 bps wide to NUE and flat to the Corp Index (in the belly). We remain MW. Separately, we

continue to see value in STLD's 2050 notes, which are ~50 bps wide of NUE, and maintain our OW rec at the long-end.

LEN F1Q24 earnings beat; F2Q24 deliveries guidance above consensus

On Wednesday after market close, Lennar Corporation (LEN) reported F1Q24 adj. earnings of \$2.57/share, above Bloomberg consensus estimates of \$2.21/share.

Cash flow and credit stats

LEN repurchased \$506mm of shares during the quarter. Other cash flow items were not available in the release. Credit stats softened q-o-q on lower LTM EBITDA: debt/LTM EBITDA = 0.9x (0.0x at F4Q23); net debt/LTM EBITDA = -0.2x (-1.2x); LTM EBITDA/interest expense = 34.1x (60.5x).

Guidance

In F2Q24, LEN expects orders of 20.9-21.3k (consensus of 20.9k), deliveries of 19-19.5k (consensus of 19k), avg sales price of \$420-425k (consensus of \$427k) and margins of ~22.5%. The company plans to deliver 80k homes in 2024 (unch'd, consensus of 80.1k) with margins consistent y-o-y. Separately, LEN maintained its constructive outlook for housing fundamentals, supported by strong demand and a chronic supply shortage.

Capital allocation

LEN increased its share repurchase program up to an additional \$5b (expect to repurchase >\$2b in 2024) and raised its quarterly dividend from \$1.50 to \$2.00/share. The company reported a homebuilding debt to capital ratio of 9.6% (unch'd q-o-q) and was in a net cash position at quarter-end. On its earning call, LEN affirmed plans to pay down its April 2024 debt maturity (\$454mm) with cash.

Backlog

At quarter-end, LEN's backlog of 16.3k units was down from 19.4k units in F1Q23.

Segment results

- Homebuilding: F1Q24 operating income of \$1,209mm, was up 13% y-o-y, due to higher deliveries and stronger gross margins, partly offset by lower avg sales prices.
- Financial Services: F1Q24 operating income of \$131mm, was up 68% y-o-y, driven by higher profits in the company's mortgage business.
- Other Ancillary Businesses
 - Multifamily: F1Q24 operating loss of \$15mm, was up from a loss of \$22mm in F1Q23.
 - Lennar Other: F1Q24 operating loss of \$40mm, was in-line with F1Q23.



Rating agency commentary

Fitch revises global Metals price assumptions

On Thursday morning, Fitch revised its price assumption for various mined commodities, including copper, gold, aluminum, iron ore, metallurgical coal, zinc, and nickel. We share Fitch's updated price deck below.

- **Copper:** Raised 2024 price outlook to \$8,500/ton from \$8,300/ton to reflect supply-side disruptions and lower production guidance from producers.
- **Gold:** Raised 2024, 2025, and 2026 price outlooks to \$1,900/ton (from \$1,800/ton), \$1,800 ton (from \$1,600/ton), and \$1,600/ton (from \$1,500/ton), respectively. The increase reflects higher geopolitical premiums.
- **Aluminum:** Lowered 2024 price outlook to \$2,300/ton from \$2,350/ton due to weaker pricing YTD. Raised 2026 and mid-cycle price outlooks to \$2,300/ton from \$2,200/ton (2026) and \$2,000/ton (mid-cycle) to reflect stronger demand growth.
- **Iron ore:** Raised 2024, 2025, and 2026 price outlooks to \$105/ton (from \$95/ton), \$90/ton (from \$80/ton), and \$85/ton (from \$75/ton), respectively. Fitch expects tighter markets for longer on supply side issues.
- **Metallurgical coal:** Raised 2024 and 2025 price outlooks to \$240/ton from \$210/ton and \$190/ton from \$180/ton, respectively. The increase reflects lower seaborne supply and demand supported by strong steel production in China.
- **Zinc:** Raised 2025, 2026 and mid-cycle price outlooks to \$2,400/ton (from \$2,300/ton), \$2,300/ton (from \$2,220/ton), and \$2,500/ton (from \$2,200/ton), respectively. Fitch expects demand to gradually recovery despite short-term challenges.
- **Nickel:** Lowered 2024 and 2025 price outlooks to \$1,700/ton from \$1,800/ton and \$1,600/ton from \$1,700/ton to reflect increasing global supply.

Exhibit 4: Fitch Metals & Mining Price Deck

Fitch's updated and previous Metals & Mining price deck

Commodity (\$/ton)	2024		2025		2026		2027		Long-term	
	Old	New	Old	New	Old	New	Old	New	Old	New
Copper	8,300	8,400	8,000	8,000	7,500	7,500	N/A	7,500	7,500	7,500
Iron ore (62%, CFR)	95	105	80	90	75	85	N/A	75	70	70
Met Coal	210	240	180	190	170	170	N/A	170	160	160
Aluminum	2,350	2,300	2,400	2,400	2,200	2,300	N/A	2,300	2,000	2,300
Zinc	2,500	2,500	2,300	2,400	2,200	2,300	N/A	2,400	2,200	2,500
Gold (USD\$/oz)	1,800	1,900	1,600	1,800	1,500	1,600	N/A	1,500	1,500	1,500
Thermal Coal (Newcastle)	100	100	90	90	80	80	N/A	80	75	75
Nickel	18,000	17,000	17,000	16,000	15,000	15,000	N/A	15,000	15,000	15,000

Source: BofA Global Research, Fitch

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FMC assigned first time rating of BBB- by Fitch; stable outlook

On Monday, Fitch assigned a first-time rating of BBB- to FMC Corporation (FMC) and provided a stable outlook. The rating reflects FMC position as the fifth largest global agrochemicals company, its product portfolio and intellectual property, and historically positive free cash flow profile / strong margins. The rating also considers FMC’s elevated leverage profile and the seasonal nature of its operations. The stable outlook reflects Fitch’s belief that leverage will approach 3.3x by YE25 as the company focuses on gross debt reduction and inventory destocking subsidies. A positive ratings action could be taken if leverage is durably below 2.8 and/or margins are sustained in the mid 20%’s. Conversely, a negative ratings action could be taken if leverage is sustained above 3.5x beyond 2025, FMC completes a large, debt funded acquisition with no clear path to de-leveraging, and/or EBITDA margins are sustained below 20%.

BofA Recommendations

Exhibit 5: BofA Global Research Recommendations
HG Basic Materials recommendations include 2 Overweights and 2 Underweights

Chemicals	Rating	Metals, Mining, & Steel	Rating
Celanese Corporation	OW	Freeport-McMoRan Inc.	MW
Dow Inc	UW	Nucor Corporation	MW
Int'l Flavors & Fragrances	OW	Steel Dynamics, Inc.	MW, OW 2050s
LyondellBasell Industries	MW	Teck Resources Ltd	MW
Nutrien Ltd	MW		
Sherwin-Williams	UW		

Source: BofA Global Research
Note: UW = Underweight, MW = Marketweight, OW = Overweight, RSTR = Restricted. Please see credit opinion key at the end of this report

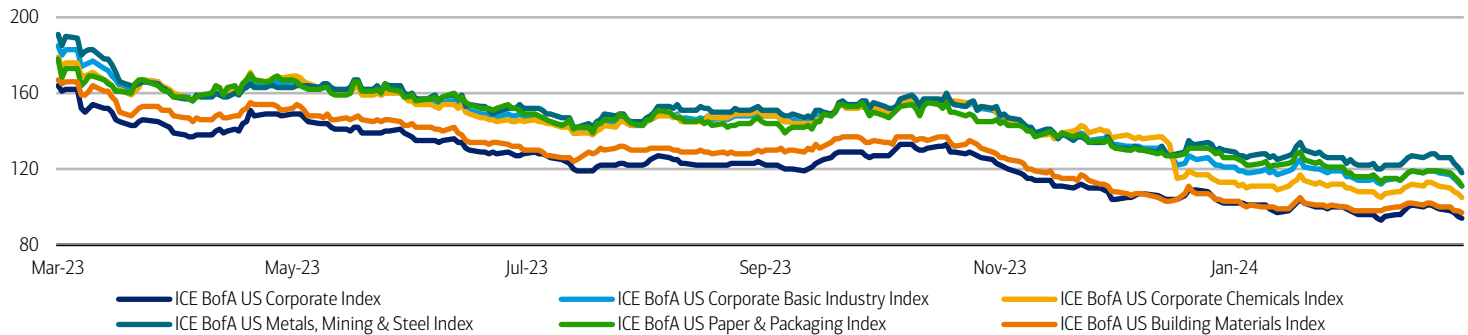
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HG Basic Materials Spreads

Exhibit 6: Option Adjusted Spread: HG Corporate Index and HG Basic Materials (& subsectors) Indices (LTM)

The Option Adjusted Spread for the HG Basic Materials Index has traded wide of the HG Corporate Index for the LTM



Source: BofA Global Research, ICE Data Indices, LLC

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Exhibit 7: HG Chemicals Cash Spreads (Bid)

In the HG Chemicals subsector, spreads were mostly 5 to 10 bps tighter w-o-w.

Issuer	Entity	Coupon	Maturity	Outstanding (\$mm)	MDY/S&P	Bid (bps)	Z-Spread	G-Spread	Price	1 wk. change	6-mo tight	6-mo wide	8-wk avg. spread (bps)
ALB	Albemarle Corp	5.050	6/1/2032	600	Baa3 / BBB	151	184	150	95.02	(13)	151	215	161
ALB	Albemarle Corp	5.650	6/1/2052	450	Baa3 / BBB	203	267	201	89.44	(10)	201	258	206
APD	Air Products and Chemicals	4.850	2/8/2034	1,150	A2 / A	78	113	78	98.14	(4)	76	88	80
APD	Air Products and Chemicals	2.800	5/15/2050	950	A2 / A	78	144	74	65.69	(3)	62	88	76
CE	Celanese US Holdings LLC	6.700	11/15/2033	1,000	Baa3 / BBB-	166	200	166	105.18	(8)	163	258	174
CF	CF Industries Inc	5.375	3/15/2044	750	Baa3 / BBB	143	207	143	92.95	(8)	138	195	143
CTVA	Corteva, Inc	4.800	5/15/2033	600	A3 / A-	79	114	79	97.81	(6)	75	121	80
DD	DuPont de Nemours Inc	5.419	11/15/2048	2,150	Baa1 / BBB+	114	174	108	97.86	(6)	96	149	116
DOW	Dow Chemical Co/The	5.150	2/15/2034	600	Baa1 / BBB	101	136	101	98.69	(6)	96	112	104
DOW	Dow Chemical Co/The	5.600	2/15/2054	650	Baa1 / BBB	129	196	129	98.15	(8)	129	141	133
ECL	Ecolab Inc	2.125	2/1/2032	650	A3 / A-	58	92	57	82.11	(5)	53	92	62
ECL	Ecolab Inc	2.700	12/15/2051	850	A3 / A-	81	150	78	62.98	(3)	69	100	80
EMN	Eastman Chemical Co	5.625	2/20/2034	750	Baa2 / BBB	141	176	141	99.27	(6)	141	150	145
EMN	Eastman Chemical Co	4.650	10/15/2044	900	Baa2 / BBB	146	211	147	84.01	(4)	138	192	145
FMC	FMC Corp	5.650	5/18/2033	500	Baa2 / BBB-	166	200	166	97.75	(18)	166	257	185
FMC	FMC Corp	6.375	5/18/2053	500	Baa2 / BBB-	204	268	203	98.64	(18)	204	271	215
HUN	Huntsman International LLC	2.950	6/15/2031	400	Baa3 / BBB-	170	202	168	82.24	(2)	165	225	171
IFF	International Flavors and Fragrances Inc	3.468	12/1/2050	1,500	Baa3 / BBB-	172	237	168	64.96	(5)	162	234	169
LIN	Linde Inc/CT	2.000	8/10/2050	300	A2 / A	67	135	63	55.22	(6)	62	95	68
LYB	LYB International Finance III LLC	5.500	3/1/2034	750	Baa2 / BBB	132	167	132	99.01	(6)	132	138	135
LYB	LYB International Finance III LLC	3.625	4/1/2051	1,000	Baa2 / BBB	147	213	144	69.36	(5)	136	185	148
MOS	Mosaic Co	5.625	11/15/2043	600	Baa2 / BBB	147	211	148	95.43	(4)	147	197	152
NTRCN	Nutrien Ltd	5.800	3/27/2053	750	Baa2 / BBB	134	199	132	100.30	(9)	122	176	136
RPM	RPM International Inc	2.950	1/15/2032	300	Baa3 / BBB	120	154	119	83.90	(4)	116	201	122
RPM	RPM International Inc	4.250	1/15/2048	300	Baa3 / BBB	143	202	136	79.37	(1)	141	194	144
SHW	Sherwin-Williams Co/The	2.200	3/15/2032	500	Baa2 / BBB	89	124	88	80.58	(4)	81	131	87
SHW	Sherwin-Williams Co/The	2.900	3/15/2052	500	Baa2 / BBB	100	169	98	63.72	(4)	87	143	96
WLK	Westlake Chemical Corp	3.125	8/15/2051	600	Baa2 / BBB	143	210	140	62.83	(9)	132	183	144

Source: BofA Global Research, BofA Trading Desk, Bloomberg

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Exhibit 8: HG Metals, Mining and Steel Cash Spreads (Bid)

In the HG Metals, Mining, & Steel subsector, spreads were mostly 5 to 10 bps tighter w-o-w.

Issuer	Entity	Coupon	Maturity	Outstanding (\$mm)	MDY/S&P	Bid (bps)	Z-Spread	G-Spread	Price	1 wk. change	6-mo tights	6-mo wides	8-wk avg. spread (bps)
AALLN	Anglo American Capital PLC	5.500	5/2/2033	900	Baa2 / BBB	141	175	141	98.44	(7)	141	195	151
AALLN	Anglo American Capital PLC	4.750	3/16/2052	750	Baa2 / BBB	159	224	157	82.82	(1)	150	204	157
ABXCN	Barrick Gold Corp	5.750	5/1/2043	849	Baa1 / BBB	103	166	105	101.92	(7)	94	126	106
BHP	BHP Billiton Finance USA Ltd	5.250	9/8/2033	1,500	A2 / A-	89	123	89	100.36	(4)	82	120	91
BHP	BHP Billiton Finance USA Ltd	5.500	9/8/2053	800	A2 / A-	95	162	94	101.62	(5)	84	110	95
FCX	Freeport-McMoRan Inc	5.400	11/14/2034	730	Baa2 / BB+	137	172	135	97.77	(10)	131	206	148
FCX	Freeport-McMoRan Inc	5.450	3/15/2043	1,706	Baa2 / BB+	145	208	147	93.77	(11)	139	201	152
GLENLN	Glencore Funding LLC	6.500	10/6/2033	1,000	Baa1 / BBB+	123	157	123	106.90	(4)	123	197	132
GLENLN	Glencore Funding LLC	3.375	9/23/2051	500	Baa1 / BBB+	124	191	121	68.13	(4)	124	188	128
KCN	Kinross Gold Corp	6.250	7/15/2033	500	Baa3 / BBB-	161	194	160	102.28	(8)	157	238	165
NEM	Newmont Corp	5.350	3/15/2034	1,000	Baa1 / BBB+	102	137	102	100.14	(8)	102	110	106
NEM	Newmont Corp	4.875	3/15/2042	1,000	Baa1 / BBB+	102	165	107	92.12	(8)	84	136	101
NUE	Nucor Corp	3.125	4/1/2032	550	Baa1 / A-	79	113	78	87.11	1	76	127	79
NUE	Nucor Corp	3.850	4/1/2052	550	Baa1 / A-	99	166	97	77.40	(3)	83	137	94
RIOLN	Rio Tinto Finance USA Ltd	5.000	3/9/2033	650	A2 / A-	75	109	74	99.56	(3)	59	107	74
RIOLN	Rio Tinto Finance USA Ltd	5.125	3/9/2053	1,100	A2 / A-	95	162	94	96.15	(6)	83	116	95
SOUTAU	South32 Treasury Ltd	4.350	4/14/2032	700	Baa1 / BBB+	176	209	175	89.14	(2)	176	244	181
STLD	Steel Dynamics	3.250	1/15/2031	500	Baa2 / BBB	102	133	100	88.22	(4)	87	145	97
STLD	Steel Dynamics	3.250	10/15/2050	400	Baa2 / BBB	144	209	140	64.88	(5)	130	170	143
TCKBCN	Teck Resources Ltd	5.400	2/1/2043	367	Baa3 / BBB-	157	220	160	91.95	(5)	157	216	160

Source: BofA Global Research, BofA Trading Desk, Bloomberg

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Exhibit 9: HG Paper, Packaging, and Wood Cash Spreads (Bid)

In the HG Paper, Packaging, & Wood subsector, spreads were mostly 2 bps tighter w-o-w.

Issuer	Entity	Coupon	Maturity	Outstanding (\$mm)	MDY/S&P	Bid (bps)	Z-Spread	G-Spread	Price	1 wk. change	6-mo tights	6-mo wides	8-wk avg. spread (bps)
ATR	AptarGroup Inc	3.600	3/15/2032	400	Baa3 / BBB-	129	163	128	87.25	(3)	118	172	128
AVY	Avery Dennison Corp	5.750	3/15/2033	400	Baa2 / BBB	98	131	97	103.18	(2)	98	155	100
IP	International Paper Co	4.350	8/15/2048	740	Baa2 / BBB	110	170	104	84.19	(2)	103	152	111
PKG	Packaging Corp of America	3.050	10/1/2051	700	Baa2 / BBB	103	171	100	65.79	(2)	95	142	99
SON	Sonoco Products Co	2.850	2/1/2032	500	Baa2 / BBB	106	140	105	83.99	(2)	105	155	108
SON	Sonoco Products Co	5.750	11/1/2040	537	Baa2 / BBB	120	182	128	99.95	(2)	120	170	128
WRK	WRKCO Inc	3.000	6/15/2033	600	Baa2 / BBB	90	126	90	83.94	(2)	90	147	96
WY	Weyerhaeuser	3.375	3/9/2033	450	Baa2 / BBB	103	138	102	86.13	(2)	103	145	106
WY	Weyerhaeuser	4.000	3/9/2052	450	Baa2 / BBB	113	180	111	77.88	(2)	107	142	111

Source: BofA Global Research, BofA Trading Desk, Bloomberg

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Exhibit 10: HG Construction Materials/Homebuilders Cash Spreads (Bid)

In the HG Construction Materials/Homebuilders subsector, spreads were mostly flat to 5 bps tighter w-o-w.

Issuer	Entity	Coupon	Maturity	Outstanding (\$mm)	MDY/S&P	Bid (bps)	Z-Spread	G-Spread	Price	1 wk. change	6-mo tights	6-mo wides	8-wk avg. spread (bps)
EXP	Eagle Materials	2.500	7/1/2031	750	Baa2 / BBB	103	136	101	83.03	(2)	98	163	103
FBINUS	Fortune Brands Home & Security Inc	5.875	6/1/2033	600	Baa2 / BBB	138	172	137	101.27	(1)	130	200	137
FBINUS	Fortune Brands Home & Security Inc	4.500	3/25/2052	450	Baa2 / BBB	151	217	149	80.36	(2)	141	202	148
MAS	Masco Corp	2.000	2/15/2031	600	Baa2 / BBB	104	136	102	80.86	(2)	101	150	105
MAS	Masco Corp	3.125	2/15/2051	300	Baa2 / BBB	118	184	114	65.61	0	109	182	115
MLM	Martin Marietta Materials Inc	2.400	7/15/2031	900	Baa2 / BBB+	90	123	88	83.06	(7)	90	144	96
MLM	Martin Marietta Materials Inc	3.200	7/15/2051	900	Baa2 / BBB+	98	165	95	68.56	(4)	80	137	95
OC	Owens Corning	4.300	7/15/2047	600	Baa1 / BBB	124	194	128	81.01	(4)	96	172	119
PHM	PulteGroup Inc	7.875	6/15/2032	300	Baa2 / BBB	128	159	127	114.90	(7)	128	188	133
VMC	Vulcan Materials Co	4.700	3/1/2048	461	Baa2 / BBB+	114	173	107	88.46	1	99	150	109

Source: BofA Global Research, BofA Trading Desk, Bloomberg

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HG Basic Materials Financial Data

Exhibit 11: HG Chemicals Financial Data (LTM as of 4Q23)

LTM financial data for HG Chemical Companies as of 4Q23

Company Name	Air Products	Albemarle	Celanese	CF Industries	Dow Chemical	DuPont	Eastman Chemical	Ecolab Inc.	FMC Corp.
Debt Ticker:	APD	ALB	CE	CF	DOW	DD	EMN	ECL	FMC
Sector/Subsector:	Industrial Gases	Spec. Chemicals	Spec. Chemicals	Agri. Chemicals	Petro. Chemicals	Spec. Chemicals	Spec. Chemicals	Spec. Chemicals	Agri. Chemicals
Moody's	A2 / S	Baa3 / S	Baa3 / N	Baa3 / S	Baa1 / S	Baa1 / S	Baa2 / S	A3 / N	Baa2 / S
S&P	A / S	BBB / S	BBB- / S	BBB / S	BBB / P	BBB+ / S	BBB / S	A- / N	BBB- / S
Financials (LTM, US\$ mm)									
Total Revenue	\$12,423	\$9,617	\$10,940	\$6,631	\$44,622	\$12,068	\$9,210	\$15,320	\$4,487
EBITDA	\$4,792	\$2,471	\$2,459	\$2,760	\$5,282	\$2,868	\$1,545	\$3,050	\$952
EBITDA Margin	38.6%	25.7%	22.5%	41.6%	11.8%	23.8%	16.8%	19.9%	21.2%
Capital Expenditures	\$2,347	\$2,149	\$568	\$499	\$2,356	\$619	\$828	\$775	\$134
Dividends	\$748	\$187	\$305	\$311	\$1,972	\$651	\$376	\$615	\$291
Free Cash Flow	\$18	(\$1,011)	\$1,026	\$1,947	\$868	\$921	\$170	\$1,022	(\$811)
Cash & Cash Equivalents	\$2,234	\$900	\$1,805	\$2,032	\$2,987	\$2,392	\$548	\$920	\$302
Total Debt	\$12,108	\$4,167	\$14,320	\$2,968	\$21,579	\$8,923	\$5,551	\$8,182	\$3,958
Total Debt/EBITDA	2.5x	1.7x	5.8x	1.1x	4.1x	3.1x	3.6x	2.7x	4.2x
Net Debt	\$9,873	\$3,267	\$12,515	\$936	\$18,592	\$6,531	\$5,003	\$7,262	\$3,655
Net Debt/EBITDA	2.1x	1.3x	5.1x	0.3x	3.5x	2.3x	3.2x	2.4x	3.8x
Interest	\$190	\$116	\$720	\$150	\$746	\$396	\$215	\$297	\$237
EBITDA/Interest	25.2x	21.3x	3.4x	18.4x	7.1x	7.2x	7.2x	10.3x	4.0x
Market Capitalization	\$48,628	\$13,696	\$16,713	\$31,156	\$37,474	\$28,584	\$10,004	\$62,893	\$6,399
Enterprise Value	\$58,502	\$16,963	\$29,228	\$31,306	\$56,066	\$35,115	\$15,007	\$70,155	\$10,054
EV/EBITDA	12.2x	6.9x	11.9x	11.3x	10.6x	12.2x	9.7x	23.0x	10.6x
Total Debt/EV	21%	25%	49%	9%	38%	25%	37%	12%	39%

Source: BofA Research, Company Reports, Bloomberg

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Exhibit 12: HG Chemicals Financial Data (LTM as of 4Q23)

LTM financial data for HG Chemical Companies as of 4Q23

Company Name	Huntsman Corp.	International Flavors & Fragrances	LyondellBasell	Mosaic	Nutrien	PPG Industries	RPM International	Sherwin-Williams	Westlake
Debt Ticker:	HUN	IFF	LYB	MOS	NTRCN	PPG	RPM	SHW	WLK
Sector/Subsector:	Commod. Chemicals	Spec. Chemicals	Petro. Chemicals	Agri. Chemicals	Agri. Chemicals	Coatings	Coatings	Coatings	Petro. Chemicals
Moody's	Baa3 / S	Baa3 / N	Baa2 / S	Baa2 / S	Baa2 / S	A3 / S	Baa3 / S	Baa2 / P	Baa2 / S
S&P	BBB- / N	BBB- / N	BBB / S	BBB / S	BBB / S	BBB+ / S	BBB / S	BBB / S	BBB / P
Financials (LTM, US\$ mm)									
Total Revenue	\$6,111	\$11,479	\$41,107	\$13,696	\$29,056	\$18,246	\$7,337	\$23,052	\$12,548
EBITDA	\$472	\$1,980	\$5,361	\$2,364	\$6,058	\$2,951	\$1,006	\$4,183	\$2,587
EBITDA Margin	7.7%	17.2%	13.0%	17.3%	20.8%	16.2%	13.7%	18.1%	20.6%
Capital Expenditures	\$230	\$503	\$1,531	\$1,402	\$2,621	\$549	\$230	\$888	\$1,034
Dividends	\$169	\$826	\$1,610	\$352	\$1,032	\$598	\$222	\$624	\$221
Free Cash Flow	(\$190)	\$110	\$1,801	\$653	\$1,413	\$1,264	\$702	\$2,010	\$1,081
Cash & Cash Equivalents	\$540	\$709	\$3,390	\$349	\$941	\$1,514	\$263	\$277	\$3,304
Total Debt	\$2,261	\$10,071	\$13,494	\$3,761	\$12,566	\$6,054	\$2,252	\$9,851	\$5,523
Total Debt/EBITDA	4.8x	5.1x	2.5x	1.6x	2.1x	2.1x	2.2x	2.4x	2.1x
Net Debt	\$1,721	\$9,362	\$10,104	\$3,413	\$11,625	\$4,540	\$1,990	\$9,574	\$2,219
Net Debt/EBITDA	3.6x	4.7x	1.9x	1.4x	1.9x	1.5x	2.0x	2.3x	0.9x
Interest	\$65	\$380	\$348	\$129	\$793	\$247	\$127	\$418	\$165
EBITDA/Interest	7.3x	5.2x	15.4x	18.3x	7.6x	11.9x	8.0x	10.0x	15.7x
Market Capitalization	\$4,625	\$18,692	\$33,033	\$10,043	\$25,312	\$33,505	\$13,842	\$85,625	\$18,041
Enterprise Value	\$6,346	\$28,054	\$43,137	\$13,456	\$36,937	\$38,045	\$16,095	\$95,199	\$20,260
EV/EBITDA	13.4x	14.2x	8.0x	5.7x	6.1x	12.9x	16.0x	22.8x	7.8x
Total Debt/EV	36%	36%	31%	28%	34%	16%	14%	10%	27%

Source: BofA Research, Company Reports, Bloomberg

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Exhibit 13: HG Metals, Mining, & Steel Financial Data (LTM as of 4Q23)

LTM financial data for HG Metals, Mining, & Steel Companies as of 4Q23

Company Name	Barrick Gold	Freeport McMoRan	Kinross Gold	Newmont Mining*	Nucor	Reliance Steel	Steel Dynamics	Teck Resources
Debt Ticker:	ABXCN	FCX	KCN	NEM	NUE	RS	STLD	TCKBCN
Sector/Subsector:	Metals & Mining	Metals & Mining	Metals & Mining	Metals & Mining	Steel	Steel	Steel	Metals & Mining
Moody's	A3 / S	Baa2 / S	Baa3 / S	Baa1 / P	Baa1 / S	Baa2 / S	Baa2 / S	Baa3 / S
S&P	BBB+ / S	BB+ / P	BBB- / N	BBB+ / S	A- / S	BBB / P	BBB / S	BBB- / S
Financials (LTM, US\$ mm)								
Total Revenue	\$11,397	\$22,855	\$4,240	\$11,812	\$34,714	\$14,806	\$18,795	\$15,011
EBITDA	\$5,474	\$8,795	\$1,827	\$4,217	\$7,023	\$2,026	\$3,663	\$6,367
EBITDA Margin	48.0%	38.5%	43.1%	35.7%	20.2%	13.7%	19.5%	42.4%
Capital Expenditures	\$3,086	\$4,824	\$1,098	\$2,666	\$2,214	\$469	\$1,658	\$4,678
Dividends	\$700	\$863	\$147	\$1,415	\$515	\$238	\$271	\$515
Free Cash Flow	(\$54)	(\$1,033)	\$497	(\$1,318)	\$4,383	\$964	\$1,591	(\$1,109)
Cash & Cash Equivalents	\$4,148	\$5,966	\$352	\$3,002	\$7,131	\$1,080	\$2,122	\$744
Total Debt	\$4,726	\$9,422	\$2,233	\$9,436	\$7,018	\$1,142	\$3,071	\$6,408
Total Debt/EBITDA	0.9x	1.1x	1.2x	2.2x	1.0x	0.6x	0.8x	1.0x
Net Debt	\$578	\$3,456	\$1,880	\$6,434	(\$113)	\$62	\$949	\$5,664
Net Debt/EBITDA	0.1x	0.4x	1.0x	1.5x	0.0x	0.0x	0.3x	0.9x
Interest	\$170	\$515	\$106	\$242	\$246	\$40	\$76	\$162
EBITDA/Interest	32.2x	17.1x	17.2x	17.4x	28.6x	50.5x	47.9x	39.3x
Market Capitalization	\$27,624	\$56,100	\$6,857	\$36,813	\$44,454	\$18,386	\$20,554	\$27,119
Enterprise Value	\$28,202	\$59,556	\$8,738	\$43,247	\$44,340	\$18,448	\$21,503	\$32,783
EV/EBITDA	5.2x	6.8x	4.8x	10.3x	6.3x	9.1x	5.9x	5.1x
Total Debt/EV	17%	16%	26%	22%	16%	6%	14%	20%

Source: BofA Research, Company Reports, Bloomberg

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Exhibit 14: HG Paper, Packaging, & Wood Financial Data (LTM as of 4Q23)

LTM financial data for HG Paper, Packaging, & Wood Companies as of 4Q23

Company Name	Avery Dennison	CCL Industries	International Paper	Packaging Corp	Sonoco Products	WestRock	Weyerhaeuser
Debt Ticker:	AVY	CCLBCN	IP	PKG	SON	WRK	WY
Sector/Subsector:	Labeling	Labeling	Paper / Packaging	Paper / Packaging	Packaging	Packaging	Forestry
Moody's	Baa2 / S	Baa2 / S	Baa2 / S	Baa2 / S	Baa2 / S	Baa2 / S	Baa2 / S
S&P	BBB / S	BBB / S	BBB / S	BBB / S	BBB / N	BBB / S	BBB / S
Financials (LTM, US\$ mm)							
Total Revenue	\$8,364	\$4,974	\$18,916	\$7,802	\$6,781	\$20,007	\$7,674
EBITDA	\$1,262	\$996	\$2,234	\$1,609	\$1,035	\$2,742	\$1,694
EBITDA Margin	15.1%	20.0%	11.8%	20.6%	15.3%	13.7%	22.1%
Capital Expenditures	\$285	\$346	\$1,141	\$470	\$363	\$1,107	\$447
Dividends	\$257	\$141	\$642	\$449	\$197	\$289	\$1,216
Free Cash Flow	\$284	\$265	\$50	\$397	\$322	\$441	(\$230)
Cash & Cash Equivalents	\$215	\$569	\$1,113	\$1,206	\$152	\$488	\$1,164
Total Debt	\$3,244	\$1,677	\$5,593	\$2,483	\$3,083	\$8,698	\$5,069
Total Debt/EBITDA	2.6x	1.7x	2.5x	1.5x	3.0x	3.2x	3.0x
Net Debt	\$3,029	\$1,108	\$4,480	\$1,277	\$2,931	\$8,210	\$3,905
Net Debt/EBITDA	2.4x	1.1x	2.0x	0.8x	2.8x	3.0x	2.3x
Interest	\$119	\$70	\$231	\$53	\$137	\$422	\$280
EBITDA/Interest	10.6x	14.1x	9.7x	30.1x	7.6x	6.5x	6.1x
Market Capitalization	\$17,230	\$8,561	\$12,368	\$16,622	\$5,565	\$11,368	\$24,133
Enterprise Value	\$20,260	\$9,670	\$16,848	\$17,899	\$8,496	\$19,578	\$28,038
EV/EBITDA	16.1x	9.7x	7.5x	11.1x	8.2x	7.1x	16.6x
Total Debt/EV	16%	17%	33%	14%	36%	44%	18%

Source: BofA Research, Company Reports, Bloomberg

BofA GLOBAL RESEARCH



**Exhibit 15: HG Construction Materials/Homebuilders Financial Data (LTM as of 4Q23)**

LTM financial data for HG Construction Materials/Homebuilders Companies as of 4Q23

Company Name	D.R. Horton	Eagle Materials	Fortune Brands	Martin Marietta	Masco	Mohawk	Owens Corning	Vulcan
Debt Ticker:	DHI	EXP	FBINUS	MLM	MAS	MHK	OC	VMC
Sector/Subsector:	Homebuilding	Construction Products	Building Products	Construction Products	Building Products	Building Products	Building Products	Construction Products
Moody's	Baa1 / S	Baa2 / S	Baa2 / S	Baa2 / S	Baa2 / P	Baa1 / S	Baa1 / S	Baa2 / S
S&P	BBB+ / S	BBB / S	BBB / S	BBB+ / S	BBB / S	BBB+ / S	BBB / S	BBB+ / S
Financials (LTM, US\$ mm)								
Total Revenue	\$35,929	\$2,253	\$4,626	\$6,777	\$7,967	\$11,135	\$9,677	\$7,782
EBITDA	\$6,345	\$794	\$869	\$2,299	\$1,484	\$1,409	\$2,559	\$1,329
EBITDA Margin	17.7%	35.2%	18.8%	33.9%	18.6%	12.7%	26.4%	17.1%
Capital Expenditures	\$149	\$137	\$257	\$650	\$243	\$613	\$526	\$873
Dividends	\$355	\$36	\$117	\$174	\$257	\$0	\$188	\$228
Free Cash Flow	\$2,818	\$389	\$683	\$704	\$584	\$716	\$1,005	\$436
Cash & Cash Equivalents	\$3,323	\$49	\$366	\$1,272	\$634	\$643	\$1,615	\$931
Total Debt	\$5,290	\$1,032	\$2,670	\$4,345	\$2,948	\$2,704	\$3,046	\$3,878
Total Debt/EBITDA	0.8x	1.3x	3.1x	1.9x	2.0x	1.9x	1.2x	2.9x
Net Debt	\$1,967	\$984	\$2,304	\$3,073	\$2,314	\$2,061	\$1,431	\$2,947
Net Debt/EBITDA	0.3x	1.2x	2.7x	1.3x	1.6x	1.5x	0.6x	2.2x
Interest	\$200	\$43	\$117	\$165	\$106	\$78	\$76	\$180
EBITDA/Interest	31.7x	18.5x	7.5x	13.9x	14.0x	18.2x	33.7x	7.4x
Market Capitalization	\$46,431	\$7,438	\$10,129	\$34,564	\$16,794	\$7,733	\$12,793	\$35,350
Enterprise Value	\$48,398	\$8,422	\$12,433	\$37,637	\$19,108	\$9,794	\$14,224	\$38,296
EV/EBITDA	7.6x	10.6x	14.3x	16.4x	12.9x	7.0x	5.6x	28.8x
Total Debt/EV	11%	12%	21%	12%	15%	28%	21%	10%

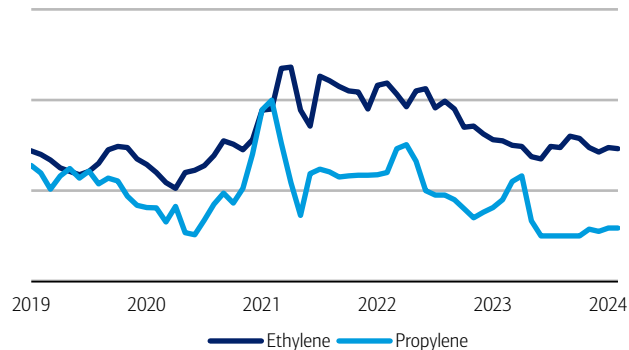
Source: BofA Research, Company Reports, Bloomberg

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Chemical Markets Data

Exhibit 16: Olefin Pricing (\$/lb)

Olefin prices have declined from their highs

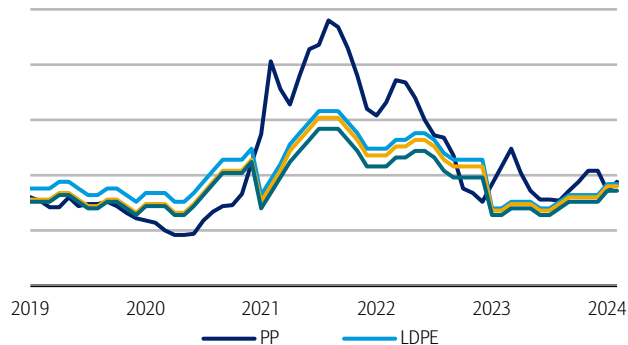


Source: Chemical Data Inc., a part of ICIS

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Exhibit 17: Polyolefin Pricing (\$/lb)

Polyolefin prices declined from their highs but have started to stabilize

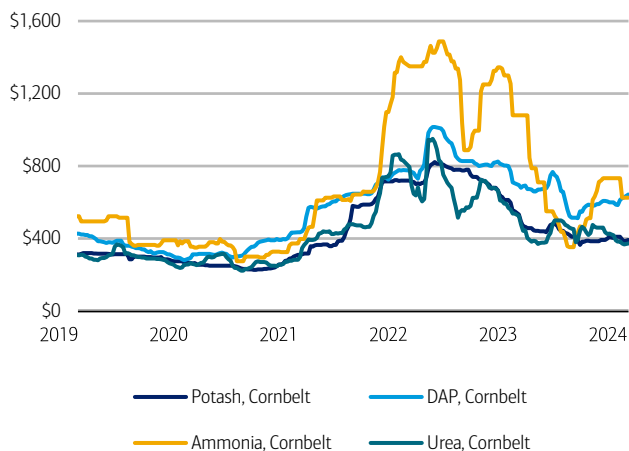


Source: Chemical Data Inc., a part of ICIS

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Exhibit 18: Fertilizer Pricing (\$/st)

Fertilizer prices declined from their high but have started to stabilize

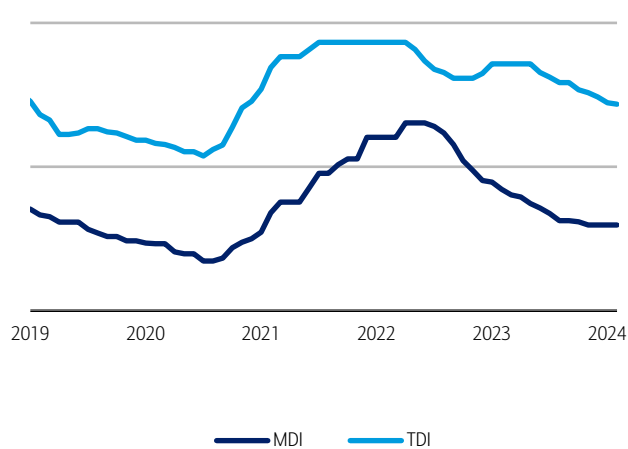


Source: BofA Global Research, Bloomberg

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Exhibit 19: Isocyanates Pricing (\$/lb)

MDI and TDI have rebounded from their COVID lows

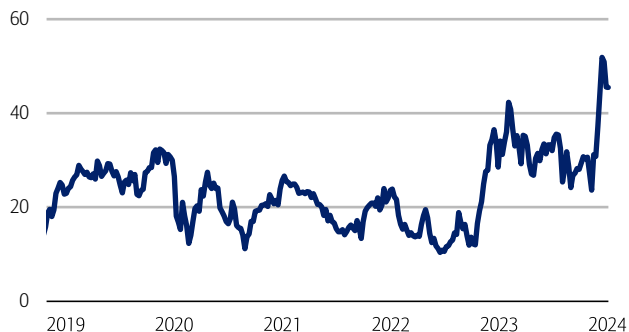


Source: Chemical Data Inc., a part of ICIS

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Exhibit 20: Brent (\$/bbl) to Natural Gas (\$/mmbtu)

The ratio of Brent to Natural Gas is at elevated levels

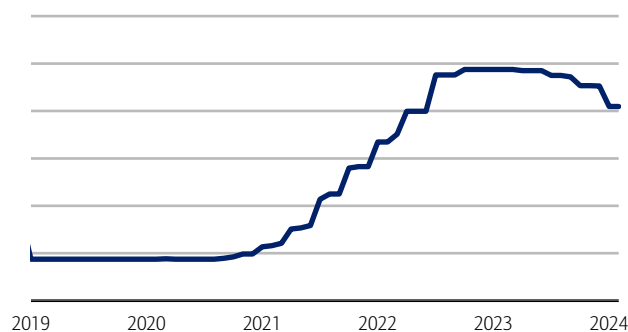


Source: BofA Global Research, Bloomberg

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Exhibit 21: Chlorine Price (US Gulf Coast FOB \$/st)

Chlorine price were largely flat in 2023 while softer in early 2024



Source: Chemical Market Analytics by OPIS, a Dow Jones Company

BofA GLOBAL RESEARCH

Commodity Forecasts

Exhibit 22: Commodity Team Base Metals Forecasts

BofA's quarterly and annual forecasts for base metals

		1Q24E	2Q24E	3Q24E	4Q24E	2024E	2025E	2026E	2027E	2028E	LT price
Aluminum	US\$/t	2,250	2,500	2,750	2,750	2,563	3,000	3,250	3,015	2,781	2,546
	US\$/lb	102	113	125	125	116	136	147	137	126	115
Strip Aluminum	US\$/t	2,279	2,279	2,279	2,279	2,279	2,425	2,546	2,637		
Copper	US\$/t	8,000	8,500	8,750	9,250	8,625	10,500	9,500	9,539	9,578	9,617
	US\$/lb	363	386	397	420	391	476	431	433	434	436
Strip Copper	US\$/t	8,593	8,593	8,593	8,593	8,593	8,686	8,712	8,725		
Lead	US\$/t	2,000	2,000	2,000	2,000	2,000	1,750	2,024	2,217	2,409	2,602
	US\$/lb	91	91	91	91	91	79	92	101	109	118
Strip Lead	US\$/t	2,167	2,167	2,167	2,167	2,167	2,189	2,219	2,251		
Nickel	US\$/t	18,500	18,500	19,000	19,000	18,750	20,000	20,000	19,141	18,283	17,424
	US\$/lb	839	839	862	862	850	907	907	868	829	790
Strip Nickel	US\$/t	16,925	16,925	16,925	16,925	16,925	17,858	18,628	19,421		
Zinc	US\$/t	2,500	2,500	2,250	2,250	2,375	2,250	2,424	2,596	2,769	2,942
	US\$/lb	113	113	102	102	108	102	110	118	126	133
Strip Zinc	US\$/t	2,592	2,592	2,592	2,592	2,592	2,621	2,627	2,630		

Source: BofA Global Research, BofA Global Commodity Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 23: Commodity Team Precious Metals Forecasts

BofA's quarterly and annual forecasts for precious metals

		1Q24E	2Q24E	3Q24E	4Q24E	2024E	2025E	2026E	2027E	2028E	LT price
Gold, nominal	US\$/oz	1,950	1,950	2,000	2,000	1,975	2,150	2,096	2,095	2,094	2,093
Gold, real	US\$/oz	1,950	1,950	2,000	2,000	1,975	2,098	1,995	1,946	1,898	1,850
Strip Gold	US\$/oz	2,064	2,064	2,064	2,064	2,064	2,155	2,259	2,314		
Silver, nominal	US\$/oz	22.50	23.00	23.53	24.00	23.26	24.75	26.07	27.18	28.39	29.42
Silver, real	US\$/oz	22.50	23.00	23.53	24.00	23.26	24.15	24.81	25.21	25.60	26.00
Strip Silver	US\$/oz	22.92	22.92	22.92	22.92	22.92	24.26	25.19	25.40		
Platinum	US\$/oz	1,000	1,000	1,100	1,250	1,050	1,250	1,322	1,372	1,421	1,471
Strip Platinum	US\$/oz	907	907	907	907	907	936	969			
Palladium	US\$/oz	900	800	700	600	750	500	500	824	1,147	1,471
Strip Palladium	US\$/oz	958	958	958	958	958	1,000	1,049			

Source: BofA Global Research, BofA Global Commodity Research, Bloomberg

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Exhibit 24: Commodity Team Bulk Commodities Forecasts

BofA's quarterly and annual forecasts for bulk commodities

		1Q24E	2Q24E	3Q24E	4Q24E	2024E	2025E	2026E	2027E	2028E	LT price
Hard coking coal	US\$/t fob	360	280	210	230	270	215	205	212	219	226
Strip Hard coking coal	US\$/t fob	295	295	295	295	295	273	220	215		
Semi-soft	US\$/t fob	238	185	139	152	178	142	135	134	133	132
Thermal Coal	US\$/t fob	148	148	151	153	150	125	112	112	113	113
Iron ore fines, spot	US\$/t CIF	150	130	120	100	125	90	90	94	98	102
Strip Iron ore fines, spot	US\$/t CIF	128	128	128	128	128	112	102			

Source: BofA Global Research, BofA Global Commodity Research, Bloomberg

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Exhibit 25: Commodity Team Other Materials Forecasts

BofA's quarterly and annual forecasts for other materials

		1Q24E	2Q24E	3Q24E	4Q24E	2024E	2025E	2026E	2027E	2028E	LT price
Lithium spodumene	\$/t	1,950	1,850	1,750	1,500	1,763	2,188	1,858	1,722	1,586	1,450
Lithium carbonate	\$/t	18,000	17,000	16,000	15,000	16,500	21,875	21,250	20,833	20,417	20,000
Lithium hydroxide	\$/t	19,500	18,500	17,500	16,500	18,000	23,375	22,750	22,333	21,917	21,500
Alumina	\$/t	340	340	340	340	340	348	357	375	394	412
Uranium	\$/lb	75.00	7,750.00	80.00	80.00	78.13	75.00	70.00	65.00	60.00	55.00
Molybdenum	\$/lb	18.10	18.10	18.10	18.10	18.10	18.10	18.10	16.32	14.54	12.76
Cobalt	\$/lb	18.00	18.00	18.00	18.00	18.00	18.00	18.44	19.84	21.23	22.63
Manganese ore	\$/dmtu	4.35	4.35	4.35	4.35	4.35	4.35	4.93	5.52	6.11	6.70

Source: BofA Global Research, BofA Global Commodity Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 26: Commodity Team Steel HRC Forecasts

BofA's quarterly and annual forecasts for steel

		1Q24E	2Q24E	3Q24E	4Q24E	2024E	2025E
HRC, Europe	US\$/t	719	701	639	674	683	714
HRC, US	US\$/t	1,130	1,020	882	805	959	799
HRC, China	US\$/t	568	602	623	592	595	602

Source: BofA Global Research, BofA Global Commodity Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 27: Commodity Team Energy Forecasts

BofA's quarterly and annual forecasts for steel

		1Q24E	2Q24E	3Q24E	4Q24E	2024E
Brent	US\$/bbl	78.00	80.00	82.00	80.00	80.00
Strip Brent	US\$/bbl	80.16	80.16	80.16	80.16	80.16
WTI	US\$/bbl	73.00	75.00	77.00	75.00	75.00
Strip WTI	US\$/bbl	75.46	75.46	75.46	75.46	75.46
Henry Hub	US\$/MMBtu	2.90	2.50	3.00	3.60	3.00
Strip Henry Hub	US\$/MMBtu	2.76	2.76	2.76	2.76	2.76

Source: BofA Global Research, BofA Global Commodity Research, Bloomberg

BofA GLOBAL RESEARCH

Precious and Base Metals Market Data

Exhibit 28: Gold Spot Price (\$/oz)

Gold prices ended down -0.5% w/w at \$2,168



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 29: Silver Spot Price (\$/oz)

Silver prices ended up +3.4% w/w at \$25.14

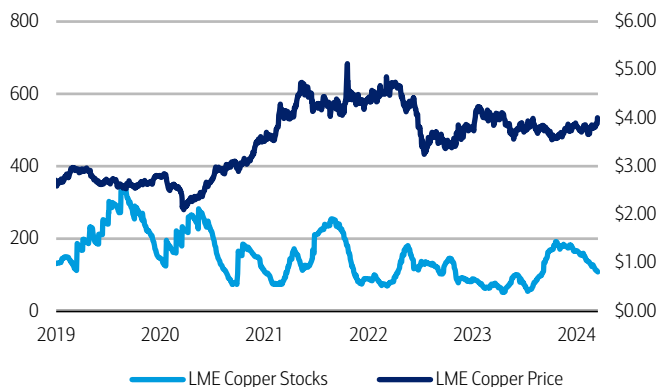


Source: BofA Global Research, Bloomberg

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Exhibit 30: LME Copper Warehouse Stocks (000s mt) & Price (\$/lb)

Copper prices ended up +2.8% w/w at \$3.98

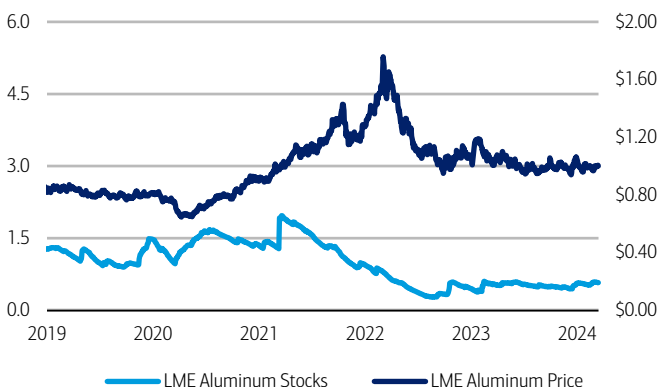


Source: BofA Global Research, Bloomberg

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Exhibit 31: LME Aluminum Warehouse Stocks (mm mt) & Price (\$/lb)

Aluminum prices ended down -0.2% w/w at \$1.00

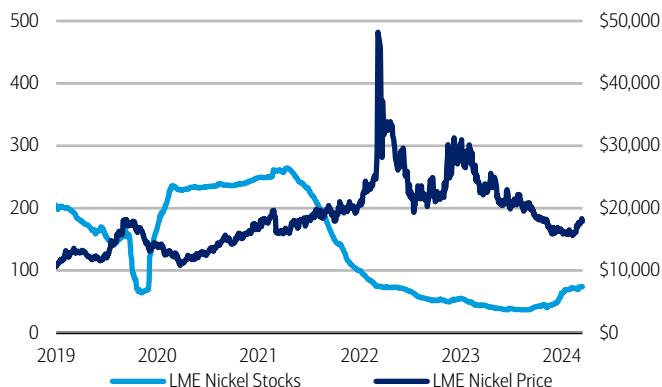


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 32: LME Nickel Warehouse Stocks (000s mt) & Price (\$/mt)

Nickel prices ended up +0.5% w/w at \$17,866



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 33: LME Zinc Warehouse Stocks (000s mt) & Price (\$/mt)

Zinc prices ended up +0.4% w/w at \$2,510

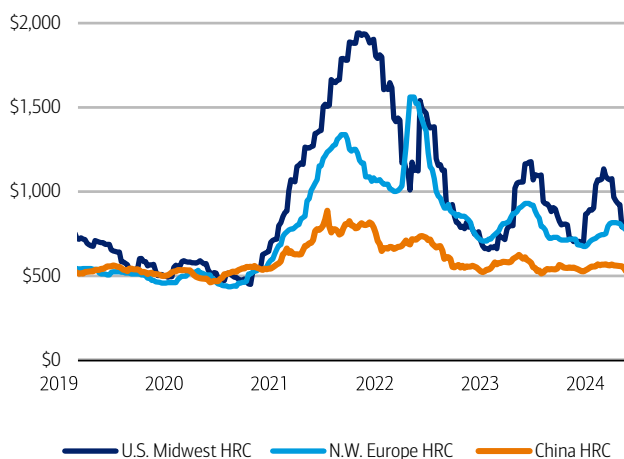


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 34: U.S. Midwest HRC (\$/t), NW. Europe HRC (\$/mt) and China HRC (\$/mt)

U.S. Midwest HRC prices ended down -2.6% w/w at \$793; NW. Europe HRC prices ended down -1.4% w/w at \$772; China HRC prices ended down -3.6% w/w at \$527



Source: BofA Global Research, Bloomberg

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Exhibit 35: China Spot Iron Ore 62% (\$/mt)

China spot iron ore prices ended down -8.3% w/w at \$117

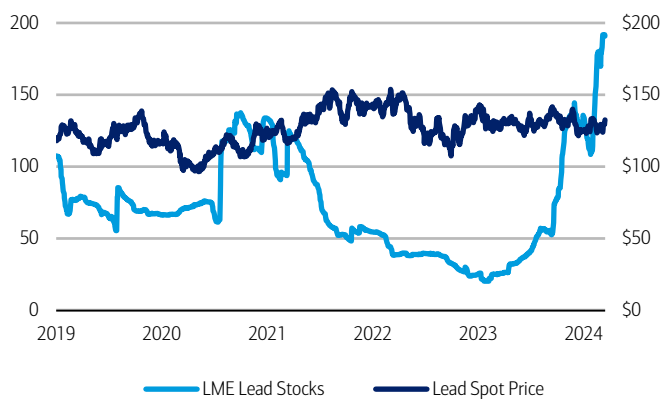


Source: BofA Global Research, Bloomberg

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Exhibit 36: LME Lead Warehouse Stocks (000s mt) & Price (\$/lb)

Lead prices ended up +5.1% w/w at \$133

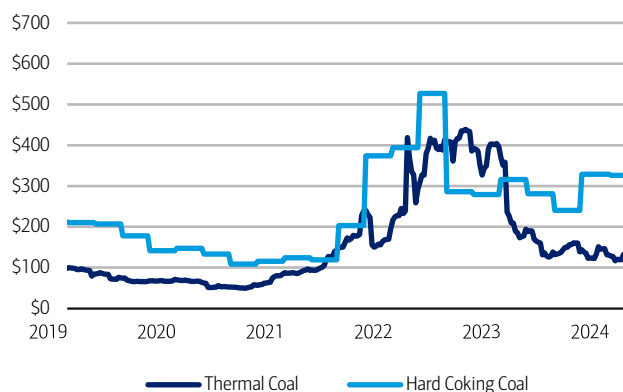


Source: BofA Global Research, Bloomberg

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Exhibit 37: Hard Coking Coal (\$/mt) and Thermal Coal (\$/mt)

Thermal Coal prices ended down -2.2% w/w at \$132 Hard Coking Coal prices ended Unch. at \$326



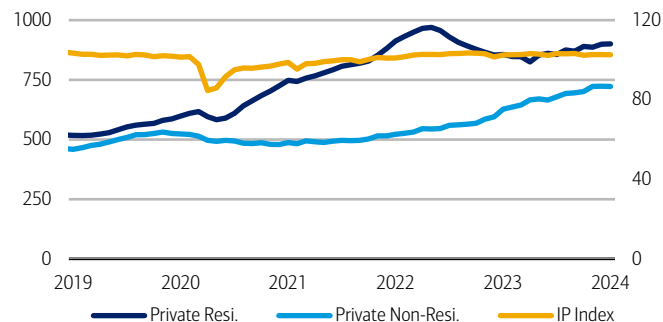
Source: BofA Global Research, Bloomberg

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Construction Products Market Data

Exhibit 38: US Construction Spending (\$bn) & Industrial Production Index

U.S. private residential new construction spending peaked in May 2022

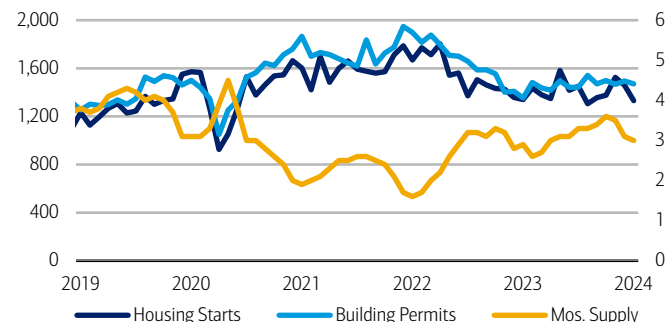


Source: BofA Global Research, Bloomberg

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Exhibit 39: US Housing Statistics (000s, SAAR) & Months' Supply of Existing Homes

U.S. housing starts & building permits have fallen from Spring 2022 highs

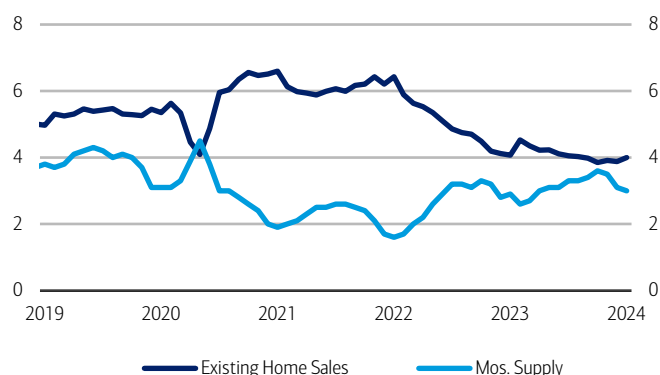


Source: BofA Global Research, Bloomberg

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Exhibit 40: Existing Home Sales (mm) & Months' Supply of Existing Homes

U.S. existing home sales have declined since February 2022

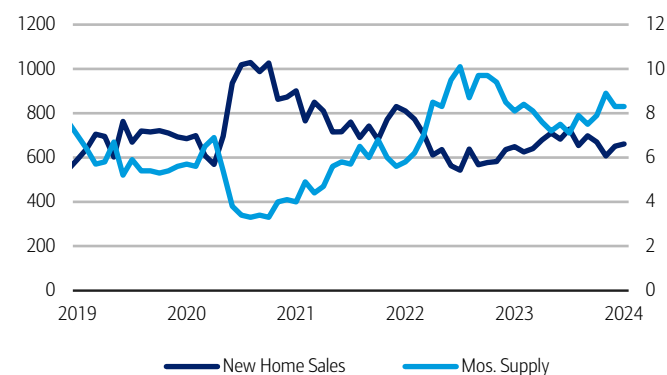


Source: BofA Global Research, Bloomberg

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Exhibit 41: New Home Sales (000s) & Months' Supply of New Homes

U.S. new home sales have fallen from 2020 highs

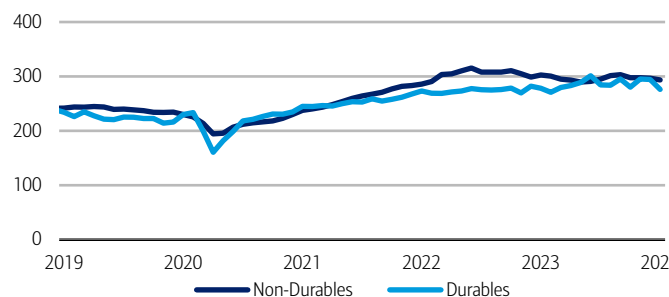


Source: BofA Global Research, Bloomberg

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Exhibit 42: U.S. Durable/Non-Durable Goods (\$bn)

New orders for U.S. durable and non-durable goods have rebounded since their COVID lows

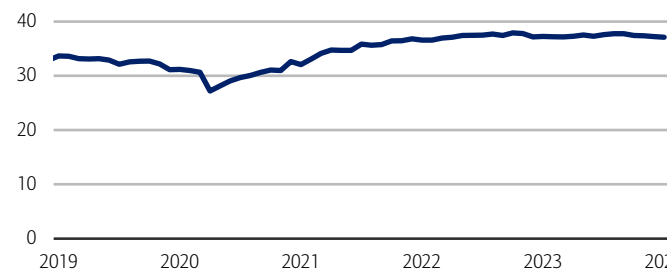


Source: BofA Global Research, Bloomberg

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Exhibit 43: U.S. Durable Goods: Machinery (\$bn)

New orders for U.S. machinery have rebounded since their COVID lows



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

HG Basic Materials New Issuance

Exhibit 44: HG Energy New Issuance

There was ~\$7.3b of HG New Issuance to date in 2024

Announce Date	Ticker	Issuer	Moody's	S&P	Amount Issued (\$MM)	Coupon (%)	Maturity Date	Term (yrs)	Spread At Issue
2/6/2024	APD	Air Products & Chemicals	A2	A	750	4.6	2/8/2029	5	60
2/6/2024	APD	Air Products & Chemicals	A2	A	600	4.75	2/8/2031	7	70
2/6/2024	APD	Air Products & Chemicals	A2	A	1150	4.85	2/8/2034	10	80
2/7/2024	DOW	Dow Chemical Co/The	Baa1	BBB	600	5.15	2/15/2034	10	105
2/7/2024	DOW	Dow Chemical Co/The	Baa1	BBB	650	5.6	2/15/2054	30	130
2/15/2024	EMN	Eastman Chemical Co	Baa2	BBB	750	5.625	2/20/2034	10	142
2/26/2024	LYB	Lyb Int Finance Iii	Baa2	BBB	750	5.5	3/1/2034	10	130
3/4/2024	NEM	Newmont / Newcrest Fin	Baa1	BBB+	1000	5.3	3/15/2026	2	70
3/4/2024	NEM	Newmont / Newcrest Fin	Baa1	BBB+	1000	5.35	3/15/2034	10	117

Source: Bloomberg, Company & Partnership Reports

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Valuation & risk

Nucor Corporation (NUE)

Nucor Corporation (NUE) is a North American steel producer with annual production capacity of approx. 27mm tons. The company primarily operates electric arc furnace mills and manufactures steel (i) sheets, (ii) plates, (iii) bars, and (iv) structural products. NUE's integrated business model includes a recycling segment with approx. 2-3mm tons of annual scrap processing capacity.

We maintain that NUE is well positioned fundamentally and should benefit from supportive sector wide fundamentals. Overall, the company benefits from (i) significant size and scale, (ii) robust credit metrics, and (iii) conservative financial policies (explicit commitment to IG ratings). We also view its growth strategy into higher value-add products favorably. Compared to peers, we believe that NUE trades near fair value and highlight that material upside is likely limited given trading levels inside of the ICE BofA Single-A Index. As a result, we think NUE remains well positioned as a defensive, bellwether steel name and should trade in-line with the broad market. We therefore provide a MW recommendation on the name.

Risks: steel price volatility, lower/higher supply and/or demand, lower/higher production costs, a more/less shareholder-friendly capital allocation policy, large-scale M&A activity and changes to Section 232 steel tariffs.

Steel Dynamics (STLD)

Steel Dynamics Inc (STLD) is a North American steel producer with annual production capacity of approx. 14mm tons. The company primarily operates electric arc furnace mills and manufactures (i) flat-rolled products, (ii) special/merchant bars, and (iii) structural steel products. STLD's circular business model includes a recycling segment which processes ferrous and nonferrous scrap metals.

We believe that STLD is well positioned fundamentally and should benefit from supportive sector wide fundamentals. Overall, the company benefits from (i) strong credit metrics, (ii) growth plans into higher value add products and (iii) conservative financial policies with explicit commitments to IG ratings. Despite our positive view of the business, we struggle to see value in the company's notes given fair trading levels vs peers and the BofA Corp Index. We therefore provide a MW rec on STLD. However, we are OW the company's notes due 2050 given a steeper 10s30s curve and attractive discount to peers at the long end.

Risks: steel price volatility, lower/higher supply and/or demand, lower/higher production

costs, a more/less shareholder-friendly capital allocation policy, large-scale M&A activity and changes to Section 232 steel tariffs.

Analyst Certification

I, Daniel Lungo, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

Security/Loan pricing

Nucor Corporation / NUE

	Amt		Ratings			Yield	Spread
Security		Maturity date	Moody's/S&P/Fitch	Price	Price date	(%)	(bps)
3.95, Senior, USD, 2028:B	500	01-MAY-2028	Baa1/A-/A-	96.33	14-Mar-2024	4.94	54
4.4, Senior, USD, 2048:B	329	01-MAY-2048	Baa1/A-/A-	87.66	14-Mar-2024	5.31	72
2, Senior, USD, 2025:B	500	01-JUN-2025	Baa1/A-/A-	95.89	14-Mar-2024	5.55	56
2.7, Senior, USD, 2030:B	500	01-JUN-2030	Baa1/A-/A-	88.20	14-Mar-2024	4.93	63
2.979, Senior, USD, 2055:B	439	15-DEC-2055	Baa1/A-/A-	63.41	14-Mar-2024	5.40	100
3.125, Senior, USD, 2032:B	550	01-APR-2032	Baa1/A-/A-	87.22	14-Mar-2024	5.08	81
3.85, Senior, USD, 2052:B	550	01-APR-2052	Baa1/A-/A-	77.72	14-Mar-2024	5.40	91
3.95, Senior, USD, 2025:B	500	23-MAY-2025	Baa1/A-/A-	98.35	14-Mar-2024	5.40	40
4.3, Senior, USD, 2027:B	500	23-MAY-2027	Baa1/A-/A-	97.64	14-Mar-2024	5.11	61

For pricing information refer to "Other Important Disclosures" below.

B=Bond; L=Loan; CS=Capital Security (Not including Equity Preferred); CDS=Credit Default Swap; EP=Equity Preferred

Steel Dynamics, Inc. / STLD

	Amt		Ratings			Yield	Spread
Security		Maturity date	Moody's/S&P/Fitch	Price	Price date	(%)	(bps)
5, Senior, USD, 2026:B	400	15-DEC-2026	Baa2/BBB/NR	98.90	14-Mar-2024	5.43	86
3.45, Senior, USD, 2030:B	600	15-APR-2030	Baa2/BBB/BBB	91.30	14-Mar-2024	5.13	83
3.25, Senior, USD, 2031:B	500	15-JAN-2031	Baa2/BBB/BBB	88.36	14-Mar-2024	5.30	102
1.65, Senior, USD, 2027:B	350	15-OCT-2027	Baa2/BBB/BBB	88.93	14-Mar-2024	5.07	62
3.25, Senior, USD, 2050:B	400	15-OCT-2050	Baa2/BBB/BBB	64.88	14-Mar-2024	5.88	134

For pricing information refer to "Other Important Disclosures" below.

B=Bond; L=Loan; CS=Capital Security (Not including Equity Preferred); CDS=Credit Default Swap; EP=Equity Preferred

Disclosures

Important Disclosures

Credit opinion history

Nucor Corporation / NUE

Company	Date ^{R1}	Action	Recommendation	
Nucor Corporation / NUE	28-Sep-2023	Initial	Marketweight	
Security	Date ^{R1}	Action	Recommendation	Price
3.95, Senior, USD, 2028:B	28-Sep-2023	Initial	Marketweight	93.79
4.4, Senior, USD, 2048:B	28-Sep-2023	Initial	Marketweight	78.49
2, Senior, USD, 2025:B	28-Sep-2023	Initial	Marketweight	93.86
2.7, Senior, USD, 2030:B	28-Sep-2023	Initial	Marketweight	83.75
2.979, Senior, USD, 2055:B	28-Sep-2023	Initial	Marketweight	57.19
3.125, Senior, USD, 2032:B	28-Sep-2023	Initial	Marketweight	82.95
3.85, Senior, USD, 2052:B	28-Sep-2023	Initial	Marketweight	70.97
3.95, Senior, USD, 2025:B	28-Sep-2023	Initial	Marketweight	96.84
4.3, Senior, USD, 2027:B	28-Sep-2023	Initial	Marketweight	96.06

Table reflects credit opinion history as of previous business day's close.^{R1}First date of recommendation within the last 36 months, if for an issuer or within the last 12 months, if for a security or loan. The investment opinion system is contained at the end of the report under the heading "BofA Global Research Credit Opinion Key."

Pricing information in the table is provided for each action where available. In the case of bonds, loans, capital securities and equity preferreds, the price shown reflects the nominal cash price for the security; and in the case of CDS, the price shown reflects the spread, on the date of the relevant action.

B=Bond; L=Loan; CS=Capital Security (Not including Equity Preferred); EP=Equity Preferred; CDS=Credit Default Swap

Steel Dynamics, Inc. / STLD

Company	Date ^{R2}	Action	Recommendation	
Steel Dynamics, Inc. / STLD	28-Feb-2021		Marketweight	
	22-Jun-2022	Extended Review	NA	
	28-Sep-2023	Coverage Reinstatement	Underweight	
	28-Nov-2023	Upgrade	Overweight	
	26-Jan-2024	Downgrade	Marketweight	
Security	Date ^{R2}	Action	Recommendation	Price
5, Senior, USD, 2026:B	28-Feb-2023		NA	
	28-Sep-2023	Coverage Reinstatement	Underweight	97.99
	28-Nov-2023	Upgrade	Overweight	98.17

Steel Dynamics, Inc. / STLD

Company	Date^{R2}	Action	Recommendation	
3.45, Senior, USD, 2030:B	26-Jan-2024	Downgrade	Marketweight	99.72
	28-Feb-2023		NA	
	28-Sep-2023	Coverage Reinstatement	Underweight	86.80
	28-Nov-2023	Upgrade	Overweight	87.31
3.25, Senior, USD, 2031:B	26-Jan-2024	Downgrade	Marketweight	91.67
	28-Feb-2023		NA	
	28-Sep-2023	Coverage Reinstatement	Underweight	84.90
	28-Nov-2023	Upgrade	Overweight	85.59
1.65, Senior, USD, 2027:B	26-Jan-2024	Downgrade	Marketweight	89.45
	28-Feb-2023		NA	
	28-Sep-2023	Coverage Reinstatement	Underweight	85.23
	28-Nov-2023	Upgrade	Overweight	85.90
3.25, Senior, USD, 2050:B	26-Jan-2024	Downgrade	Marketweight	88.98
	28-Feb-2023		NA	
	28-Sep-2023	Coverage Reinstatement	Underweight	60.75
	28-Nov-2023	Upgrade	Overweight	62.29

Table reflects credit opinion history as of previous business day's close.^{R2}First date of recommendation within the last 36 months, if for an issuer or within the last 12 months, if for a security or loan. The investment opinion system is contained at the end of the report under the heading "BofA Global Research Credit Opinion Key."

Pricing information in the table is provided for each action where available. In the case of bonds, loans, capital securities and equity preferreds, the price shown reflects the nominal cash price for the security; and in the case of CDS, the price shown reflects the spread, on the date of the relevant action.

B=Bond; L=Loan; CS=Capital Security (Not including Equity Preferred); EP=Equity Preferred; CDS=Credit Default Swap

BofA Global Research Credit Opinion Key

BofA Global Research provides recommendations on an issuer's bonds (including corporate and sovereign external debt securities), loans, capital securities, equity preferreds and CDS as described below. Convertible securities are not rated. An issuer level recommendation may also be provided for an issuer as explained below. BofA Global Research credit recommendations are assigned using a three-month time horizon.

Issuer Recommendations: If an issuer credit recommendation is provided, it is applicable to bonds and capital securities of the issuer except bonds and capital securities specifically referenced in the report with a different credit recommendation. Where there is no issuer credit recommendation, only individual bonds and capital securities with specific recommendations are covered. Loans, CDS and equity preferreds are rated separately and issuer recommendations do not apply to them.

BofA Global Research credit recommendations are assigned using a three-month time horizon:

Overweight: Spreads and/or excess returns are likely to outperform the relevant and comparable market over the next three months.

Marketweight: Spreads and/or excess returns are likely to perform in-line with the relevant and comparable market over the next three months.

Underweight: Spreads and/or excess returns are likely to underperform the relevant and comparable market over the next three months.

BofA Global Research uses the following rating system with respect to **Credit Default Swaps (CDS)**:

Buy Protection: Buy CDS, therefore going short credit risk.

Neutral: No purchase or sale of CDS is recommended.

Sell Protection: Sell CDS, therefore going long credit risk.

Corporate Credit Issuer Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R3}	Count	Percent
Buy	144	37.21%	Buy	119	82.64%
Hold	193	49.87%	Hold	163	84.46%
Sell	50	12.92%	Sell	37	74.00%

^{R3} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only corporate credit issuer recommendations. A corporate credit issuer rated Overweight is included as a Buy, a corporate credit issuer rated Marketweight is included as a Hold, and a corporate credit issuer rated Underweight is included as a Sell.

Credit Opinion History Tables for the securities referenced in this research report are available on the [Price Charts and Credit Opinion History Tables website](#), or call 1-800-MERRILL to have them mailed.

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