

High Grade Basic Materials Weekly

Week ended January 5, 2024

Industry Overview

HG Basic Materials spreads finished 3 bps tighter w-o-w

HG Basic Materials spreads finished 3 bps tighter w-o-w, outperforming the Corp Index (+5 bps, OAS basis). All subsectors performed relatively in-line, excluding Chemicals (-17 bps) though this largely was due to a treasury roll down of bonds in the new year within the index (3y to 2y treasury, ~20 bps differential) and not related to anything fundamental. We also note that some variation in name specific spread performance wo-w is due to the lack of trading liquidity in last week's holiday shortened session.

HG Basic Materials underperformed the market

HG Basic Materials (-19 bps of excess returns) outperformed the Corp Index (-28 bps) wo-w. Chemicals (-5 bps), Paper & Packaging (-6 bps), and Construction Materials / Homebuilders (-24 bps) outperformed while Metals underperformed (-31 bps).

TCKBCN & MOS 4Q update; ABXCN / FMCN; RPM earnings

On Wednesday, Teck Resources (TCKBCN, MW) provided an operational update on QB2 and released 4Q23 steelmaking coal volumes / prices. FY23 QB2 copper production missed the low-end of guidance due to reliability issues in 2H23 though the mine reached full design throughput capacity by December-end (as expected). Total project capex of US\$8.6-8.8b was left unch'd. Regarding steelmaking coal, 4Q23 sales volumes and prices were both strong vs consensus estimates. Overall, we think TCKBCN's credit story is unch'd following its operational update and remain MW the name. We like the company's copper assets / growth outlook and strong balance but see upside constrained by its pro-forma (post coal sale) smaller size and less diversified nature. We therefore think spreads, which are near other BBB-rated miners, trade around fair value. Separately, we discuss a Bloomberg report that Barrick Gold (ABXCN, NR) approached investors of First Quantum Minerals (FMCN, NR) around a potential takeover in late 2023. Next, we highlight RPM International's (RPM, NR) F2Q24 in-line earnings print. During the quarter, RPM reduced debt by \$253mm. F3Q24 and FY24 guidance was inline with consensus. Away from RPM, we note Mosaic's (MOS, NR) revenue / sales volumes for Oct / Nov 2023. For 4Q23, the company sees potash / phosphate vols near the low-end of its prev guidance. Lastly, we overview S&P's report from late December which placed Anglo American (AALLN, covered by Rick Mattila) on creditwatch negative.

Metals prices weaker w-o-w

Metals prices were weaker w-o-w amid a broad market selloff as investors wrestled with uncertainty around a US Fed pivot. We note that our <u>US economics team</u>, led by Michael Gapen, maintained its outlook for a gradual Fed easing cycle in 2024 with the first rate cute (25 bps) coming in March. In China, we look ahead to 4Q23 GDP data to be released on January 16. <u>Our China econ team</u> expects 4Q23 GDP growth of 5.2% y-o-y (up from 4.9% in 3Q) but down sequentially. Separately, we note that Australian lithium producer Core Lithium announced spodumene production cuts through mid-2024. These are the first major production cuts we have seen during the current lithium price downcycle.

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Refer to important disclosures on page 21 to 24. Analyst Certification on page 20.

Valuation & Risk on page 20.

05 January 2024

High Grade Credit North America Basic Materials

Daniel Lungo

Research Analyst BofAS +1 646 855 9965 daniel.e.lungo@bofa.com

Gavin Andersen

Research Analyst

+1 646 855 8058 gavin.andersen@bofa.com

Exhibit 1:WTD Excess Returns (bps)

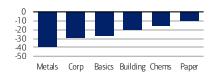
Basic materials outperformed this week



Source: BofA Global Research, ICE Data Indices, LLC

Exhibit 2: YTD Excess Return (bps)

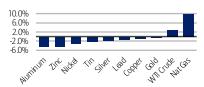
Basic materials performed in-line YTD



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

Exhibit 3: W-o-w Commodity Performance

Nat Gas gained the most w-o-w at 9.7%; while Aluminum gained the least at -4.7%



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

News & Views

TCKBCN provides QB2 update and releases 4Q23 steelmaking coal sales volumes / prices

On Wednesday night, Teck Resources Ltd. (TCKBCN, MW) provided an operational update on QB2 and released 4Q23 steelmaking coal volumes / prices.

QB2 update

TCKCN reported FY23 QB2 copper production of \sim 56 kt which was below guidance of 80-100 kt due to reliability and consistency issues. 4Q23 production was 35k tons. By December end, the mine was operating near design throughput capacity (which has continued into 2024) and recoveries / grades have been in-line with expectations. Total project capex for QB2 was left unch'd at US \$8.6-8.8b.

Steelmaking coal 4Q23 results

Steelmaking coal sales volumes for 4Q23 were 6.1mm tons (above consensus of 5.9mm tons). Prices averaged US\$270/ton which was above consensus of US\$247/ton. TCKBCN expects to report a positive provisional pricing adj of \$89mm in 4Q23.

Upcoming releases

The company plans to issue FY23 production results and 2024 guidance on Jan 16, 2024. Earnings are scheduled for Feb 21, 2024.

Credit story unchanged; remain MW

TCKBCN's credit story remains intact following this release. We continue to view the company's copper asset / growth outlook and strong balance sheet positively but see upside constrained by its pro-forma (post-coal sale) smaller size and less diversified nature. In addition, we think that spreads, which are near other BBB-rated miners, trade around fair value and note that illiquidity within TCKBCN's outstanding bonds likely makes transacting in the name difficult. We acknowledge that TCKBCN (post-coal sale) screens attractive as an acquisition target for a larger A-rated miner (given it would a be a pureplay base metals business) but think this is unlikely a near-term event and therefore not a significant driver of spreads. This leads us to maintain our MW recommendation.

ABXCN reportedly approaches FMCN shareholders about a potential takeover

On Wednesday, Bloomberg reported that Barrick Gold (ABXCN, NR) had approached major investors of First Quantum Minerals (FMCN, NR) around a potential takeover in late 2023. The article notes that ABXCN CEO Mark Bristow is confident he could resolve FMCN's situation in Panama and has been closely following the business since issues escalated in October 2023. As a reminder, Panama recently ordered for the closure of FMCN's flagship Cobre Mine in the country which led to a steep decline in the company's share price. This latest headline follows Bloomberg reports from June 2023 that FMCN had declined to enter any substantive talks with ABXCN following various informal takeover approaches in early 2023.



RPM F2Q24 earnings in-line; reduced debt by \$253mm q-o-q

On Thursday before market open, RPM International (RPM, NR) reported F2Q24 adj. earnings of \$1.22/share, in-line with Bloomberg consensus estimates. Adj. EBIT of \$237mm was also in-line with consensus estimates.

Credit metrics and cash flow

Cash from operations of \$409mm (including a \$223mm working capital inflow) covered capex of \$37mm, dividends of \$59mm, and share repurchases of \$33mm. RPM reduced total debt by \$253mm q-o-q in F2Q23. Credit stats improved q-o-q due to higher LTM EBITDA and lower net debt: adj. total debt / LTM EBITDA = 2.6x (2.9x at F1Q24); adj. net debt / EBITDA = 2.3x (2.6x); LTM EBITDA / int. expense = 8.0x (7.9x).

F3Q24 outlook

RPM expects business conditions to be similar q-o-q in F3Q24. The company sees strength in Consumer Products, Performance Coatings and international markets offsetting weakness in do-it-yourself (DIY) and specialty original equipment manufacturer (OEM) demand. Management sees adj EBIT growth driven by less challenging y-o-y comps and MAP 2025 benefits which should offset lower volumes and capex investments. Overall, the company expects this outlook to result in F3Q23 consolidated sales flat y-o-y (consensus of +4% y-o-y) and adj EBIT up 25-35% y-o-y (consensus of +27% y-o-y). RPM also provided the following F3Q24 outlooks for its operating segments:

- **Construction Products Group (CPG):** Sales up a mid-single digit % y-o-y (consensus of +4% y-o-y)
- **Performance Coatings Group (PCG):** Sales up a mid-single digit % y-o-y (consensus of +8% y-o-y)
- **Specialty Product Group (SPG):** Sales down mid-teen % y-o-y (consensus of -2% y-o-y)
- Consumer Group: sales down a low-single digit % y-o-y (consensus of +3% y-o-y)

FY24 outlook

For FY24, RPM expects sales to increase a low-single digit % y-o-y (prev. up mid-single digit % y-o-y, consensus of +4% y-o-y) and adj EBIT to increase low-double digit to midteens % y-o-y (unch'd, consensus of +15%). The company expects to benefit from (i) a focus on repair and maintenance; (ii) reshoring; and (iii) market share gains while headwinds could come from (i) uncertain commercial construction conditions; (ii) weak OEM demand; and (iii) reduced benefits from pricing.

Map 2025 initiatives

RPM expects to achieve \$160mm of EBIT savings (unch'd) through MAP 2025 initiatives in FY24. The company noted that lower volumes (leading to negative manufacturing absorption) has masked some benefits recently.

Segment results

- **CPG:** F2Q24 adj. EBIT of \$100mm was up 26% y-o-y driven by MAP 2025 initiatives, favorable mix and improved fixed cost leverage.
- PCG: F2Q24 adj. EBIT of \$61mm was up 28% y-o-y driven by sales growth, favorable mix, and improved fixed cost leverage (which was enhanced by MAP 2025 initiatives).
- **SPG:** F2Q24 adj. EBIT of \$17mm was down 44% y-o-y due to lower sales and unfavorable fixed-cost leverage.



• **Consumer Group:** F2Q24 adj. EBIT of \$96mm was up 2% y-o-y driven by gross margin expansion (enabled by MAP 2025 initiatives) and strength in international markets.

MOS announces Oct & Nov volume / revenue figures

On December 19, 2023, Mosaic Corporation (MOS, NR) provided the following volumes / revenue figures for October and November 2023:

Exhibit 4: MOS volumes / revenues figures for October and November 2023

MOS provided the following volumes / revenue figures for October and November

Potash	Oct/Nov 2023	Oct/Nov 2022
Sales volumes (kt)	1,638	1,248
Revenues (\$mm)	\$506	\$780
Phosphates	Oct/Nov 2023	Oct/Nov 2022
Sales volumes (kt)	1,019	914
Revenues (\$mm)	\$677	\$785
Mosiac Fertilizantes	Oct/Nov 2023	Oct/Nov 2022
Sales volumes (kt)	1,472	1,521
Revenues (\$mm)	\$811	\$1,238

Source: BofA Global Research, Company Filings

BofA GLOBAL RESEARCH

Guidance

MOS noted that dry weather conditions pose risks to Brazil fertilizer shipments in 4Q23. The company also provided the following 4Q23 outlooks for its business segments:

- **Potash:** Expect sales volumes near the low-end of previous guidance range (2.4-2.6mm tons) and MOP prices of \$235-260/ton.
- **Phosphate:** Expect sales volumes near the low-end of previous guidance range (1.6-1.8mm tons). DAP prices are expected to be within prev outlook range of \$530-580/ton.



Rating Agency Actions

S&P places AALLN on creditwatch negative

On December 21, 2023, S&P placed Anglo American (AALLN, covered by Rick Mattila) on creditwatch negative due to disappointing production guidance for 2023-2025. S&P maintained its BBB+ long-term issuer rating for the company. The update reflects S&P's belief that the combination of lower volumes, weak prices across certain commodities, and higher capex needs could put pressure on AALLN's credit metrics. The agency sees a potential for downgrade with the release of AALLN's FY23 annual results should credit metrics for 2024/2025 no longer commensurate with the BBB+ rating. S&P notes that a downgrade, if any, should be limited to one notch.

BofA Recommendations

Exhibit 5: BofA Global Research Recommendations

HG Basic Materials recommendations include 3 Overweights and 1 Underweight

Chemicals	Rating	Metals, Mining, & Steel	Rating
Celanese Corporation	OW	Freeport-McMoRan Inc.	OW
Dow Inc	UW	Nucor Corporation	MW
Int'l Flavors & Fragrances	MW, OW 2030s	Steel Dynamics, Inc.	OW
LyondellBasell Industries	MW, OW 2050s+	Teck Resources Ltd	MW
Nutrien Ltd	MW		
Sherwin-Williams	MW		

Source: BofA Global Research

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



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

BofA GLOBAL RESEARCH

Exhibit 7: HG Chemicals Cash Spreads (Bid)

In the HG Chemicals subsector, spreads were mostly 5 to 15 bps wider w-o-w.

Issue	r 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)
ALB	Albemarle Corp	5.050	6/1/2032	600	Baa3 / BBB	174	210	174	95.22	21	153	215	181
ALB	Albemarle Corp	5.650	6/1/2052	450	Baa3 / BBB	228	290	227	89.32	15	208	258	233
APD	Air Products and Chemicals	4.800	3/3/2033	600	A2/A	50	86	50	101.93	2	48	88	56
APD	Air Products and Chemicals	2.800	5/15/2050	950	A2/A	76	139	72	68.47	11	62	88	71
CE	Celanese US Holdings LLC	6.700	11/15/2033	1,000	Baa3 / BBB-	177	213	177	106.51	14	163	259	188
CF	CF Industries Inc	5.375	3/15/2044	750	Baa3 / BBB	161	227	162	93.28	4	157	209	165
CTVA	Corteva, Inc	4.800	5/15/2033	600	A3/A-	81	118	81	99.66	3	75	127	84
DD	DuPont de Nemours Inc	5.419	11/15/2048	2,150	Baa1 / BBB+	114	172	107	101.11	5	108	162	116
DOW	Dow Chemical Co/The	6.300	3/15/2033	600	Baa1 / BBB	106	142	106	108.56	0	104	148	112
DOW	Dow Chemical Co/The	6.900	5/15/2053	900	Baa1 / BBB	148	210	148	117.26	3	140	208	152
ECL	Ecolab Inc	2.125	2/1/2032	650	A3/A-	60	98	60	83.27	7	53	92	67
ECL	Ecolab Inc	2.700	12/15/2051	850	A3/A-	83	149	81	65.28	13	69	107	77
EMN	Eastman Chemical Co	5.750	3/8/2033	500	Baa2 / BBB	140	176	140	102.20	1	139	197	148
EMN	Eastman Chemical Co	4.650	10/15/2044	900	Baa2 / BBB	150	217	151	85.77	5	145	192	160
FMC	FMC Corp	5.650	5/18/2033	500	Baa2 / BBB-	190	226	190	97.97	(1)	190	257	210
FMC	FMC Corp	6.375	5/18/2053	500	Baa2 / BBB-	227	289	228	98.80	9	214	271	230
HUN	Huntsman International LLC	2.950	6/15/2031	400	Baa3 / BBB-	170	207	170	83.34	0	170	240	179
IFF	International Flavors and Fragrances Inc	3.468	12/1/2050	1,500	Baa3 / BBB-	185	247	182	65.95	4	173	234	184
LIN	Linde Inc/CT	2.000	8/10/2050	300	A2 / A	65	130	61	57.71	0	65	103	72
LYB	LYB International Finance III LLC	5.625	5/15/2033	500	Baa2 / BBB	117	153	117	103.01	3	114	175	127
LYB	LYB International Finance III LLC	3.625	4/1/2051	1,000	Baa2 / BBB	161	224	158	70.33	10	151	200	161
MOS	Mosaic Co	5.625	11/15/2043	600	Baa2 / BBB	161	227	161	96.23	(1)	161	206	170
	Nutrien Ltd	5.800	3/27/2053	750	Baa2 / BBB	137	200	137	103.32	2	135	190	144
RPM	RPM International Inc	2.950	1/15/2032	300	Baa3 / BBB	143	180	143	83.85	(1)	143	215	163
RPM	RPM International Inc	4.250	1/15/2048	300	Baa3 / BBB	155	213	147	80.64	5	150	216	167
SHW	Sherwin-Williams Co/The	2.200	3/15/2032	500	Baa2 / BBB	87	125	87	81.95	2	85	131	96
SHW	Sherwin-Williams Co/The	2.900	3/15/2052	500	Baa2 / BBB	101	167	100	66.11	11	90	147	105
WLK	Westlake Chemical Corp	3.125	8/15/2051	600	Baa2 / BBB	154	218	152	64.03	18	136	188	153

Source: BofA Global Research, BofA Trading Desk, Bloomberg



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

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

				Outstanding		Bid	Z-	G-		1 wk.	6-mo	6-mo	8-wk avg.
Issuer	Entity	Coupon	Maturity	(\$mm)	MDY/S&P	(bps)	Spread	Spread	Price	change	tights	wides	spread (bps)
AALLN	Anglo American Capital PLC	5.500	5/2/2033	900	Baa2 / BBB	159	195	159	99.10	2	157	200	161
AALLN	Anglo American Capital PLC	4.750	3/16/2052	750	Baa2 / BBB	180	243	179	83.14	7	169	218	176
ABXCN	Barrick Gold Corp	5.750	5/1/2043	849	Baa1 / BBB	114	180	116	103.18	14	94	147	106
BHP	BHP Billiton Finance USA Ltd	5.250	9/8/2033	1,500	A2/A-	93	129	93	102.12	3	88	120	94
BHP	BHP Billiton Finance USA Ltd	5.500	9/8/2053	800	A2/A-	94	158	94	105.46	6	86	113	92
FCX	Freeport-McMoRan Inc	5.400	11/14/2034	730	Baa2 / BB+	150	186	147	98.91	6	144	206	166
FCX	Freeport-McMoRan Inc	5.450	3/15/2043	1,706	Baa2 / BB+	165	231	167	93.88	12	153	204	170
GLENLN	I Glencore Funding LLC	6.500	10/6/2033	1,000	Baa1 / BBB+	143	179	143	107.59	3	140	197	152
GLENLN	I Glencore Funding LLC	3.375	9/23/2051	500	Baa1 / BBB+	141	205	139	68.80	(3)	138	189	148
KCN	Kinross Gold Corp	6.250	7/15/2033	500	Baa3 / BBB-	179	215	179	103.01	8	171	258	186
NEM	Newmont Corp	2.600	7/15/2032	1,000	Baa1 / BBB+	90	127	90	83.93	(1)	80	144	95
NEM	Newmont Corp	4.875	3/15/2042	1,000	Baa1 / BBB+	99	165	104	94.73	4	94	148	103
NUE	Nucor Corp	3.125	4/1/2032	550	Baa1 / A-	83	120	83	88.31	5	78	127	91
NUE	Nucor Corp	3.850	4/1/2052	550	Baa1/A-	95	160	94	80.81	5	90	143	103
RIOLN	Rio Tinto Finance USA Ltd	5.000	3/9/2033	650	A2/A-	64	100	64	102.34	5	59	108	70
RIOLN	Rio Tinto Finance USA Ltd	5.125	3/9/2053	1,100	A2/A-	93	157	93	99.98	8	85	120	91
SOUTAL	J South32 Treasury Ltd	4.350	4/14/2032	700	Baa1 / BBB+	198	234	198	89.28	(3)	198	244	214
STLD	Steel Dynamics	3.250	1/15/2031	500	Baa2 / BBB	104	140	104	89.34	7	97	159	116
STLD	Steel Dynamics	3.250	10/15/2050	400	Baa2 / BBB	147	210	144	66.91	17	130	181	146
TCKBCN	Teck Resources Ltd	5.400	2/1/2043	377	Baa3 / BBB-	172	238	174	92.59	9	163	222	172

Source: BofA Global Research, BofA Trading Desk, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 9: HG Paper, Packaging, and Wood Cash Spreads (Bid)In the HG Paper, Packaging, & Wood subsector, spreads were mostly 3 bps wider w-o-w.

				Outstanding		Bid	Z-	G-		1 wk.	6-mo	6-mo	8-wk avg.	
Issue	r Entity	Coupon	Maturity	(\$mm)	MDY/S&P	(bps)	Spread	Spread	Price	change	tights	wides	spread (bps)	
ATR	AptarGroup Inc	3.600	3/15/2032	400	Baa3 / BBB-	128	165	128	88.73	3	125	190	137	i
AVY	Avery Dennison Corp	5.750	3/15/2033	400	Baa2 / BBB	114	150	114	104.07	3	111	168	123	
IΡ	International Paper Co	4.350	8/15/2048	740	Baa2 / BBB	113	171	106	86.70	3	110	170	123	i
PKG	Packaging Corp of America	3.050	10/1/2051	700	Baa2 / BBB	113	178	111	67.21	3	110	155	117	
SON	Sonoco Products Co	2.850	2/1/2032	500	Baa2 / BBB	131	168	131	83.83	3	127	165	135	i
SON	Sonoco Products Co	5.750	11/1/2040	537	Baa2 / BBB	140	205	151	100.09	3	137	180	152	i
WRK	WRKCO Inc	3.000	6/15/2033	600	Baa2 / BBB	106	143	106	84.46	3	103	160	112	i
WY	Weyerhaeuser	3.375	3/9/2033	450	Baa2 / BBB	114	151	114	86.99	3	109	145	116	i
WY	Weverhaeuser	4.000	3/9/2052	450	Baa2 / BBB	121	185	120	79.77	3	118	150	123	İ

Source: BofA Global Research, BofA Trading Desk, Bloomberg



Exhibit 10: HG Construction Materials/Homebuilders Cash Spreads (Bid)In the HG Construction Materials/Homebuilders subsector, spreads were mixed but mostly flat to 10 bps wider 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	114	151	114	83.59	2	112	163	128
FBINUS	Fortune Brands Home & Security Inc	5.875	6/1/2033	600	Baa2 / BBB	147	183	147	102.63	4	143	200	157
FBINUS	Fortune Brands Home & Security Inc	4.500	3/25/2052	450	Baa2 / BBB	167	230	166	81.26	7	159	217	169
MAS	Masco Corp	2.000	2/15/2031	600	Baa2 / BBB	118	155	118	81.13	(2)	118	153	128
MAS	Masco Corp	3.125	2/15/2051	300	Baa2 / BBB	127	191	124	67.10	12	114	196	129
MDC	MDC Holdings Inc	2.500	1/15/2031	350	Ba1 / BBB-	179	215	179	81.07	(11)	179	259	208
MDC	MDC Holdings Inc	6.000	1/15/2043	500	Ba1 / BBB-	262	327	265	89.96	12	245	298	260
MLM	Martin Marietta Materials Inc	2.400	7/15/2031	900	Baa2 / BBB+	95	132	95	83.96	0	95	144	107
MLM	Martin Marietta Materials Inc	3.200	7/15/2051	900	Baa2 / BBB+	90	154	88	72.11	0	90	142	101
OC	Owens Corning	4.300	7/15/2047	600	Baa1 / BBB	116	188	122	84.27	1	115	182	133
PHM	PulteGroup Inc	7.875	6/15/2032	300	Baa2 / BBB	144	179	144	116.03	(1)	144	205	155
VMC	Vulcan Materials Co	4.700	3/1/2048	461	Baa2 / BBB+	124	182	116	90.16	(1)	120	163	128

Source: BofA Global Research, BofA Trading Desk, Bloomberg

HG Basic Materials Financial Data

Exhibit 11: HG Chemicals Financial Data (LTM as of 3Q23) LTM financial data for HG Chemical Companies as of 3Q23

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	\$12,600	\$7,571	\$10,719	\$7,668	\$45,860	\$12,274	\$9,376	\$15,053	\$4,963
EBITDA	\$4,702	\$3,899	\$2,322	\$3,464	\$5,427	\$2,965	\$1,558	\$2,934	\$1,155
EBITDA Margin	37.3%	51.5%	21.7%	45.2%	11.8%	24.2%	16.6%	19.5%	23.3%
Capital Expenditures	\$4,626	\$1,365	\$583	\$445	\$2,197	\$659	\$852	\$714	\$143
Dividends	\$1,497	\$140	\$305	\$314	\$1,976	\$647	\$373	\$608	\$486
Free Cash Flow	(\$2,917)	\$242	\$722	\$2,103	\$1,445	\$113	\$154	\$1,096	(\$629)
Cash & Cash Equivalents	\$1,949	\$1,587	\$1,357	\$3,254	\$3,080	\$1,338	\$439	\$1,001	\$324
Total Debt	\$10,306	\$3,236	\$14,334	\$2,967	\$20,029	\$9,314	\$5,924	\$8,616	\$4,116
Total Debt/EBITDA	2.2x	0.8x	6.2x	0.9x	3.7x	3.1x	3.8x	2.9x	3.6x
Net Debt	\$8,357	\$1,649	\$12,977	(\$287)	\$16,949	\$7,976	\$5,485	\$7,615	\$3,792
Net Debt/EBITDA	1.8x	0.4x	5.6x	-0.1x	3.1x	2.7x	3.5x	2.6x	3.3x
Interest	\$178	\$76	\$710	\$90	\$724	\$417	\$211	\$296	\$225
EBITDA/Interest	26.5x	51.0x	3.3x	38.5x	7.5x	7.1x	7.4x	9.9x	5.1x
Market Capitalization	\$59,627	\$13,438	\$12,844	\$15,283	\$34,064	\$29,961	\$8,717	\$49,834	\$6,337
Enterprise Value	\$67,984	\$15,087	\$25,821	\$15,373	\$51,013	\$37,937	\$14,202	\$57,449	\$10,129
EV/EBITDA	14.5x	3.9x	11.1x	4.4x	9.4x	12.8x	9.1x	19.6x	8.8x
Total Debt/EV	15%	21%	56%	19%	39%	25%	42%	15%	41%

Source: BofA Research, Company Reports, Bloomberg

Exhibit 12: HG Chemicals Financial Data (LTM as of 3Q23) LTM financial data for HG Chemical Companies as of 3Q23

Company Name	Huntsman Corp.	Int'l 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/S	Baa2/S
S&P	BBB-/S	BBB-/N	BBB/S	BBB/S	BBB/S	BBB+/N	BBB/S	BBB/S	BBB/P
Financials (LTM, US\$ mm)								
Total Revenue	\$5,969	\$11,620	\$41,384	\$15,028	\$30,925	\$18,081	\$7,336	\$23,030	\$13,021
EBITDA	\$515	\$1,959	\$5,177	\$2,807	\$7,078	\$2,817	\$985	\$4,183	\$2,816
EBITDA Margin	8.6%	16.9%	12.5%	18.7%	22.9%	15.6%	13.4%	18.2%	21.6%
Capital Expenditures	\$233	\$550	\$1,520	\$1,384	\$2,814	\$531	\$249	\$803	\$1,049
Dividends	\$168	\$825	\$1,591	\$339	\$1,021	\$591	\$217	\$624	\$202
Free Cash Flow	(\$46)	(\$424)	\$1,931	\$1,102	\$1,817	\$978	\$447	\$1,818	\$1,347
Cash & Cash Equivalents	\$496	\$639	\$2,833	\$591	\$554	\$1,218	\$241	\$503	\$3,057
Total Debt	\$2,118	\$10,301	\$13,165	\$3,657	\$14,987	\$6,202	\$2,505	\$9,936	\$5,379
Total Debt/EBITDA	4.1x	5.3x	2.5x	1.3x	2.1x	2.2x	2.5x	2.4x	1.9x
Net Debt	\$1,622	\$9,662	\$10,332	\$3,066	\$14,433	\$4,984	\$2,264	\$9,433	\$2,322
Net Debt/EBITDA	3.1x	4.9x	2.0x	1.1x	2.0x	1.8x	2.3x	2.3x	0.8x
Interest	\$64	\$441	\$337	\$128	\$768	\$243	\$124	\$431	\$167
EBITDA/Interest	8.0x	4.4x	15.4x	21.9x	9.2x	11.6x	7.9x	9.7x	16.9x
Market Capitalization	\$4,294	\$18,130	\$29,971	\$11,266	\$27,952	\$29,508	\$12,606	\$65,463	\$15,845
Enterprise Value	\$5,916	\$27,792	\$40,303	\$14,332	\$42,385	\$34,492	\$15,112	\$74,896	\$18,167
EV/EBITDA	11.5x	14.2x	7.8x	5.1x	6.0x	12.2x	15.3x	17.9x	6.5x
Total Debt/EV	36%	37%	33%	26%	35%	18%	17%	13%	30%

Source: BofA Research, Company Reports, Bloomberg



Exhibit 13: HG Metals, Mining, & Steel Financial Data (LTM as of 3Q23) LTM financial data for HG Metals, Mining, & Steel Companies as of 3Q23

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	Baa3/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	\$11,112	\$22,708	\$4,133	\$11,055	\$35,733	\$15,079	\$19,388	\$12,731
EBITDA	\$5,301	\$8,754	\$1,751	\$3,990	\$7,630	\$2,144	\$3,904	\$5,997
EBITDA Margin	47.7%	38.6%	42.4%	36.1%	21.4%	14.2%	20.1%	47.1%
Capital Expenditures	\$3,116	\$4,509	\$1,098	\$2,392	\$2,014	\$451	\$1,487	\$4,917
Dividends	\$785	\$861	\$148	\$1,390	\$517	\$233	\$262	\$515
Free Cash Flow	(\$354)	(\$964)	\$452	(\$625)	\$5,594	\$1,271	\$2,050	(\$1,544)
Cash & Cash Equivalents	\$4,261	\$6,442	\$465	\$3,190	\$6,719	\$977	\$2,266	\$1,343
Total Debt	\$4,775	\$9,405	\$2,415	\$6,087	\$6,681	\$1,142	\$3,095	\$6,745
Total Debt/EBITDA	0.9x	1.1x	1.4x	1.5x	0.9x	0.5x	0.8x	1.1x
Net Debt	\$514	\$2,963	\$1,950	\$2,897	(\$38)	\$165	\$829	\$5,402
Net Debt/EBITDA	0.1x	0.3x	1.1x	0.7x	0.0x	0.1x	0.2x	0.9x
Interest	\$205	\$555	\$104	\$215	\$28	\$46	\$86	\$112
EBITDA/Interest	25.9x	15.8x	16.8x	18.6x	276.3x	46.8x	45.6x	53.5x
Market Capitalization	\$26,491	\$50,913	\$6,421	\$39,415	\$37,385	\$15,291	\$17,528	\$24,883
Enterprise Value	\$27,005	\$53,876	\$8,371	\$42,312	\$37,347	\$15,456	\$18,357	\$30,285
EV/EBITDA	5.1x	6.2x	4.8x	10.6x	4.9x	7.2x	4.7x	5.0x
Total Debt/EV	18%	17%	29%	14%	18%	7%	17%	22%

Source: BofA Research, Company Reports, Bloomberg

Exhibit 14: HG Paper, Packaging, & Wood Financial Data (LTM as of 3Q23) LTM financial data for HG Paper, Packaging, & Wood Companies as of 3Q23

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	\$8,280	\$4,896	\$19,448	\$7,843	\$6,822	\$20,310	\$7,723
EBITDA	\$1,178	\$957	\$2,535	\$1,622	\$1,022	\$2,872	\$1,742
EBITDA Margin	14.2%	19.5%	13.0%	20.7%	15.0%	14.1%	22.6%
Capital Expenditures	\$288	\$377	\$1,158	\$576	\$337	\$1,142	\$512
Dividends	\$252	\$137	\$646	\$453	\$195	\$281	\$1,208
Free Cash Flow	\$320	\$266	\$298	\$371	\$271	\$405	(\$408)
Cash & Cash Equivalents	\$210	\$577	\$1,149	\$727	\$258	\$393	\$1,173
Total Debt	\$3,314	\$1,889	\$5,669	\$2,087	\$3,255	\$8,584	\$5,679
Total Debt/EBITDA	2.8x	2.0x	2.2x	1.3x	3.2x	3.0x	3.3x
Net Debt	\$3,104	\$1,312	\$4,520	\$1,361	\$2,997	\$8,191	\$4,506
Net Debt/EBITDA	2.6x	1.4x	1.8x	0.8x	2.9x	2.9x	2.6x
Interest	\$112	\$67	\$238	\$57	\$128	\$418	\$274
EBITDA/Interest	10.5x	14.4x	10.7x	28.3x	8.0x	6.9x	6.4x
Market Capitalization	\$14,018	\$6,343	\$11,450	\$14,123	\$5,398	\$9,864	\$20,739
Enterprise Value	\$17,122	\$7,656	\$15,970	\$15,483	\$8,395	\$18,054	\$25,245
EV/EBITDA	14.5x	8.0x	6.3x	9.5x	8.2x	6.3x	14.5x
Total Debt/EV	19%	25%	35%	13%	39%	48%	22%

Source: BofA Research, Company Reports, Bloomberg



Exhibit 15: HG Construction Materials/Homebuilders Financial Data (LTM as of 3Q23) LTM financial data for HG Construction Materials/Homebuilders Companies as of 3Q23



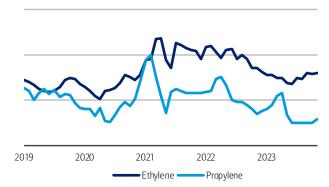
Company Name	D.R. Horton	Eagle Materials	Fortune Brands	Martin Marrietta	Masco	Mohawk	Owens Corning	Vulcan
Debt Ticker:	DHI	EXP	FBINUS	MLM	MAS	MHK	OC	VMC
Sector/Subsector:	Homebuilding	Construction Products	Building Products	Construction Products	Building Products	Building Products	Building Products	Construction Products
Moody's	Baa1/S	Baa2/S	Baa2/S	Baa2/S	Baa2/S	Baa1/S	Baa2 / P	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	\$35,460	\$2,205	\$966	\$6,646	\$8,008	\$11,174	\$9,658	\$7,680
EBITDA	\$6,364	\$772	\$861	\$2,052	\$1,235	\$1,348	\$2,264	\$1,824
EBITDA Margin	17.9%	35.0%	89.2%	30.9%	15.4%	12.1%	23.4%	23.8%
Capital Expenditures	\$149	\$132	\$247	\$637	\$268	\$523	\$530	\$829
Dividends	\$341	\$36	\$124	\$169	\$256	\$0	\$175	\$225
Free Cash Flow	\$3,814	\$386	\$743	\$597	\$369	\$751	\$991	\$402
Cash & Cash Equivalents	\$3,874	\$47	\$453	\$648	\$560	\$518	\$1,323	\$340
Total Debt	\$5,095	\$1,090	\$2,829	\$4,344	\$3,012	\$2,598	\$3,022	\$3,875
Total Debt/EBITDA	0.8x	1.4x	3.3x	2.1x	2.4x	1.9x	1.3x	2.1x
Net Debt	\$1,221	\$1,042	\$2,376	\$3,697	\$2,452	\$2,080	\$1,699	\$3,535
Net Debt/EBITDA	0.2x	1.4x	2.8x	1.8x	2.0x	1.5x	0.8x	1.9x
Interest	\$204	\$42	\$122	\$168	\$108	\$75	\$89	\$190
EBITDA/Interest	31.3x	18.5x	7.1x	12.2x	11.4x	18.0x	25.4x	9.6x
Market Capitalization	\$43,162	\$5,165	\$6,959	\$28,052	\$12,610	\$5,137	\$11,047	\$25,661
Enterprise Value	\$44,383	\$6,207	\$9,335	\$31,749	\$15,062	\$7,216	\$12,746	\$29,196
EV/EBITDA	7.0x	8.0x	10.8x	15.5x	12.2x	5.4x	5.6x	16.0x
Total Debt/EV	11%	18%	30%	14%	20%	36%	24%	13%

Source: BofA Research, Company Reports, Bloomberg

Chemical Markets Data

Exhibit 16: Olefin Pricing (\$/lb)

Olefin prices have declined from their highs

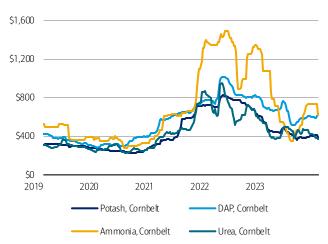


Source: Chemical Data Inc., a part of ICIS

BofA GLOBAL RESEARCH

Exhibit 18: Fertilizer Pricing (\$/st)

Fertilizer prices declined from their high but have started to stabilize

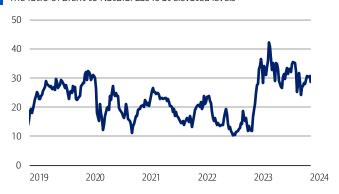


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

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

The ratio of Brent to Natural Gas is at elevated levels

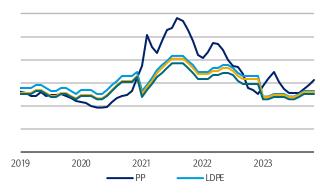


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 17: Polyolefin Pricing (\$/lb)

Polyolefin prices declined from their highs but have started to stabilize

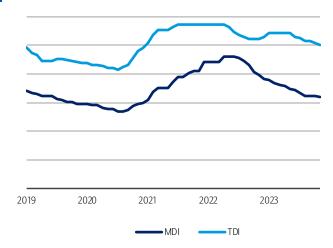


Source: Chemical Data Inc., a part of ICIS

BofA GLOBAL RESEARCH

Exhibit 19: Isocyanates Pricing (\$/Ib)

MDI and TDI have rebounded from their COVID lows

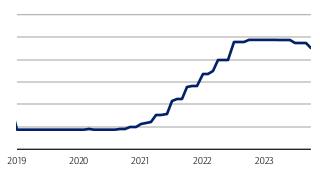


Source: Chemical Data Inc., a part of ICIS

BofA GLOBAL RESEARCH

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

Chlorine price were largely flat in 2023



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



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
	USc/lb	102	113	125	125	116	136	147	137	126	115
Strip Aluminum	US\$/t	2,362	2,362	2,362	2,362	2,362	2,504	2,623	2,733		
Copper	US\$/t	8,000	8,500	8,750	9,250	8,625	10,500	9,500	9,539	9,578	9,617
	USc/lb	363	386	397	420	391	476	431	433	434	436
Strip Copper	US\$/t	8,560	8,560	8,560	8,560	8,560	8,626	8,657	8,693		
Lead	US\$/t	2,000	2,000	2,000	2,000	2,000	1,750	2,024	2,217	2,409	2,602
	USc/lb	91	91	91	91	91	79	92	101	109	118
Strip Lead	US\$/t	2,049	2,049	2,049	2,049	2,049	2,072	2,102	2,133		
Nickel	US\$/t	18,500	18,500	19,000	19,000	18,750	20,000	20,000	19,141	18,283	17,424
	USc/lb	839	839	862	862	850	907	907	868	829	790
Strip Nickel	US\$/t	16,724	16,724	16,724	16,724	16,724	17,718	18,603	19,458		
Zinc	US\$/t	2,500	2,500	2,250	2,250	2,375	2,250	2,424	2,596	2,769	2,942
	USc/lb	113	113	102	102	108	102	110	118	126	133
Strip Zinc	US\$/t	2,602	2,602	2,602	2,602	2,602	2,635	2,647	2,651		

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	2,090	2,090	2,090	2,090	2,090	2,182	2,286	2,342		
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	23.62	23.62	23.62	23.62	23.62	24.56	25.50	25.71		
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	993	993	993	993	993	1,020	1,045			
Palladium	US\$/oz	900	800	700	600	750	500	500	824	1,147	1,471
Strip Palladium	US\$/oz	1.083	1.083	1.083	1.083	1.083	1,129	1.179			

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

BofA GLOBAL RESEARCH

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	300	300	300	300	300	271	215	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	135	135	135	135	135	120	111			

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

Exhibit 25: Commodity Team Other Materials ForecastsBofA'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

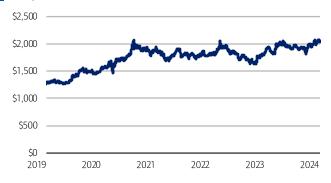
Source: BofA Global Research, BofA Global Commodity Research, Bloomberg



Precious and Base Metals Market Data

Exhibit 27: Gold Spot Price (\$/oz)

Gold prices ended down -0.2% w/w at \$2,060

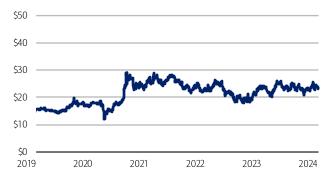


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

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

Silver prices ended down -1.9% w/w at \$23.35

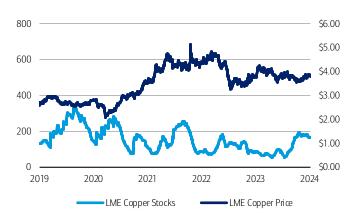


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 29: LME Copper Warehouse Stocks (000s mt) & Price (\$/lb)

Copper prices ended down -1.9% w/wat \$3.80



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 30: LME Aluminum Warehouse Stocks (mm mt) & Price (\$/lb)

Aluminum prices ended down -4.1% w/wat \$1.01

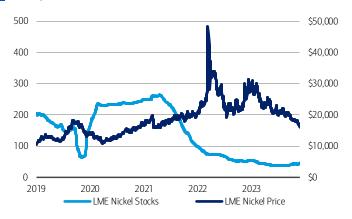


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 31: LME Nickel Warehouse Stocks (000s mt) & Price (\$/mt)

Nickel prices ended down -4.0% w/w at \$15,835



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

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

Zinc prices ended down-4.2% w/w at \$2,516

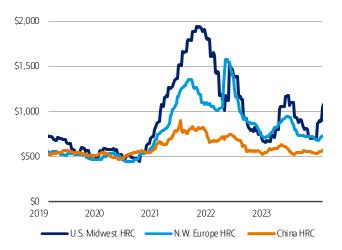


Source: BofA Global Research, Bloomberg



Exhibit 33: U.S. Midwest HRC (\$/t), NW. Europe HRC (\$/mt) and China HRC (\$/mt)

U.S. Midwest HRC prices ended down -3.3% w/wat \$1097; NW. Europe HRC prices ended Unch. at \$753; China HRC prices ended up +0.3% w/wat \$573

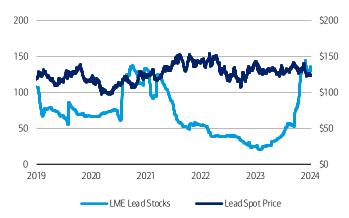


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 35: LME Lead Warehouse Stocks (000s mt) & Price (\$/lb)

Lead prices ended down -2.1% w/w at \$123



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 34: China Spot Iron Ore 62% (\$/mt)

China spot iron ore prices ended down -0.7% w/w at \$135

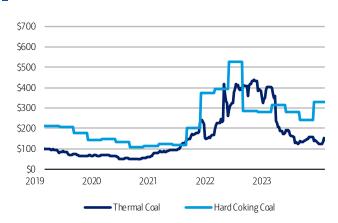


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 36: Hard Coking Coal (\$/mt) and Thermal Coal (\$/mt)

Thermal Coal prices ended down -10.6% w/w at \$131 Hard Coking Coal prices ended Unch. at \$329

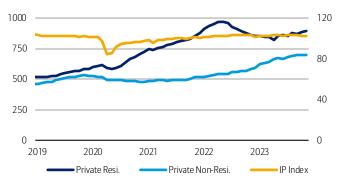


Source: BofA Global Research, Bloomberg

Construction Products Market Data

Exhibit 37: US Construction Spending (\$bn) & Industrial Production Index

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



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 38: 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

BofA GLOBAL RESEARCH

Exhibit 39: Existing Home Sales (mm) & Months' Supply of Existing Homes

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



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 40: New Home Sales (000s) & Months' Supply of New Homes

U.S new home sales have fallen from 2020 highs

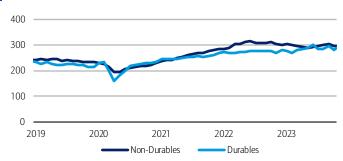


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 41: U.S. Durable/Non-Durable Goods (\$bn)

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

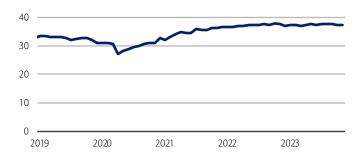


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 42: U.S. Durable Goods: Machinery (\$bn)

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



Source: BofA Global Research, Bloomberg



Valuation & risk

Teck Resources (TCKBCN)

Teck Resources Ltd (TCKBCN) is a diversified resource company focused on copper, zinc, and steelmaking (met) coal.

We view TCKBCN positively given its favorable copper assets, robust copper growth outlook and strong balance sheet. Pro-forma (PF) for its announced steelmaking coal sale, TCKBCN is well positioned as a pure play base metals producer with a robust copper growth pipeline. We think the standalone company could benefit from an increased investor base who previously could not participate due to its steelmaking coal exposure (a positive technical for spreads) though expect fundamentals to be constrained by its PF smaller size and scale and less diversified nature. We maintain that TCKBCN screens attractive as an acquisition target for a larger A-rated miner (now that it's a pureplay base metals business) though such a transaction is unlikely a near-term event and therefore not a significant driver of spreads. We therefore view current trading levels wrapped around other BBB rated miners as fair value and provide a MW recommendation on the company.

Risks: M&A, global economic weakness, operational disruptions, execution risk on the ramp-up of QB2, more/less favorable regulatory/environmental regulations, particularly at its Chilean operations, unfavorable currency moves, and acceleration/deceleration of the energy transition.

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

Teck Resources Ltd / TCKBCN

	Amt		Ratings			Yield	Spread
Security		Maturity date	Moody's/S&P/Fitch	Price	Price date	(%)	(bps)
6.125, Senior, USD, 2035:B	609	01-OCT-2035	Baa3/BBB-/BBB-	103.65	04-Jan-2024	5.69	166
6.25, Senior, USD, 2041:B	795	15-JUL-2041	Baa3/BBB-/BBB-	101.62	04-Jan-2024	6.10	188
5.2, Senior, USD, 2042:B	399	01-MAR-2042	Baa3/BBB-/BBB-	91.38	04-Jan-2024	5.98	173
5.4, Senior, USD, 2043:B	377	01-FEB-2043	Baa3/BBB-/BBB-	94.00	04-Jan-2024	5.93	164
6, Senior, USD, 2040:B	491	15-AUG-2040	Baa3/BBB-/BBB-	100.36	04-Jan-2024	5.96	178
3.9, Senior, USD, 2030:B	550	15-JUL-2030	Baa3/BBB-/BBB-	92.24	04-Jan-2024	5.32	135

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

Teck Resources Ltd / TCKBCN

TCCK RESOURCES ELU/ TCKDCH				
Company	Date ^{R1}	Action	Recommendation	
Teck Resources Ltd / TCKBCN	31-Dec-2020		Marketweight	
	04-Mar-2021	Extended Review	NA	
	16-Feb-2022	Coverage Terminated	NA	
	16-Jun-2022	Coverage Reinstatement	Marketweight	
Security	Date ^{R1}	Action	Recommendation	Price
6.125, Senior, USD, 2035:B	31-Dec-2022		Marketweight	
6.25, Senior, USD, 2041:B	31-Dec-2022		Marketweight	
5.2, Senior, USD, 2042:B	31-Dec-2022		Marketweight	
5.4, Senior, USD, 2043:B	31-Dec-2022		Marketweight	
6, Senior, USD, 2040:B	31-Dec-2022		Marketweight	
3.9, Senior, USD, 2030:B	31-Dec-2022		Marketweight	
	14-Nov-2023	Downgrade	Underweight	86.62
	28-Nov-2023	Upgrade	Marketweight	89.09

Table reflects credit opinion history as of previous business day's close. 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 R2	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%

¹⁷² Issuers that were investment banking dients 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

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Teck Resources.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Teck Resources.

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Teck Resources.

BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: Teck Resources.

BofAS or one of its affiliates has a significant financial interest in the fixed income instruments of the issuer. If this report was issued on or after the 15th day of the month, it reflects a significant financial interest on the last day of the previous month. Reports issued before the 15th day of the month reflect a significant financial interest at the end of the second month preceding the report: Teck Resources.

BofAS or one of its affiliates trades or may trade as principal in the debt securities (or in related derivatives) that are the subject of this research report: Teck Resources.

The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: Teck Resources. BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

BofA Securities fixed income analysts regularly interact with sales and trading desk personnel in connection with their research, including to ascertain pricing and liquidity in the fixed income markets

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

This report may refer to fixed income securities or other financial instruments that may not be offered or sold in one or more states or jurisdictions, or to certain categories of investors, including retail investors. Readers of this report are advised that any discussion, recommendation or other mention of such instruments is not a solicitation or offer to transact in such instruments. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor for information relating to such instruments. Rule 144A securities may be offered or sold only to persons in the U.S. who are Qualified Institutional Buyers within the meaning of Rule 144A under the Securities Act of 1933, as amended. SECURITIES OR OTHER FINANCIAL INSTRUMENTS DISCUSSED HEREIN MAY BE RATED BELOW INVESTMENT GRADE AND SHOULD THEREFORE ONLY BE CONSIDERED FOR INCLUSION IN ACCOUNTS QUALIFIED FOR SPECULATIVE INVESTMENT.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

The securities or other financial instruments discussed in this report may be traded over-the-counter. Retail sales and/or distribution of this report may be made only in states where these instruments are exempt from registration or have been qualified for sale.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

This report, and the securities or other financial instruments discussed herein, may not be eligible for distribution or sale in all countries or to certain categories of investors, including retail investors.

Information relating to Affiliates of BofAS, MLPF&S and Distribution of Affiliate Research Reports:

Refer to BofA Global Research policies relating to conflicts of interest

"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842. 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofaml.com/BofASEdisclaimer, BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI, BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSFC); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaría y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency, Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSFC; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australia Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is



authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the Electronic Communications Disclaimers for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities. This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

This report may contain a trading idea or recommendation which highlights a specific identified near-term catalyst or event impacting a security, issuer, industry sector or the market generally that presents a transaction opportunity, but does not have any impact on the analyst's particular "Overweight" or "Underweight" rating (which is based on a three month trade horizon). Trading ideas and recommendations may differ directionally from the analyst's rating on a security or issuer because they reflect the impact of a near-term catalyst or event.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned in this report. Investors in such securities and instruments effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information. In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities. Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public inform

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports or investment opinions relating to securities, financial instruments, and/or issuers may no longer be current. Always refer to the most recent research report relating to securities.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.

