

# PNC'S METALS INDUSTRY UPDATE

## Issue 37

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Welcome to Issue #37 of PNC's *Metals Industry Update*.

We enter the third quarter of 2022 with a confusing environment. We have seen strong reported earnings in June from Worthington, Commercial Metals and Schnitzer. We have read bullish guidance from Nucor, Steel Dynamics and U. S. Steel. At the same time, the month of June delivered continued downward pressure on commodity prices. LME aluminum, nickel, copper and zinc all declined. Flat roll steel prices across the range of HRC, CRC and Galv fell by \$200 per ton or more. In early July, Alcoa and Century Aluminum announced idling of smelter capacity, and Kaiser Aluminum claimed force majeure over the lack of availability of magnesium.

The Federal Reserve increased rates by 75 basis points in both June and July. These hikes have added cost to all metal-intensive goods purchased using credit (autos, appliances and homes) and is intended to slow economic growth. This Issue will share in this confusion.

We will start with an economic update from PNC Economist Abbey Omodunbi. Abbey lays out the argument for the global decline in economic growth. Then we will provide our recurring sections: metals pricing saw ups and downs in the quarter for the 21 products we track; the PNC Metals Index saw spreads widen out substantially; however, the syndicated bank loan market remained strong for both \$ volume and number of deals transacted.

Despite these mixed signals, our clients across the board still are feeling good about their order books going into the second half of the year. Nevertheless, we are going to buckle up because it also feels like we may have some bumps in the road.

## SOFTER DEMAND FOR BASE METALS EXPECTED AS GLOBAL ECONOMY SLOWS

### Summary

- Slower global economic growth coupled with a hawkish tilt by many central banks will limit price growth this year.
- Global steel demand is expected to grow by 0.4% this year and grow a further 2.2% in 2023.
- The weak real estate sector in China and a stronger dollar will both weigh on base metals demand.

Many base metals have had an awful 2022. After reaching record-high prices in 2021, the outlook for base metals has deteriorated significantly this year. Aggressive monetary tightening by many major central banks, a weak Chinese real estate sector, and a more slowly growing global economy have been negatives for base metals this year. After peaking at \$1,945 per ton in August 2021, hot-rolled coil steel closed June 2022 at \$930.

## SOFTER DEMAND FOR BASE METALS EXPECTED AS GLOBAL ECONOMY SLOWS *(Continued)*

Iron ore, a key ingredient in steel production, peaked at \$220 per ton in July 2021 before losing some steam as a weak Chinese economy and a global economic slowdown weighed on demand. Global economic growth is expected to slow from above 6% in 2021 to 3% in 2022 and 2.8% in 2023, according to the Organization for Economic Co-operation and Development (OECD). PNC's baseline forecast calls for below-trend economic growth in the U.S. in 2022 and 2023 as rising interest rates and elevated inflation continue to take a toll on consumers and businesses. Recession risks are elevated in the U.K. as sticky high inflation, supply issues and the energy crisis weigh on the economy. The Covid-zero policy and a weaker global economy will weigh on Chinese economic growth this year.

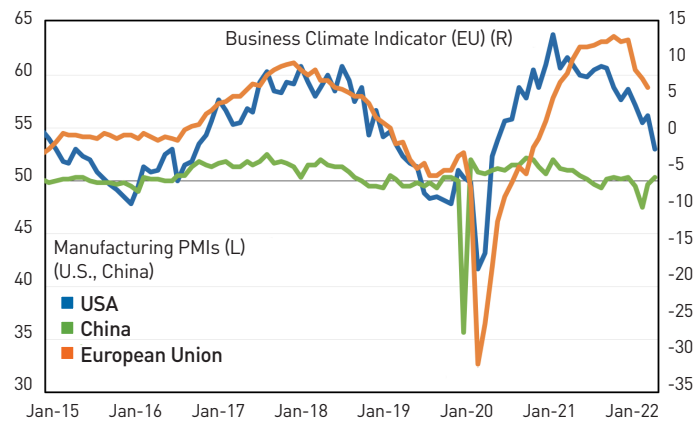
The manufacturing outlook in the E.U., China and U.S. (Chart 1) is mixed as supply-chain difficulties and labor shortages limit production and consumers shift their spending from goods to services. In the U.S., a ramp-up in infrastructure spending in 2022 and 2023 will support demand for steel, cobalt and lithium, although high U.S. steel production (Chart 2) will dampen price growth in the near term. Outside of the U.S., weaker global economic growth will weigh on steel demand. The World Steel Association (WSA) forecasts global steel demand will grow 0.4% in 2022 and a further 2.2% in 2023, following a 4.5% increase in 2021.

Substantially higher mortgage rates will slow housing activity and limit U.S. homebuilding (Chart 3), and a recovering automotive sector (Chart 4) bodes well for steel, aluminum, iron, zinc and copper. In addition, the green energy transition will support base metals in the long term; building an electric vehicle requires six times more minerals than a gas-powered car, according to the International Energy Agency (IEA). Construction activity remained elevated during the pandemic, but investment in residential and nonresidential structures (Chart 5) will decline as the Fed withdraws stimulus in 2022 and 2023.

The remarkable strength of the dollar in 2022 has weighed on commodities as most commodities are priced in U.S. dollars. The U.S. dollar strengthened to a fresh 20-year high in July as financial markets raised the odds of a 100-basis-point Fed rate hike at the July 27 FOMC meeting. PNC Economics expects continued strength in the greenback (Chart 6) in the near term and a slight depreciation in 2023. Also, a recovering Chinese economy will be bullish for base metals. The People's Bank of China (PBOC) is likely to keep monetary policy accommodative through 2022 to support the economy. Risks to the metals outlook are heavily tilted to the downside. An escalation of the Ukraine invasion, continued strength of the dollar, or a global economic recession would weigh on metals demand.

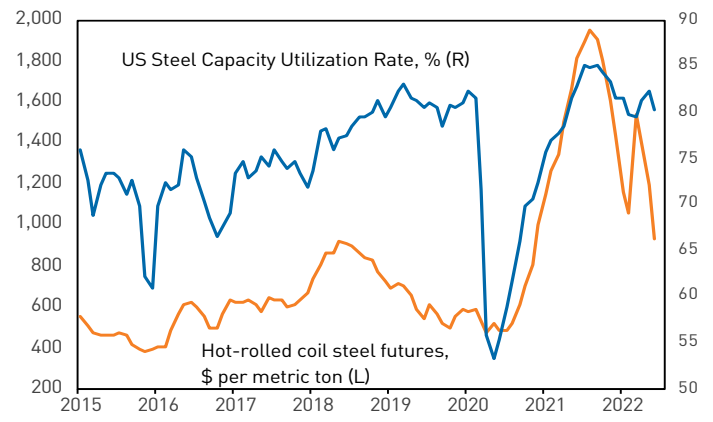
## SOFTER DEMAND FOR BASE METALS EXPECTED AS GLOBAL ECONOMY SLOWS *(Continued)*

### CHART 1: CONSUMERS WILL SPEND LESS ON GOODS



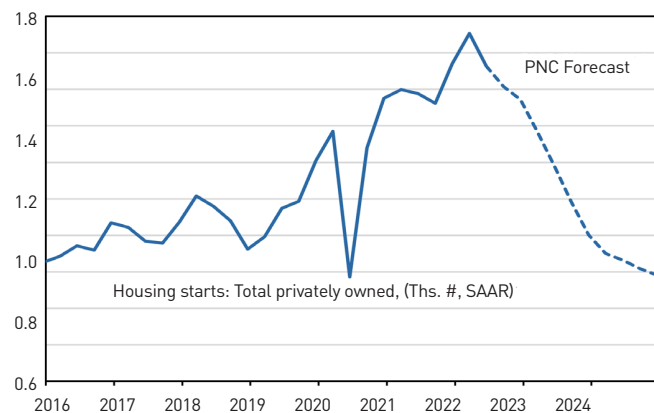
Sources: CFLP, ISM, EU EcFin

### CHART 2: HOT-ROLLED COIL STEEL PRICES HAVE SLUMPED



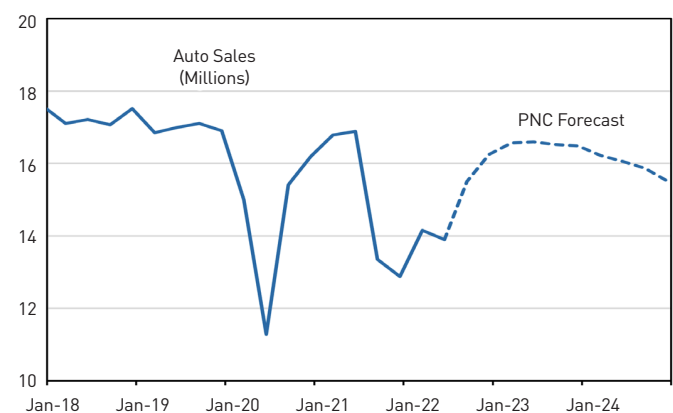
Source: Bloomberg

### CHART 3: DEMAND FOR NEW HOMES WILL FALL



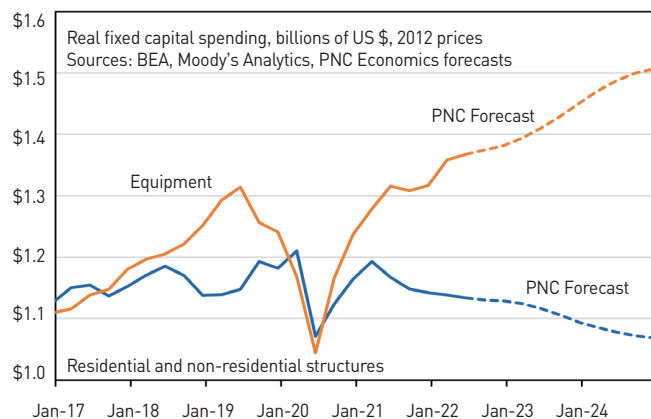
Sources: Moody's Analytics, PNC Economics baseline forecast

### CHART 4: REBOUND IN AUTO SALES EXPECTED THIS YEAR

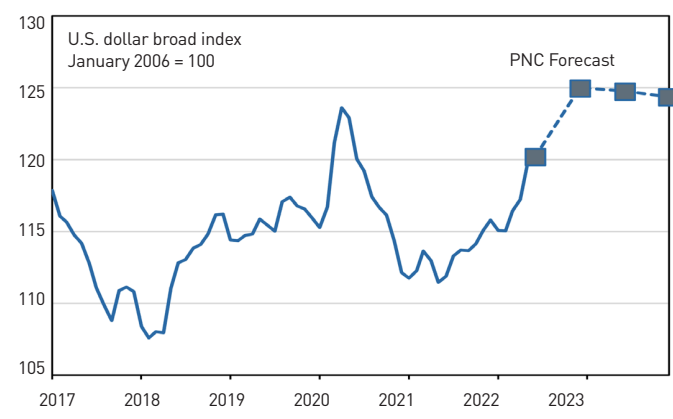


Sources: Moody's Analytics, PNC Economics baseline forecast

### CHART 5: FED TIGHTENING WILL WEIGH ON CAPEX



### CHART 6: DOLLAR STRENGTH TO WEIGH ON BASE METAL PRICES



Sources: Federal Reserve, PNC FX Forecasts January 2022

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## METALS PRICING

Metal prices moved all over the map during the quarter, adding to the sense of confusion around where markets are heading. Of the 21 products we track, seven went up, twelve went down, and two were flat.

HRC seems to be getting most of the headlines. After moving up in price from April to May, HRC collapsed in June and finished the quarter down 23.6%. CRC and Galv moved down throughout the quarter but were able to preserve most of the spread over HRC, which remains at historically high levels.

Most of the other carbon products (MBQ, SBQ and structurals) were relatively flat during the quarter. It was notable that demand for plate, OCTG and line pipe remained strong, allowing these products to avoid the downdraft being felt across the sheet products.

The carbon steel raw material inputs (scrap, iron ore pellets and low-vol coal) fell sharply during the quarter, helping keep producers' metal margins in a healthy range.

The nonferrous products we track were down in the quarter with the exception 304 cold-rolled coils, which gave up some of the May price gains in the month of June to finish up 6.8%. **Below is a list of the monthly price activity for the second quarter.**

Carbon Flat-Rolled Steel \$/NT April-June 2022			
Product	April	May	June
Hot-Rolled	1,440	1,900	1,100
Cold-Rolled	1,900	1,780	1,530
Galvanized	2,000	1,870	1,640

Discrete Plate \$/NT April-June 2022			
Product	April	May	June
A36	1,855	1,910	1,860
A514	2,415	2,515	2,515
AR400	2,435	2,535	2,535

Wide Flange Beam \$/cwt. April-June 2022			
Size	April	May	June
24"x12¾"	76.50	77.00	76.50
18"x6"	74.50	75.00	74.50

MBQ \$/cwt. April-June 2022			
Shape	April	May	June
1" 1018 round	66.00	66.00	65.50

Rebar \$/cwt. - Grade 60 April-June 2022			
Size	April	May	June
16 mm - #5	56.25	56.50	56.00

SBQ \$/cwt. - 1" round April-June 2022			
Grade	April	May	June
HR 4140 Q&T	112.40	117.35	114.10

Pipe & Tube \$/NT April-June 2022			
Product	April	May	June
OCTG J55	2,150	2,200	2,300
Linepipe, ERW	1,850	1,980	1,900

Aluminum \$/lb April-June 2022			
Alloy	April	May	June
3003	2.96	2.84	2.61

Stainless \$/lb - Cold-Rolled Coil April-June 2022			
Grade	April	May	June
304	2.47	2.82	2.64

Copper \$/lb April-June 2022			
	April	May	June
Comex Avg.	4.60	4.25	4.12

Nickel \$/lb April-June 2022			
	April	May	June
LME Avg.	13.16	12.67	11.71

Ferrous Scrap \$/GT Midwest April-June 2022			
GRADE	April	May	June
No. 1 HMS	515	440	390
Shredded	615	540	490

Iron Ore \$/LT U.S. April-June 2022			
GRADE	April	May	June
Furnace Pellets	151	134	135

Met Coal \$/MT U.S. East Coast April-June 2022			
GRADE	April	May	June
Low-vol	456	432	369

## PRICING FOR PUBLIC NOTES AND BONDS

### METALS BOND UPDATE: MACRO CONCERNS PLAGUE FIXED INCOME INVESTOR SENTIMENT IN SECOND QUARTER 2022

The fixed income market was whipsawed by persistent global inflation, central bank policy actions, growing recession concerns and geopolitical instability in second quarter 2022 — driving yields higher and bond issuance down to a fraction of second quarter 2021 levels. On the heels of two FOMC rate increases in May (50 basis points) and June (75 basis points), the 10-year U.S. Treasury yield reached a peak of 3.46% on June 14 before ending the quarter at 3.01%, up 67 basis points quarter on quarter.

Curbed by significant macro headwinds, second quarter 2022 Investment Grade new issue volume of \$279.9 billion was down 31% from second quarter 2021. However, supported by strong issuer credit and liquidity metrics, spreads were relatively resilient given the volatile market backdrop. A-rated and BBB-rated credit spreads widened 7 basis points and 55 basis points, respectively. Nucor Corp was the only IG metals issuer to tap the market in second quarter 2022, pricing \$500 million Baa1/A- rated 3-year notes at T+115 basis points and \$500 million 5-year notes at T+145 basis points on May 18. Looking specifically at the PNC IG Metals Bond Index, spreads widened 42 basis points, while yields increased 0.84% in second quarter 2022.

Second quarter 2022 High Yield issuance slowed to a trickle, with new issue volume at a modest \$24.6 billion, down 82% from second quarter 2021 and the lowest second quarter since 2006. With yields on the rise, the high-yield market remained primarily M&A-driven, and many issuers elected to downsize offerings in favor of lower-cost financing alternatives. Poor primary performance seeped into the secondary market, with just one deal that priced in the first half of 2022 trading above par and 93% of total bonds in the high-yield index trading at a discount. BB-rated yields increased 218 basis points (currently 7.18%), and B-rated yields increased 326 basis points on average (currently 9.52%). Compared to the previous quarter, average spreads of companies in the PNC HY Metals Bond Index widened ~214 basis points, while yields increased 1.96%. There were no new high-yield metals transactions in second quarter 2022.

### METALS BOND INDEX\*

As of Date	PNC IG Metals Bond Index			PNC HY Metals Bond Index		
	7/5/2022	4/7/2022	Change	7/5/2022	4/7/2022	Change
Effective Maturity (Years)	8.89	9.13	-0.24	5.98	6.07	-0.09
Composite Rating	BBB+	BBB+	–	BB-	BB-	–
Weighted Average Coupon	3.71%	3.71%	0.00%	5.53%	5.68%	-0.15%
Yield to Worst	4.38%	3.54%	0.84%	7.17%	5.21%	1.96%
Option Adjusted Spread to Treasuries (bps)	138.2	95.9	42.3	424.5	210.9	213.6

\*Index members are market-value weighted.

Note: PNC IG Metals Bond Index excludes bonds of size less than \$300 million.

Source: Bloomberg



## METALS BOND UPDATE

										As of 7/5/2022		Since 4/7/2022		
Issuance Date	Issuer	Amount Outstanding (\$MM)	Structure	Moody's Rating	S&P Rating	Maturity	Coupon Rate	Price at Issuance	Issuance Spread over Treasury	Yield to Worst	Interp. Spread (G-Spread)	4/7 Interp. Spread	Change in Spread (bps)	%Change in Spread
Steel Mills														
7/16/2019	ArcelorMittal SA	\$290	Sr Unsecured	Baa3	BBB-	7/16/2024	3.600%	99.86	175 bps	4.113%	139 bps	76 bps	63 bps	82.4%
6/1/2015	ArcelorMittal SA	\$184	Sr Unsecured	Baa3	BBB-	6/1/2025	6.125%	100.00	399 bps	4.712%	191 bps	121 bps	70 bps	58.3%
3/11/2019	ArcelorMittal SA	\$401	Sr Unsecured	Baa3	BBB-	3/11/2026	4.550%	99.72	200 bps	4.731%	194 bps	121 bps	73 bps	60.5%
7/16/2019	ArcelorMittal SA	\$500	Sr Unsecured	Baa3	BBB-	7/16/2029	4.250%	99.00	225 bps	4.920%	208 bps	152 bps	56 bps	36.5%
3/7/2011	ArcelorMittal SA	\$434	Sr Unsecured	Baa3	BBB-	3/1/2041	6.750%	99.18	230 bps	6.768%	354 bps	273 bps	81 bps	29.5%
3/13/2020	Cleveland-Cliffs Inc	\$845	1st lien	B2	BB	3/15/2026	6.750%	100.00	606 bps	6.742%	396 bps	160 bps	236 bps	147.2%
5/13/2019	Cleveland-Cliffs Inc	\$555	Sr Unsecured	Ba3	B	6/1/2027	5.875%	96.13	n/a	7.482%	463 bps	158 bps	305 bps	192.8%
2/17/2021	Cleveland-Cliffs Inc	\$500	Sr Unsecured	Ba3	N/A	3/1/2029	4.625%	100.00	368 bps	6.793%	395 bps	228 bps	167 bps	73.2%
2/17/2021	Cleveland-Cliffs Inc	\$500	Sr Unsecured	Ba3	N/A	3/1/2031	4.875%	100.00	374 bps	6.699%	383 bps	242 bps	141 bps	58.2%
5/20/2013	Commercial Metals Co	\$330	Sr Unsecured	Ba2	BB+	5/15/2023	4.875%	100.00	311 bps	5.477%	312 bps	173 bps	139 bps	80.0%
1/28/2022	Commercial Metals Co	\$300	Sr Unsecured	Ba2	BB+	1/15/2030	4.125%	100.00	n/a	6.767%	388 bps	243 bps	145 bps	59.7%
1/28/2022	Commercial Metals Co	\$300	Sr Unsecured	Ba2	BB+	3/15/2032	4.375%	100.00	n/a	6.870%	407 bps	268 bps	140 bps	52.1%
2/2/2021	Commercial Metals Co	\$300	Sr Unsecured	Ba2	BB+	2/15/2031	3.875%	100.00	279 bps	6.876%	403 bps	255 bps	148 bps	58.1%
4/16/2014	GTL Trade Finance Inc	\$500	Sr Unsecured	Baa3	BBB-	4/16/2044	7.250%	100.00	368 bps	6.823%	353 bps	278 bps	75 bps	26.8%
9/21/2010	Nucor Corp	\$600	Sr Unsecured	Baa1	A-	9/15/2022	4.125%	99.83	140 bps	2.216%	99 bps	130 bps	-31 bps	-23.6%
5/22/2020	Nucor Corp	\$500	Sr Unsecured	Baa1	A-	6/1/2025	2.000%	99.85	170 bps	3.935%	115 bps	43 bps	72 bps	165.0%
5/23/2022	Nucor Corp	\$500	Sr Unsecured	Baa1	A-	5/23/2025	3.950%	99.94	115 bps	3.877%	109 bps	-	-	-
5/23/2022	Nucor Corp	\$500	Sr Unsecured	Baa1	A-	5/23/2027	4.300%	99.84	145 bps	4.144%	130 bps	-	-	-
4/26/2018	Nucor Corp	\$500	Sr Unsecured	Baa1	A-	5/1/2028	3.950%	99.85	100 bps	4.285%	141 bps	93 bps	48 bps	51.4%
5/22/2020	Nucor Corp	\$500	Sr Unsecured	Baa1	A-	6/1/2030	2.700%	99.72	205 bps	4.549%	169 bps	100 bps	69 bps	69.7%
3/11/2022	Nucor Corp	\$550	Sr Unsecured	Baa1	A-	4/1/2032	3.125%	99.67	130 bps	4.602%	174 bps	121 bps	53 bps	44.2%
3/11/2022	Nucor Corp	\$550	Sr Unsecured	Baa1	A-	4/1/2052	3.850%	99.07	165 bps	4.976%	189 bps	139 bps	49 bps	35.5%
12/7/2020	Nucor Corp	\$329	Sr Unsecured	Baa1	A-	12/15/2055	2.979%	n/a	n/a	4.869%	178 bps	140 bps	38 bps	27.5%
12/11/2019	Steel Dynamics Inc	\$400	Sr Unsecured	Baa3	BBB-	12/15/2024	2.800%	99.93	115 bps	4.518%	119 bps	64 bps	55 bps	85.4%
6/5/2020	Steel Dynamics Inc	\$400	Sr Unsecured	Baa3	BBB-	6/15/2025	2.400%	99.62	210 bps	4.730%	127 bps	82 bps	45 bps	54.7%
12/6/2016	Steel Dynamics Inc	\$400	Sr Unsecured	Baa3	BBB-	12/15/2026	5.000%	100.00	266 bps	4.040%	235 bps	250 bps	-15 bps	-6.1%
10/9/2020	Steel Dynamics Inc	\$350	Sr Unsecured	Baa3	BBB-	10/15/2027	1.650%	99.30	120 bps	4.798%	162 bps	93 bps	69 bps	73.9%
12/11/2019	Steel Dynamics Inc	\$600	Sr Unsecured	Baa3	BBB-	4/15/2030	3.450%	99.74	165 bps	4.798%	209 bps	126 bps	82 bps	65.3%
6/5/2020	Steel Dynamics Inc	\$500	Sr Unsecured	Baa3	BBB-	1/15/2031	3.250%	98.96	260 bps	4.798%	214 bps	126 bps	88 bps	69.5%
10/9/2020	Steel Dynamics Inc	\$400	Sr Unsecured	Baa3	BBB-	10/15/2050	3.250%	96.33	185 bps	4.798%	218 bps	156 bps	63 bps	40.3%
2/11/2021	United States Steel Corp	\$750	Sr Unsecured	B1	BB-	3/1/2029	6.875%	100.00	592 bps	9.412%	652 bps	301 bps	351 bps	116.7%
5/21/2007	United States Steel Corp	\$350	Sr Unsecured	B1	BB-	6/1/2037	6.650%	99.41	180 bps	9.058%	596 bps	383 bps	214 bps	55.9%
9/18/2020	Big River Steel LLC	\$720	Secured	Ba2	B+	1/31/2029	6.625%	100.00	604 bps	7.830%	500 bps	190 bps	309 bps	162.5%
Distribution														
4/12/2013	Reliance Steel & Aluminum Co	\$500	Sr Unsecured	Baa2	BBB	4/15/2023	4.500%	99.59	280 bps	4.000%	163 bps	118 bps	46 bps	39.0%
8/3/2020	Reliance Steel & Aluminum Co	\$400	Sr Unsecured	Baa2	BBB	8/15/2025	1.300%	99.69	110 bps	4.256%	147 bps	68 bps	78 bps	115.3%
8/3/2020	Reliance Steel & Aluminum Co	\$500	Sr Unsecured	Baa2	BBB	8/15/2030	2.150%	99.72	160 bps	4.829%	195 bps	119 bps	76 bps	64.0%
11/20/2006	Reliance Steel & Aluminum Co	\$250	Sr Unsecured	Baa2	BBB	11/15/2036	6.850%	99.43	220 bps	5.221%	222 bps	208 bps	14 bps	6.9%
4/15/2014	Worthington Industries Inc	\$250	Sr Unsecured	Baa3	BBB	4/15/2026	4.550%	99.79	195 bps	4.365%	164 bps	159 bps	5 bps	3.1%
7/28/2017	Worthington Industries Inc	\$200	Sr Unsecured	Baa3	BBB	8/1/2032	4.300%	99.90	200 bps	5.328%	251 bps	170 bps	82 bps	48.1%
Specialty														
5/13/2020	Arconic Corp	\$700	1st lien	Ba1	BB+	5/15/2025	6.000%	100.00	563 bps	6.666%	388 bps	219 bps	169 bps	76.9%
2/7/2020	Arconic Corp	\$900	2nd lien	NR	B+	2/15/2028	6.125%	100.00	457 bps	7.657%	482 bps	322 bps	160 bps	49.6%
9/22/2014	Howmet Aerospace Inc	\$1,150	Sr Unsecured	Ba1	BB+	10/1/2024	5.125%	100.00	255 bps	4.892%	225 bps	138 bps	87 bps	63.4%
4/24/2020	Howmet Aerospace Inc	\$600	Sr Unsecured	Ba1	BB+	5/1/2025	6.875%	100.00	255 bps	5.495%	281 bps	165 bps	116 bps	70.7%
9/1/2021	Howmet Aerospace Inc	\$700	Sr Unsecured	Ba1	BB+	1/15/2029	3.000%	100.00	255 bps	6.032%	315 bps	207 bps	108 bps	52.2%
1/25/2007	Howmet Aerospace Inc	\$625	Sr Unsecured	Ba1	BB+	2/1/2037	5.950%	99.62	113 bps	6.553%	350 bps	261 bps	89 bps	34.3%
7/13/2020	Alcoa Nederland Holding BV	\$750	Sr Unsecured	Ba1 **	BB+	12/15/2027	5.500%	100.00	255 bps	6.683%	387 bps	156 bps	231 bps	148.8%
5/17/2018	Alcoa Nederland Holding BV	\$500	Sr Unsecured	Ba1 **	BB+	5/15/2028	6.125%	100.00	314 bps	6.729%	391 bps	141 bps	251 bps	178.1%
3/24/2021	Alcoa Nederland Holding BV	\$500	Sr Unsecured	Ba1 **	BB+	3/31/2029	4.125%	100.00	274 bps	6.028%	314 bps	157 bps	157 bps	100.3%
9/14/2021	Allegheny Technologies Inc	\$325	Sr Unsecured	B3	B	10/1/2029	4.875%	100.00	255 bps	8.436%	557 bps	298 bps	259 bps	86.9%
9/14/2021	Allegheny Technologies Inc	\$350	Sr Unsecured	B3	B	10/1/2031	5.125%	100.00	255 bps	8.477%	569 bps	323 bps	246 bps	76.3%
7/24/2020	Carpenter Technology Corp	\$400	Sr Unsecured	B2	BB+	7/15/2028	6.375%	100.00	587 bps	5.848%	525 bps	291 bps	234 bps	80.5%
3/16/2022	Carpenter Technology Corp	\$300	Sr Unsecured	B2	BB+	3/15/2030	7.625%	100.00	566 bps	5.848%	525 bps	377 bps	148 bps	39.4%
4/14/2021	Century Aluminum Co	\$250	Secured	Caa1	B	4/1/2028	7.500%	100.00	615 bps	9.806%	696 bps	298 bps	398 bps	133.7%
5/31/2018	JW Aluminum Continuous	\$300	1st lien	B3	B-	6/1/2026	10.250%	100.00	718 bps	8.798%	618 bps	522 bps	96 bps	18.3%
11/26/2019	Kaiser Aluminum Corp	\$500	Sr Unsecured	B1	BB	3/1/2028	4.625%	100.00	289 bps	8.292%	543 bps	327 bps	216 bps	65.9%
5/20/2021	Kaiser Aluminum Corp	\$550	Sr Unsecured	B1	BB	6/1/2031	4.500%	100.00	288 bps	8.256%	538 bps	356 bps	182 bps	51.1%
12/20/2012	Precision Castparts Corp	\$1,000	Sr Unsecured	Aa2	AA	1/15/2023	2.500%	99.43	80 bps	2.350%	65 bps	50 bps	15 bps	29.2%
6/10/2015	Precision Castparts Corp	\$850	Sr Unsecured	Aa2	AA	6/15/2025	3.250%	99.80	110 bps	3.160%	33 bps	19 bps	15 bps	78.7%
6/10/2015	Precision Castparts Corp	\$275	Sr Unsecured	Aa2	AA	6/15/2035	4.200%	99.40	130 bps	4.181%	121 bps	115 bps	6 bps	4.9%
12/20/2012	Precision Castparts Corp	\$500	Sr Unsecured	Aa2	AA	1/15/2043	3.900%	99.38	100 bps	4.688%	140 bps	120 bps	20 bps	16.3%
6/10/2015	Precision Castparts Corp	\$325	Sr Unsecured	Aa2	AA	6/15/2045	4.375%	99.67	145 bps	4.600%	138 bps	129 bps	9 bps	7.2%
8/17/2020	Triumph Group Inc	\$563	1st lien	B1	B	6/1/2024	8.875%	100.00	871 bps	8.194%	562 bps	361 bps	202 bps	55.9%
9/23/2019	Triumph Group Inc	\$525	2nd lien	Caa1	CCC-	9/15/2024	6.250%	100.00	476 bps	11.864%	910 bps	426 bps	485 bps	113.9%
8/11/2021	Novelis Corp	\$750	Sr Unsecured	B1	BB	11/15/2026	3.250%	100.00	836 bps	7.331%	453 bps	202 bps	252 bps	124.8%
1/16/2020	Novelis Corp	\$1,600	Sr Unsecured	B1	BB	1/30/2030	4.750%	100.00	836 bps	7.779%	489 bps	255 bps	234 bps	91.5%
8/11/2021	Novelis Corp	\$750	Sr Unsecured	B1	BB	8/15/2031	3.875%	100.00	836 bps	7.411%	454 bps	256 bps	198 bps	77.3%

Denotes new issuance since 4/7/22 Metals Bond Update

Denotes bond that matures in the next two years

\*/-/ Indicates ratings currently on review for upgrade/downgrade

Source: Bloomberg

## SYNDICATED BANK LOAN MARKET

Metals borrowers took advantage of favorable bank market conditions during the quarter. Second quarter syndicated bank loan activity included 13 deals for a total dollar value of \$7.3 billion. This is more than twice the dollar value of last quarter and seven times the dollar volume in the same quarter one year ago.

The quarter included three transactions more than \$1 billion, including GrafTech – \$1.87 billion, U. S. Steel – \$1.75 billion and Alcoa – \$1.25 billion. Other significant transactions closed in the quarter were Kaiser Aluminum – \$575 million, Constellium – \$500 million, Park Ohio – \$405 million and Majestic Steel – \$330 million.

Bank market conditions remain constructive as we enter third quarter, but we are seeing early signs of tightening. The tightening conditions in other credit markets are driving borrowers back to the banks. At the same time, bank deposits are declining as cash investors are finding bank deposit rates slow to react to the rising rate environment.

Recession concerns and the prospects for increased loan losses are making bank credit officers more cautious.

Finally, the results of the recent stress tests at the largest banks are putting pressure on bank capital levels. We expect these factors to begin influencing bank pricing in the second half of the year. **See below for additional detail on some of the deals closed in the second quarter.**

(\$ in millions)	Alcoa Corporation	Century Aluminum Company	Constellium Muscle Shoals LLC	Kaiser Aluminum Corporation
Date	June 2022	June 2022	June 2022	April 2022
Deal Size (\$ in MM)	\$1,250.0	\$250.0	\$500.0	\$575.0
Facility Type	CF Revolver	ABL Revolver	ABL Revolver	ABL Revolver
Tenor	5 years	5 years	5 years	5 years
Purpose	Corporate Purposes	Corporate Purposes	Corporate Purposes	Corporate Purposes
Ratings				
S&P	BB+	B-	NR	BB
Moody's	Ba1	B3	NR	Ba3
Amortization	-	-	-	-
Pricing at close (bps)				
All-in Spread	150.0	175.0	135.0	150.0
SOFR Margin	150.0	175.0	135.0	150.0
Facility Fee	-	-	Not disclosed	-
Commitment Fee	20.0	25.0	Not disclosed	25.0
Sustainability Adjustment	+/- 5.0 bps drawn +/- 1.0 bps undrawn	-	Not disclosed	+/- 7.5 bps drawn +/- 1.5 bps undrawn
Pricing Detail (bps)	Debt Rating SOFR Spread Comm. Fee	Avg. Excess Avail. SOFR Spread Comm. Fee	Not disclosed	Avg. Excess Avail. SOFR Spread Comm. Fee
	≥ BBB+ / Baa1 112.5 10.0	≥ 66.7% 125.0 25.0		≥ 40.0% 125.0 25.0
	BBB / Baa2 125.0 12.5	≥ 33.3% 150.0 25.0		< 40.0% 150.0 25.0
	BBB- / Baa3 137.5 17.5	< 33.3% 175.0 25.0		
	BB+ / Ba1 150.0 20.0			
	< BB+ / Ba1 175.0 25.0			
SOFR Adjustment (bps) (1-mo / 3-mo / 6-mo)	10.0 / 10.0 / 10.0	10.0 / 10.0 / 25.0	Not disclosed	10.0 / 10.0 / -
Rate Floor	0.00%	0.00%	Not disclosed	0.00%
Financial Covenants				
Interest Coverage Ratio	4.00x	-		-
Debt to Capital Ratio	0.60x <sup>(1)</sup>	-	Not disclosed	-
Total Leverage Ratio	3.25 <sup>(1)</sup>	-		-
Fixed Charge Coverage	-	1.00x when Avail < the greater of i) \$125.0MM and ii) 50% of Line Cap		1.00x when Avail < the greater of i) \$46.0MM and ii) 10% of Line Cap
Secured	Yes <sup>(2)</sup>	No	Yes	Yes

(1) Total Leverage ratio applies if Company is rated < BB+ / Ba1; Debt to Capital applies if Company is rated > BBB- / Baa3

(2) Collateral released upon investment grade rating

Sources:  
S&P Capital IQ, Moody's,  
Refinitiv Loan Connector

SYNDICATED BANK LOAN MARKET *(Continued)*

(\$ in millions)	Park-Ohio Industries, Inc.	ASP Grede Acquisitionco LLC	United States Steel Corporation				Majestic Steel USA Inc.
Date	November 2019 (Amended June 2022)	June 2022	May 2022				May 2021 (Amended April 2022)
Deal Size (\$ in MM)	\$405.0	\$125.0	\$1,750.0 <sup>(1)</sup>				\$330.0
Facility Type	ABL Revolver	ABL Revolver	ABL Revolver				ABL Revolver
Tenor	5 years	5 years	5 years				5 years
Purpose	Corporate Purposes	Corporate Purposes	Corporate Purposes				Corporate Purposes
Ratings							
S&P	B-	NR	B+				NR
Moody's	B2	NR	Ba3				NR
Amortization	-	-	-				-
Pricing at close (bps)							
All-in Spread	150.0	210.0	125.0 / 225.0				130.0
SOFR Margin	150.0	210.0	125.0 / 225.0				130.0
Facility Fee	Not disclosed	Not disclosed	-				Not disclosed
Commitment Fee	Not disclosed	Not disclosed	25.0				Not disclosed
Sustainability Adjustment	Not disclosed	Not disclosed	+/- 5.0 bps drawn +/- 1.0 bps undrawn				Not disclosed
Pricing Detail (bps)							
	Not disclosed	Not disclosed	Avg. Excess Avail.	Tran. A SOFR Spread	Tran. B SOFR Spread	Comm. Fee <sup>(2)</sup>	Not disclosed
			≥ 30.0%	125.0	225.0	25.0	
			< 30.0%	150.0	225.0	30.0	
SOFR Adjustment (bps) (1-mo / 3-mo / 6-mo)	Not disclosed	Not disclosed	10.0 / 10.0 / 10.0				Not disclosed
Rate Floor	Not disclosed	Not disclosed	0.00%				Not disclosed
Financial Covenants							
Interest Coverage Ratio			-				
Debt to Capital Ratio	Not disclosed	Not disclosed	-				Not disclosed
Total Leverage Ratio			-				
Fixed Charge Coverage			1.00x when Avail < the greater of i) \$140.0MM and ii) 10% of Line Cap				
Secured	Yes	Yes	Yes				Yes

(1) Consists of Tranche A (\$1,610.0MM) and Tranche B (\$140.0MM)  
(2) 25.0 bps applies if average daily usage ≥ 33.3%; 30.0 bps applies if average daily usage < 33.3%

Sources:  
S&P Capital IQ, Moody's,  
Refinitiv Loan Connector



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