U.S. STEEL PRODUCTION DROPS
Steel mills idled a number of operations, particularly blast furnaces, as steel demand plunged amid the pandemic.

PRICES FALL WITH METALS DEMAND
Demand collapsed for steel and base metals during pandemic-related closures, which have begun to ease.

U.S. ALUMINUM CUTS HURT EXTRUDERS
Section 232 aluminum tariffs hurt extruders that were forced to import billet due to a lack of domestic options.
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NOLVs
- **Ferrous and Non-ferrous**: NOLVs decreased or are expected to decrease for appraisals with effective dates beyond February 2020 month-end due to decreasing market prices and reduced demand from metal-consuming industries such as automotive, energy, and construction as a result of the impact of the COVID-19 pandemic.

Sales Trends
- **Ferrous and Non-ferrous**: Sales decreased since the prior Metals Monitor in February as market price declines intensified in recent months, stemming from COVID-19 impacts, with volume demand eroding due to end-use plant closures during March and April throughout metal-consuming industries such as automotive, energy, and construction.

Gross Margin
- **Ferrous and Non-ferrous**: Gross margins decreased since the prior monitor as steep drop-offs in market pricing for finished steel and nearly all non-ferrous metals in March and April resulted in higher-than-desired inventory holding costs versus selling prices.

Inventory
- **Ferrous and Non-ferrous**: Inventory levels remained consistent since the prior monitor, as companies have largely held off on purchasing material in a volatile and declining market, while destocking has not occurred due to a lack of customer demand. With signs of price stabilization in May and the gradual reopening of the economy, companies are expected to purchase more stock in the near future, at least for ferrous inventory.

Pricing
- **Ferrous**: Prices decreased since the prior monitor, with market prices for ferrous scrap and flat rolled coil seeing the largest declines in March and April as end-use demand dried up amid plant closures in the automotive, energy, and construction segments. May and June pricing has shown some stabilization, with scrap pricing rising slightly due to reduced availability, and as plants are slowly beginning to reopen.
- **Non-ferrous**: Prices decreased since the prior monitor, with market prices for nearly all non-ferrous materials decreasing in March and April. While prices began to stabilize in May and June due to plants gradually reopening, certain metals are still showing signs of depressed pricing, such as grade P1020 aluminum, due to the massive drop in the Midwest transaction premium.
Overview

Steel prices fell since January 2020 as the COVID-19 pandemic eroded demand while the threat of global overcapacity loomed, prompting U.S. steel mills to idle a number of operations. Market conditions showed signs of improvement more recently as the economy gradually restarts.

The World Steel Association reported China’s year-over-year crude steel production increased 7.2% and 5.0% in January and February 2020, respectively, despite closures of many steel-consuming industries amid the country’s COVID-19 outbreak. As China accounts for more than half of global steel output, the country’s earlier increase in steel production and slow response to cutting production sparked fears of global steel overcapacity, especially as the virus spread across the world, reaching a pandemic status as of March 11, 2020.

U.S. steel demand plummeted as the economy nearly ground to a halt amid stay-at-home orders and business closures during the pandemic. Major steel-consuming industries, particularly the oil and gas sector as well as the automotive industry, were hit hard. American Iron and Steel Institute (“AISI”) reported shipments from steel mills fell 6.3% and 31.5% in March and April 2020, respectively, while the Metals Service Center Institute reported shipments from steel service centers dropped 2.3% and 31.3%, respectively. Since January 2020, prices for hot rolled band, a bellwether for overall steel price trends, dropped through April due to falling demand. However, in May, steel mills began raising prices, given resuming auto production and a recent increase in pricing for ferrous scrap, an input in raw steel production.

In response to the market downturn, U.S. steel mills have been aggressively reducing production. While remaining at historically low levels, U.S. raw steel production appeared to begin stabilizing by late May. U.S. steel imports have also declined, given the reduction in domestic steel demand, continued Section 232 tariffs of 25% on most steel imports, and idled mills in countries such as Turkey and India.

AISI reported that finished steel imports fell 28.2% year-to-date through April 2020 versus the same period in 2019, while total steel imports decreased 20.3%.

Prices for base metals have also fallen from January through April due to the drop in demand related to the global COVID-19 pandemic. However, base metals saw prices recover slightly in May as economies began to restart gradually. According to Reuters, copper and nickel are expected to be the least affected by reduced demand, given the supply losses caused by lockdowns in producer countries.

Steel and base metal demand is driven by demand from various manufacturing sectors. The Institute for Supply Management reported the U.S. purchasing manager’s index (“PMI”) fell 7.6 percentage points to 41.5% in April 2020 versus the prior month, reflecting a sharp contraction in U.S. manufacturing activity due to closures related to the pandemic; while the PMI increased 1.6 percentage points to 43.1% in May as parts of the economy began to reopen, overall manufacturing activity continued to contract. According to CNet, 93% of U.S. auto production was shut down as of March 26, 2020, and The New York Times reported new vehicle sales plunged nearly 50% in April; while the majority of automakers began bringing their plants back online in May, they face challenges from supply disruptions and lower market demand. Falling crude oil prices in recent months spurred a significant curtailment in oil and gas exploration and production (“E&P”) that may take longer to recover, with the U.S. oil and gas rig count dropping 64.3% from mid-January 2020 to early June 2020, according to Baker Hughes, reducing demand for oil country tubular goods (“OCTG”).
Many of the idled facilities represent blast furnaces, while shutdowns of electric arc furnaces (“EAFs”) have been more limited, allowing EAFs to take additional market share from blast furnaces. Given their ability to quickly ramp production up or down, EAFs have been gaining market share over the years, accounting for 70% of U.S. steel production capacity last year versus 62% in 2009, according to AISI.

However, curtailments of production capacity have recently slowed amid signs of potential price and demand recovery. On June 9, 2020, U.S. Steel announced that it restarted production at its #1 blast furnace at Mon Valley Works, while other mills indicated plans to restart mills sooner than expected, which may reflect the recovering automotive production in the U.S. Still, the road to automotive recovery remains a bumpy one, given continued supply-chain issues.

Per AISI, U.S. raw steel production totaled 1,195,000 net tons in the week ended June 6, 2020, down 36.0% from the same week in 2019 and 0.9% from the previous week ended May 30, 2020. Capacity utilization reached 53.3%, down significantly from 80.2% the prior year, and down slightly from 53.8% the prior week. Adjusted year-to-date production through June 6, 2020 totaled 35,491,000 net tons at a capacity utilization rate of 68.6%, down 16.9% from the same period last year, when the capacity utilization rate was 81.4%.

**UTILIZATION RATES**

In response to the market downturn spurred by the COVID-19 pandemic, U.S. steel mills have been aggressively reducing production. U.S. steel capacity utilization rates have recently fallen to the 50% range, levels last seen when the country was just emerging from the recession in 2009, and well below the 80%+ rates that typically denote optimal profitability for mills and which were achieved prior to the pandemic. As of June 2, 2020, at least 12 major steel-producing companies had idled over 30 facilities since the U.S. COVID-19 outbreak.

<table>
<thead>
<tr>
<th>Week Ended</th>
<th>Raw Steel Production (In Millions of Net Tons)</th>
<th>Change Vs. Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 4, 2020</td>
<td>1.898</td>
<td>2.0%</td>
</tr>
<tr>
<td>February 1, 2020</td>
<td>1.914</td>
<td>1.9%</td>
</tr>
<tr>
<td>March 7, 2020</td>
<td>1.903</td>
<td>(0.5%)</td>
</tr>
<tr>
<td>April 4, 2020</td>
<td>1.534</td>
<td>(18.9%)</td>
</tr>
<tr>
<td>May 2, 2020</td>
<td>1.144</td>
<td>(39.4%)</td>
</tr>
<tr>
<td>June 6, 2020</td>
<td>1.195</td>
<td>(36.0%)</td>
</tr>
<tr>
<td>YTD June 6, 2020</td>
<td>35.491</td>
<td>(16.9%)</td>
</tr>
</tbody>
</table>

**SOURCE:** AISI
In May 2020, steel plate prices remained below year-ago levels. The SteelBenchmarker price for U.S. standard steel plate (East of the Mississippi River) reached $548 per net ton on May 25, 2020, down from $895 per net ton on May 27, 2019. Similar to flat rolled steel coil, steel plate prices were depressed for much of the latter half of 2019, thanks to climbing supplies and lackluster demand, coupled with lower prices for ferrous scrap. And while steel plate also benefited from price hikes from steel mills toward the end of 2019 and early January 2020, given the environment of restocking and improved market sentiment, that short-lived trend reversed with the onset of the COVID-19 pandemic, which eroded demand from various end-markets.

Steel plate prices continued to decrease over past three months despite restarts in automotive production in May, as the COVID-19 pandemic continued to negatively impact other key end-markets for plate, including construction, oil and gas, and railcars/heavy equipment. In addition, while flat roll steel mills slashed capacity in recent months to help bring supply more in line with demand, plate mills only reported minimal outages.

North American steel mills announced a round of price hikes for steel plate in mid-May; however, the price increases were not accepted by the market. On June 8, 2020, the SteelBenchmarker price for standard plate remained at $548 per net ton.
In May 2020, U.S. Southeast rebar prices remained well below year-ago levels and also declined over the past three months.

Like most steel products, rebar prices fell throughout the latter part of 2019 as supplies increased and demand slowed. Rebar (steel reinforcing bars) are used to reinforce concrete and masonry structures. After a relatively healthy start to 2020, U.S. construction starts and activity fell off a cliff from March to April and continued through May as fears over the spread and containment of the COVID-19 virus took hold, forcing the delay or cancellation of numerous projects. According to Dodge Data & Analytics, total construction starts declined 25% from March to April 2020.

Still, rebar prices could reverse course as industries begin to restart projects in June and local governments relax stay-at-home orders.

In May 2020, prices for grade J55 electric resistance welded (“ERW”) OCTG material remained well below year-ago levels, and also declined over the past three months.

Demand for OCTG is driven by drilling activity, which is influenced by crude oil prices. Crude oil prices have been free-falling in recent months, as oil demand plunged amid the global COVID-19 pandemic while Saudi Arabia and Russia flooded the market with more oil. In response, a coalition of various oil-producing nations announced production cuts starting in May, but not enough to offset the drop in demand, resulting in storage shortages that led oil prices to go negative for the first time in history during a short period in April.

In response to the abrupt drop in commodity prices, at the end of the first quarter of 2020, U.S. E&P companies announced plans to decrease capital spending, generally in a range of 30% to 50%. In response, the oil and gas rig count began a sharp decline, falling 64.3% from 796 rigs for the week ended January 17, 2020 to 284 rigs as of June 5, 2020, per Baker Hughes, and dropping 70.9% from the same week in 2019, negatively impacting OCTG prices.

Several OCTG mills, including Evraz North America, Tenaris, and U.S. Steel tubular operations, have idled production to counter the drop in demand, as supplies remain plentiful.

Market analysts expect consolidation in the OCTG market, with pipe distributors and smaller suppliers potentially absorbed by large oil companies.
In May 2020, London Metal Exchange ("LME") prices for aluminum and Midwest transaction prices for grade P1020 aluminum were below year-ago levels. In the second half of 2019, aluminum demand was largely hampered by lackluster activity in the automotive and construction end-markets, higher scrap availability, and restrained demand from China amid trade tensions. While prices received a boost in November from optimism surrounding Phase 1 of the trade deal between the U.S. and China, the sentiment quickly became more muted as the actual terms of the deal failed to mention the Section 232 tariffs, then eroded in the new year as concerns emerged regarding China’s first-quarter growth in the wake of the country’s COVID-19 outbreak.

As the virus quickly spread around the world, with COVID-19 classified as a global pandemic in March 2020, aluminum prices continued to decline as demand plummeted. Large swathes of the economy stalled amid government-mandated lockdowns. In particular, the closures of most U.S. automotive plants in March struck a blow to aluminum demand, compounded by slower demand from the transportation, construction, aerospace, and consumer electronics sectors. However, according to ResearchAndMarkets, aluminum demand increased for printed circuit boards for medical devices such as ventilators, as the U.S. Aluminum Association called on state and federal governments to ensure aluminum production was designated an essential industry.

In March, aluminum prices weathered the largest monthly drop since 2011, given falling demand and supply-chain disruptions.

In April, Alcoa, the top U.S. aluminum producer, suspended its January market outlook—a rare move—due to the unknown scope of the pandemic; the January outlook had forecast that global supply would exceed demand by as much as 1.0 million tons in 2020. More recently, analysts caution that continued weak demand from end-markets, coupled with high supplies, could result in an aluminum surplus to the tune of millions of metric tons. As a result, Alcoa announced it will cut the remaining 230,000 metric tons of “uncompetitive” smelting capacity at its Intalco facility in Ferndale, Washington, by the end of July. According to Transport Topics, with this curtailment, only five U.S. smelters continued to operate as of late April, all unprofitably. The closure of Alcoa’s Intalco facility resulted in U.S. aluminum extruders losing their only remaining primary billet supplier west of the Mississippi, according to the Aluminum Extruders Council, which has renewed calls to end Section 232 tariffs on imported aluminum, as such tariffs have hurt extruders forced to import billet from outside of North America due to a lack of domestic options.

More recently, LME aluminum prices showed upward momentum in late May and early June as the economy gradually reopened after COVID-19 lockdowns eased, despite increased aluminum stocks held in LME warehouses. Alcoa expects aluminum demand to recover in the second half of 2020, boosting investment by speculators, although it remains to be seen how the supply side plays out. However, grade P1020 aluminum continues to show signs of depressed pricing given the massive drop in the Midwest transaction premium, which fell by over half its value since last year.
Copper

In May 2020, copper prices on the LME were below year-ago levels, although above prices in April 2020. The International Wrought Copper Council expects copper to be in a surplus of 285,000 metric tons as a result of the pandemic, with that amount increasing to 675,000 metric tons next year. The pandemic has also spurred greater uncertainty in demand factors such as construction and electric cars.

Over the first three months of 2020, the demand for copper from the Chinese market was estimated to have fallen by a quarter. Although much of the world has experienced stay-at-home orders, implemented social distancing, and operated on essential business only, demand from Asia is returning to pre-COVID-19 levels as the region recovers. Supply-side issues are seen in major suppliers Peru and Chile halting production, suspending expansions, and reviewing future plans.

Copper prices were mixed more recently, as prices rose in May after months of decline due the continued increase in Chinese demand and the lifting of lockdowns in other key demand areas such as Europe and the U.S. However, copper pricing remains volatile, given the surplus of material.

Zinc

In May 2020, zinc prices on the LME were below year-ago levels. Like other base metals, zinc prices have fallen for much of 2020 thus far due to the COVID-19 pandemic, which slashed demand across most industries as the economy ground to a near-halt amid lockdowns. Prior to the outbreak, refined zinc registered a small surplus; this surplus has since grown.

The recent three-month price trend was mixed, as zinc prices continued to decline through April before climbing in May as the economy gradually began to reopen. However, there currently remains a lag time between production and end-user sales. In addition, many zinc mines may not come back online anytime soon, as zinc prices remain low, making mining less profitable. The outlook therefore remains cloudy.
Nickel

In May 2020, nickel prices on the LME were above year-ago levels. As nickel was one of only a few base metals to see strong gains in 2019, largely due to supply concerns, these gains buoyed nickel prices above year-ago levels, despite price declines in the fourth quarter of 2019 and through April 2020. Like other base metals, nickel prices fell for most of 2020 thus far due to the COVID-19 pandemic. As nickel is largely used in the production of stainless steel, the collapse in demand for stainless steel negatively impacted nickel.

In addition, as nickel sulfate is a key material used in electric vehicle (“EV”) batteries, demand for the metal has also been hampered by reduced short-term EV sales forecasts as the automotive market deals with supply-chain disruptions. However, as chemistries shift to cathodes with higher nickel content, recovering demand for EVs could boost demand for nickel—and pressure nickel supplies.

The recent three-month price trend was mixed, with nickel prices increasing in May 2020 versus the prior month as the economy gradually reopened. However, while most other base metals also showed upward momentum in early June, nickel prices remained relatively subdued. Dynamics remain in flux, with supply restrictions on one hand, as the Indonesian government announced it would keep a ban on nickel exports in place, and constrained demand on the other.

Stainless Steel

In May 2020, stainless steel prices were below year-ago levels. Stainless steel prices dropped for much of 2020 thus far due to the drop in demand related to the economic response to the COVID-19 pandemic, along with lower prices for nickel, a key input in the production of stainless steel.

Among the stainless steel end-markets that have been hurt include the automotive, construction, chemical processing, and energy industries. According to Recycling Today, the economic downturn resulted in record high global stocks of finished stainless steel.

More recently stainless steel prices were mixed, as prices increased in May, similar to other base metal prices that felt upward momentum by restarting sectors of the economy. However, stainless steel demand from the oil and gas industry is expected to continue falling this year, with a slower recovery expected.
The Metals Monitor provides market value trends in both ferrous and non-ferrous metals. The commodity nature of steel scrap, aluminum ingot, copper cathode, zinc, and nickel often results in volatile market values. Our Metals Monitor reflects pricing and market trends in order to reflect significant developments in the metals markets. The information contained herein is based on a composite of GA's industry expertise, contact with industry personnel, industry publications, liquidation and appraisal experience, and data compiled from a variety of well-respected sources.

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Experience

GA's extensive record of metals inventory valuations features companies throughout the entire metal supply chain, including foreign and domestic metal- and steel-producing mills; metal converters that produce tubing and pipe, as well as expanded, grating, and perforated metal types; metal service centers/processors and distributors; structural and custom fabricators and stampers; manufacturers that utilize metals as raw materials; and scrap yards, recyclers, dealers, and brokers. GA has also appraised precious and specialty metals. GA has appraised metal products with applications in a wide variety of industries, including the automotive, construction, aerospace, industrial machinery, appliance, and electrical equipment markets.

GA's appraisal experience includes valuations of major businesses in the metals industry, including the following sampling:

- Steel mini-mills and producers of flat rolled steel products.
- Globally recognized vertically integrated manufacturers and distributors of steel tube, including OCTG.
- A vertically integrated producer of aluminum with over $1 billion in sales annually and over $130 million in inventory.
- A number of the largest scrap recycling processors in the U.S.
- Well-known service centers across the nation, including a multi-division full-line steel service center.

Moreover, GA has liquidated a number of companies with metal products, including Accurate Metal Solutions, Republic Storage, United Sheet Metal, Charleston Aluminum, Advanced Composites, Aluminum Skylight & Specialty Corporation, Anello Corporation, Apex Pattern, Balox Fabricators, BJS Industries, Buckner Foundry, Crown City Plating, GE Roto Flow, Laird Technology, Maddox Metal Works, Miller Pacific Steel, R.D. Black Sheet Metal, Valley Brass Foundry, and Southline Steel. GA has also been involved in liquidations of metalworking equipment for companies such as CAMtech Precision Manufacturing, Inc., International Piping Systems, Heat Transfer Products, PMC Machining and Manufacturing, Sherrill Manufacturing, Veristeel, Inc., and Weiland Steel, Inc. In addition, GA maintains a staff of experienced metals experts with personal contacts within the metals industry that we utilize for insight and perspective on recovery values.
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