

# China mill margins capped in Feb; ferrous prices extend gains

Chinese steelmakers' margins were mixed, with modest changes in February. Prices for both steelmaking raw materials as well as finished steel extended their gains on improving demand.

The net margin proxy for rebar producers edged up by 4.41 yuan (\$0.64) per tonne month on month to 60.42 yuan per tonne on a daily average basis in February, while that for hot-rolled coil producers shrank by 19.78 yuan per tonne to 184.68 yuan per tonne.

Steelmaking costs and finished steel prices continued to rise last month due to an accelerated demand recovery in the second half of the month and expectations for stimuli from the annual "Two Sessions" parliamentary meetings in early March. But bearish sentiment reappeared after the "Two Sessions", which limited the upside in ferrous prices.

Hot metal costs rose by \$13.63 per tonne month on month to \$450.01 on a daily average basis in February, following an increase of \$19.71 per tonne in January. Aside from improving steel demand, supply concerns triggered by a deadly coal mine collapse in northern China late February also underpinned prices for coking coal and coke last month. Yet persistently thin

margins at mills and recurrent anti-smog production curbs at mills slowed the increase in hot metal costs.

The extended gains in hot metal costs, meanwhile, widened the premiums of hot metal costs over steel scrap to \$35.51 per tonne on a daily average basis in February from January's \$21.33 per tonne, making scrap a more economical option for steelmakers.

## Analyst comments:

Iron ore prices have cooled recently as China's National Development and Reform Commission has increased its supervisory role over iron ore prices to limit speculative bubbles. The Chinese government also announced less vigorous economic stimulus policies than the market expected during the recent 'Two Sessions' government meetings last weekend, cooling some of the recent bullishness in iron ore prices.

During the meeting, authorities set out a GDP year-on-year growth rate target of around 5% for 2023. This is lower than the 2022 target of 5.5% and the 2021 target of above 6%, when the country was initially seeking to rebound from economic activity dampened by Covid-19 in 2020.

	Unit	Monthly average	Previous month average	Change	February maximum	February minimum	Current quarterly average	Previous quarterly average
<b>Iron Ore</b>								
Iron Ore 65% Fe Fines/62% Fe Fines Differential	Usd/tonne	14.90	14.40	▲ 0.50	15.72	13.54	14.66	12.74
Iron ore 66% Fe Concentrates/65% Fe Fines Differential	Usd/tonne	1.60	2.77	▼ 1.18	2.57	0.18	2.18	1.03
<b>Hot Metal</b>								
Hot metal cost (Iron ore 62% Fe fines, PHCC)	Usd/tonne	450.01	436.38	▲ 13.63	463.36	437.57	443.37	393.62
East China Domestic HRC / Hot Metal Spread	Usd/tonne	95.45	110.86	▼ 15.41	108.82	88.33	102.29	92.06
East China Domestic Rebar / Hot Metal Spread	Usd/tonne	79.38	91.53	▼ 12.15	99.64	72.43	84.78	76.00
<b>Scrap</b>								
South Korea import HMS 1&2 VS South Korea import H2	Usd/tonne	22.13	14.20	▲ 7.93	35.16	15.78	18.17	20.96
Vietnam import HMS1&2 VS Vietnam import H2	Usd/tonne	6.88	9.50	▼ 2.63	10.00	5.00	8.33	13.33
China steel scrap premium over hot metal	Usd/tonne	-35.51	-21.33	▼ 14.18	-25.28	-45.76	-29.43	-34.31
Steel billet spread (Steel billet import cfr SE Asia VS scrap HMS cfr Vietnam)	Usd/tonne	161.63	149.75	▲ 11.88	174.50	152.50	155.69	140.47
Steel scrap Shindachi Premium over steel scrap H2 fob Japan	Usd/tonne	21.51	22.60	▼ 1.10	27.96	11.43	22.06	20.45
<b>Steel Mills Margin</b>								
China steel mills' Rebar Margin Proxy	Yuan/tonne	60.42	56.02	▲ 4.41	105.15	20.90	58.47	-38.92
China steel mills' HRC Margin Proxy	Yuan/tonne	184.68	204.45	▼ 19.78	238.60	115.90	193.47	89.27

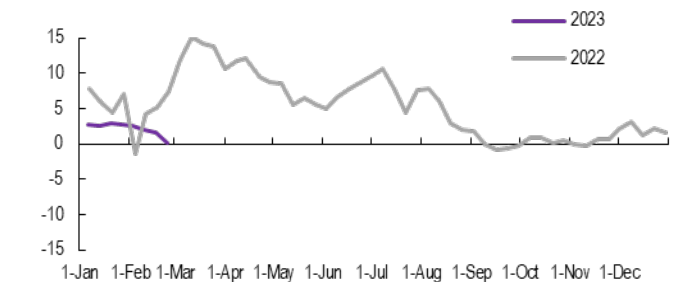
## IRON ORE SPREAD

Iron Ore 65% Fe Fines/62% Fe Fines Differential, usd/tonne



Formula: Fastmarkets' Iron ore 65% Fe Brazil-origin fines, cfr Qingdao, \$/tonne - Fastmarkets' Iron ore 62% Fe fines, cfr Qingdao, \$/tonne  
The differential indicates the price competitiveness between seaborne Brazilian high-grade iron ore fines and seaborne mid-grade iron ore fines driven by the fundamental supply and demand of the two products.

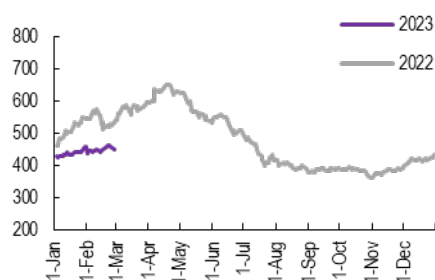
Iron ore 66% Fe Concentrates/65% Fe Fines Differential, usd/tonne



Formula: Fastmarkets' Iron ore 66% Fe concentrate, cfr Qingdao, \$/tonne - Fastmarkets' Iron ore 65% Fe Brazil-origin fines, cfr Qingdao, \$/tonne  
The differential indicates the price competitiveness between seaborne iron ore concentrates and seaborne Brazilian high-grade iron ore fines driven by the fundamental supply and demand of the two products.

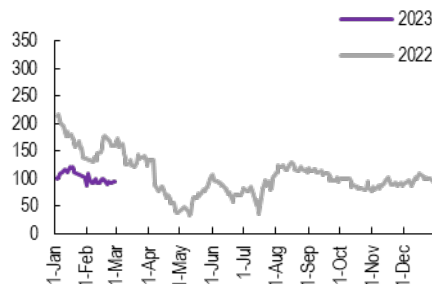
## HOT METAL COST

### Hot metal cost, usd/tonne



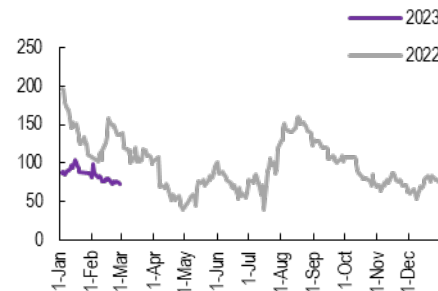
Formula:  $1.6 \times \text{Fastmarkets' Iron ore 62\% Fe fines, cfr Qingdao, \$/tonne} + 0.77 \times \text{Fastmarkets' Premium hard coking coal, cfr Jinglang, \$/tonne}$   
The cost of hot metal in the blast furnace steelmaking route in China with imported mid-grade iron ore fines and imported premium hard coking coal.

### East China Domestic HRC/Hot metal spread, usd/tonne



Formula:  $\text{Fastmarkets' Steel hot-rolled coil domestic, ex-whs Eastern China, \$/tonne (converted to usd/tonne)} - \text{Hot metal cost}$   
The spread between China's domestic hot-rolled coil price in the eastern region and the cost of hot metal indicates the profitability of HRC producing steel mills.

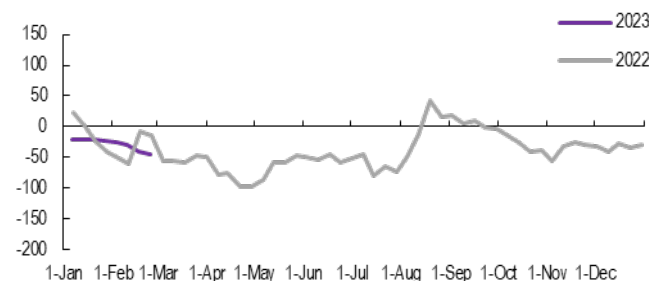
### East China Domestic Rebar/Hot metal spread, usd/tonne



Formula:  $\text{Fastmarkets' Steel reinforcing bar (rebar) domestic, ex-whs Eastern China, \$/tonne (converted to usd/tonne)} - \text{Hot metal cost}$   
The spread between China's domestic reinforcing bar price in the eastern region and the cost of hot metal indicates the profitability of rebar producing steel mills.

## SCRAP

### China steel scrap premium over hot metal, usd/tonne



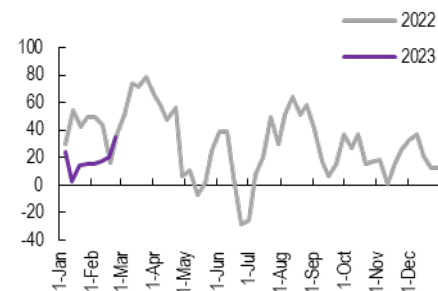
Formula:  $\text{Fastmarkets' Steel scrap heavy scrap domestic, delivered mill China, \$/tonne (converted to usd/tonne)} - \text{Hot metal cost}$   
The premium indicates the price competitiveness between China's domestic steel heavy scrap and the cost of hot metal.

### Steel billet spread (Steel billet import cfr SE Asia VS scrap HMS cfr Vietnam), usd/tonne



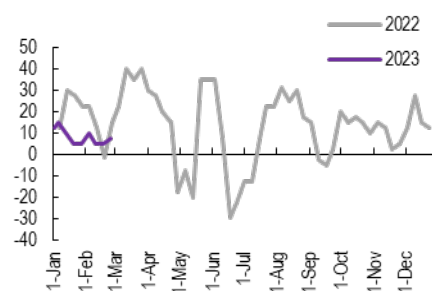
Formula:  $\text{Fastmarkets' Steel billet import, cfr Southeast Asia, \$/tonne} - \text{Fastmarkets' Steel scrap HMS 1\&2 (80:20), cfr Vietnam, \$/tonne}$   
The spread indicates the price competitiveness between Southeast Asia imported steel billet and Vietnam imported recycled steel.

### South Korea import HMS 1&2/South Korea import H2 Differential, usd/tonne



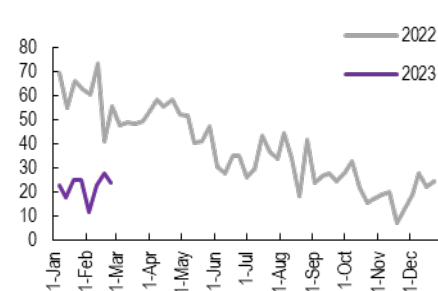
Formula:  $\text{Fastmarkets' Steel scrap HMS 1\&2 (80:20) deep-sea origin import, cfr South Korea, \$/tonne} - \text{Fastmarkets' Steel scrap H2 Japan origin import, cfr main port South Korea, \$/tonne (converted to usd/tonne)}$   
The premium for deep-sea origin HMS 1&2 scrap over Japan-origin H2 scrap on a cfr South Korea basis shows which material is more competitive for Korean steelmakers to purchase.

### Vietnam import HMS1&2/Vietnam import H2 Differential, usd/tonne



Formula:  $\text{Fastmarkets' Steel scrap HMS 1\&2 (80:20), cfr Vietnam, \$/tonne} - \text{Fastmarkets' Steel scrap H2 Japan-origin import, cfr Vietnam, \$/tonne}$   
The premium for deep-sea origin HMS 1&2 scrap over Japan-origin H2 scrap on a cfr Vietnam basis shows which material is more competitive for Vietnamese steelmakers to purchase.

### Steel scrap Shindachi premium over steel scrap H2 fob Japan, usd/tonne



\*Formula:  $\text{Fastmarkets' Steel scrap Shindachi export, fob main port Japan, \$/tonne (converted to usd/tonne)} - \text{Fastmarkets' Steel scrap H2 export, fob main port Japan, \$/tonne (converted to usd/tonne)}$   
The premium for Japan export Shindachi over Japan export H2 shows how competitive high-grade busheling scrap prices are compared with those for the base-grade heavy scrap material.

## STEEL MILLS MARGIN

### China's Steel Mill rebar margin proxy, yuan/tonne



Formula:  $\text{Fastmarkets' Steel reinforcing bar (rebar) domestic, ex-whs Eastern China, \$/tonne} - 1.6 \times \text{Fastmarkets' Iron ore 62\% Fe fines, cfr Qingdao, \$/wet tonne} - 0.5 \times \text{China Domestic Coke price - Other costs (1250\$/tonne)}$   
The profitability of China's rebar producing steel mills with portside purchased iron ore and domestic coke.

### China's Steel Mill HRC margin proxy, yuan/tonne



Formula:  $\text{Fastmarkets' Steel hot-rolled coil domestic, ex-whs Eastern China, \$/tonne} - 1.6 \times \text{Fastmarkets' Iron ore 62\% Fe fines, cfr Qingdao, \$/wet tonne} - 0.5 \times \text{China Domestic Coke price - Other costs (1250\$/tonne)}$   
The profitability of China's HRC producing steel mills with portside purchased iron ore and domestic coke.