Metals Market Index MMi

MMi Dashboard

Iron Ore Price Indices

Iron Ore Port Stock (FOT Qingdao) IOPI62 62% Fe Fines RMB/t	Iron Ore Port Stock (FOT Qingdao) IOPI65 65% Fe Fines RMB/t	Iron Port Stock (FOT Qingdao) IOPI58 58% Fe Fines RMB/t
892	1004	793
-22 -2.41%	-22.00 -2.14%	-4 -0.50%
Apr 20th, 2023	Apr 20th, 2023	Apr 20th, 2023

Iron Ore Seaborne (CFR Qingdao) IOSI62 62% Fe Fines USD/dmt	Iron Ore Seaborne (CFR Qingdao) IOSI65 65% Fe Fines USD/dmt	Iron Ore Port Stock (FOT Qingdao) IOPLI 62.5% Fe Lump RMB/t
145.75	149.10	1010
0.00 0.00%	1.65 1.12%	10 1.00%
Apr 20th, 2023	Apr 20th, 2023	Week Ending Apr 14th, 2023

Exchange Traded Contracts

DCE Iron Ore 62% Fines I2309 (Jan) RMB/t (3pm close)	SGX Iron Ore (CFR Qingdao) 62% Fe Fines May 23 USD/dmt	SHFE Rebar RB2310 (Jan) RMB/t
761.50	115.45	3914
-16.00 -2.06%	0.45 0.39%	-13 -0.33%
Apr 20th, 2023 (3pm close)	Apr 20th, 2023 (5.30 pm Print)	Apr 20th, 2023 (3pm close)

Freight Rates / Steel Price

C3, Tubarao - Qingdao USD/t	C5, W. Australia - Qingdao USD/t	Steel Rebar (China Domestic) RMB/t
21.18	7.71	4060
-0.38 -1.78%	-0.01 -0.13%	-70 -1.69%
Apr 19th, 2023	Apr 19th, 2023	Week Ending Apr 14th, 2023

Inventory Levels / Steel Price

Iron Ore Inventory at Chinese Ports (35) million tonnes	Steel Inventory in China million tonnes	Steel HRC (China Domestic) RMB/t
125.77	16.87	4200
-2.10 -1.64%	-0.22 -1.28%	-50 -1.18%
Week Ending Apr 14th, 2023	Week Ending Apr 14th, 2023	Week Ending Apr 14th, 2023

IRON ORE PORT STOCK INDEX (IOPI)

Apr 20th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne [1]						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low [2]	High [2]	Price	Change	Change %	MTD	YTD	Low [2]	High [2]
IOPI62	62% Fe Fines	**892**	-22	-2.4%	869	880	858	892	**120.47**	-3.53	-2.8%	120.06	120.58	117.93	122.93
IOPI58	58% Fe Fines	**793**	-4	-0.5%	813	798	761	793	**107.84**	-0.97	-0.9%	113.29	110.17	105.29	110.04
IOPI65	65% Fe Fines	**1004**	-22	-2.1%	981	992	970	1003	**136.09**	-3.59	-2.6%	136.05	136.43	133.84	138.73

IRON ORE SEABORNE INDEX (IOSI)

Apr 20th, 2023		CFR Qingdao, USD/dry tonne						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low [2]	High [2]
IOSI62	62% Fe Fines	**145.75**	0.00	0.00%	114.21	124.26	83.90	156.65
IOSI65	65% Fe Fines	**149.10**	1.65	1.12%	124.04	140.22	94.45	182.85

MARKET COMMENTARY

DCE iron ore futures declined by 2.62% today, the main contract closed at 761.5.The traders' willingness to ship is better.The steel mills are active to purchase.The overall trading sentiment of the market is better.PBF at Shandong port deal 874 yuan/mt,decrease 15yuan/mt; PBF at Tangshan port deal 905yuan/mt,decrease 7-12yuan/mt. Today's market is still shrouded in pessimistic expectations that the National Development and Reform Commission will closely monitor the dynamics of the iron ore market, and the iron ore futures market will weaken again. According to SMM tracking, some steel mills in Shanxi, Shaanxi, and Sichuan regions are considering production reduction plans. It is expected that the current production of molten iron will soon reach its peak and there will be a slight decline in the future. Therefore, market confidence is lacking. With the rebound in the supply of scrap steel at the raw material end, the improvement in the cost-effectiveness of scrap steel, and the subsequent increase in overseas iron ore shipments, it is expected that there is still room for exploration in the medium to long term iron ore prices.

IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending Apr 14th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne [3]						
Index	Fe Content	Price	W-o-W	Change %	MTD	YTD	Low [2]	High [2]	Price	W-o-W	Change %	MTD	YTD	Low [2]	High [2]
IOPLI62	62.5% Fe Lump	**1010**	10	1.0%	922	1033	770	1330	**137.26**	6.97	5.35%	118.86	138.01	94.72	183.92

IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

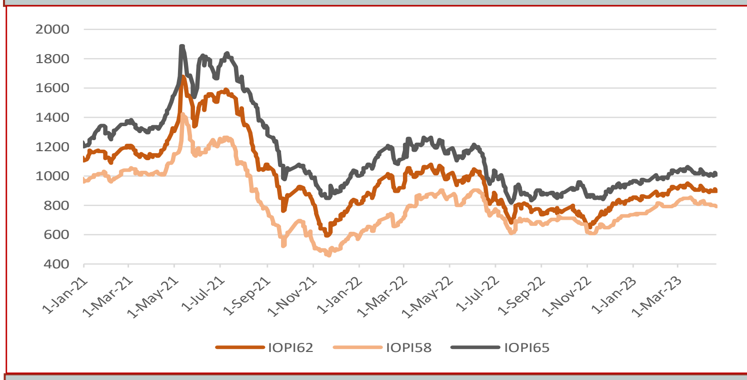
Week Ending Apr 14th, 2023				RMB/tonne (excluding tax) [3]				USD/tonne (excluding tax) [3]			
Province	Region	Product	Basis	This week	Change %	Low [2]	High [2]	This week	Change %	Low [2]	High [2]
Hebei	Hanxing	66% Fe Concentrate	Dry	**1025**	-2.8%	779	1645	**149.08**	-2.82%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	**1065**	-0.9%	780	1630	**154.90**	-0.90%	110.51	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	**805**	-2.4%	620	1310	**117.09**	-2.40%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	**1041**	-3.2%	800	1752	**151.41**	-3.14%	117.19	272.32

Week Ending Apr 14th, 2023	This week	Change %	Low [2]	High [2]
China Mines Concentrate Composite Index RMB/WT	941.87	-1.77%	706.36	1511.22

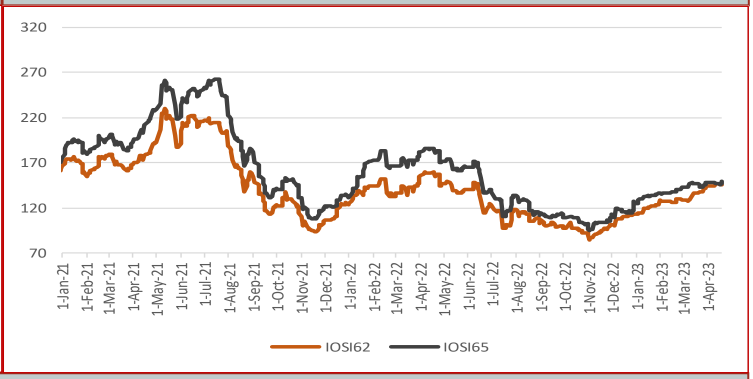
[1] Exchange rate applied: RMB/USD = 6.7522 [2]Last 12 months

[3] Weekly exchange rate applied: RMB/USD =6.87528

IRON ORE PORT INDEX, FOT QINGDAO (RMB/WT)



IRON ORE SEABORNE INDEX, CFR QINGDAO (USD/DMT)



IRON ORE PORT STOCK INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Apr 20th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	December	January	February	March	MTD	QTD	YTD	December	January	February	March	MTD	QTD	YTD
IOPI62	62% Fe Fines	822	856	892	924	**869**	881	880	109.43	117.00	121.64	124.91	**120.06**	120.90	120.58
IOPI58	58% Fe Fines	711	751	799	832	**813**	792	798	95.17	103.34	109.79	113.41	**113.29**	109.35	110.17
IOPI65	65% Fe Fines	935	968	1003	1036	**981**	993	992	124.90	132.80	137.36	140.49	**136.05**	136.72	136.43

IRON ORE SEABORNE INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Apr 20th, 2023		CFR Qingdao, USD/dry tonne						
Index	Fe Content	December	January	February	March	MTD	QTD	YTD
IOSI62	62% Fe Fines	108.92	119.76	127.73	134.77	**112.14**	113.80	124.26
IOSI65	65% Fe Fines	116.83	132.39	138.06	145.14	**122.86**	124.10	140.22

FREIGHT RATES

Apr 19th, 2023		FREIGHT RATES - DRY BULK US$/wet tonne				
Route	Designation		Change	Change %	Low [2]	High [2]
W. Australia - Qingdao	C5	**7.71**	-0.01	-0.13%	3.57	16.77
Tubarao - Qingdao	C3	**21.18**	-0.38	-1.78%	6.70	36.40

IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

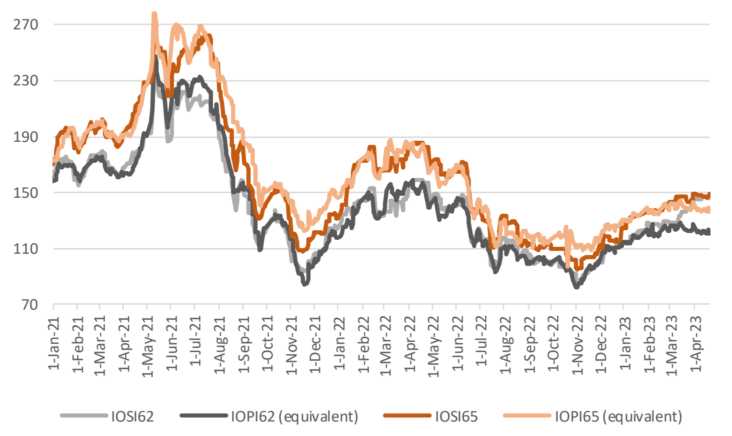
Week Ending Apr 14th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne [1]						
Index	Fe Content	December	January	February	March	MTD	QTD	YTD	December	January	February	March	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	922	964	988	1012	**925**	922	1032	117.06	126.47	129.95	131.15	**119.39**	119.51	137.99

IRON ORE INDEX PREMIUMS/DISCOUNTS

Apr 20th, 2023		PORT STOCK INDEX (RMB/WT)	
Index	Fe Content	Spread to IOPI62	% Spread to IOPI62
IOPI58	58% Fe Fines	**-99**	-11.10%
IOPI65	65% Fe Fines	**112**	12.56%

Apr 20th, 2023		SEABORNE INDEX (USD/DMT)	
Index	Fe Content	Spread to IOSI62	% Spread to IOSI62
IOSI65	65% Fe Fines	**3.35**	2.30%

IRON ORE INDEX COMPARISONS (USD/DMT)



CHINA DOMESTIC COMPOSITE MINES INDEX (RMB/Wet Tonne, including VAT)

IRON ORE BRAND SPOT PRICE ASSESMENTS

Apr 20th, 2023	PORT STOCK INDEX (RMB/WT)		
	Price	Change	Diff to IOPI62
Roy Hill	835	-22	-57
SIMEC Fines	765	-22	-127
PB Fines	860	-21	-32
Newman Fines	861	-22	-31
MAC Fines	842	-22	-50
Jimblebar Blended Fines	757	-22	-135
Carajas Fines	1073	-22	181
Brazilian SSF	856	-23	-36
Brazilian Blend Fines	873	-22	-19
RTX Fines	775	-22	-117
West Pilbara Fines	803	-22	-89

Apr 20th, 2023	SEABORNE INDEX (USD/DMT)		
	Price	Change	Diff to IOSI62
Roy Hill	141.25	0.00	-4.50
SIMEC Fines	137.75	0.00	-8.00
PB Fines	142.00	0.00	-3.75
Newman Fines	144.90	0.00	-0.85
MAC Fines	142.00	0.00	-3.75
Jimblebar Blended Fines	134.40	0.00	-11.35
Carajas Fines	175.30	0.00	29.55
Brazilian SSF	149.50	0.00	3.75
Brazilian Blend Fines	151.15	0.00	5.40
RTX Fines	135.65	0.00	-10.10
West Pilbara Fines	140.00	0.00	-5.75

Apr 20th, 2023	PORT STOCK INDEX (RMB/WT)		
	Price	Change	Diff to IOPI58
SSF	793	-4	0
FMG Blended Fines	803	-4	10
Robe River	804	-4	11
Western Fines	807	-4	14
Atlas Fines	800	-4	7
Yandi	786	-4	-7

IRON ORE INDEX NORMALISATION DIFFERENTIALS

Port Stock Index Product Differentials (RMB/wet tonne)

	Applicable range	Value	Change
1% Fe	High Grade Fe 60 - 63%	5.00	0.00
	High Grade Fe 63 - 64%	5.00	0.00
	High Grade Fe 64 - 65%	5.00	0.00
	High Grade Fe 65 - 65.5%	5.00	0.00
	Low Grade Fe	19.00	0.00
1% Alumina	High Fe Grade Al <2.25%	41.00	0.00
	High Fe Grade Al 2.25-4%	5.00	0.00
	Low Fe Grade Al <2.25%	90.00	-8.00
	Low Fe Grade Al 2.25-4%	18.00	2.00
1% Silica	High Fe Grade Si <4%	13.00	0.00
	High Fe Grade Si 4-6.5%	14.00	0.00
	Low Fe Grade	17.00	0.00
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	9.00	-1.00
	High Fe Grade 0.115%<P<0.15%	9.00	-1.00
	Low Fe Grade 0.09<P<0.1%	5.00	0.00

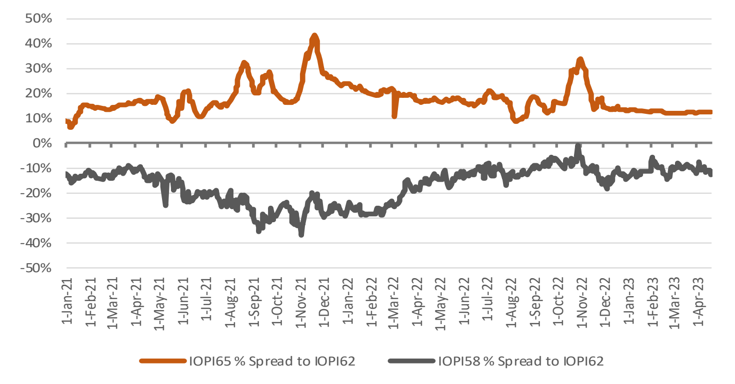
Seaborne Index Product Differentials (USD/dry tonne)

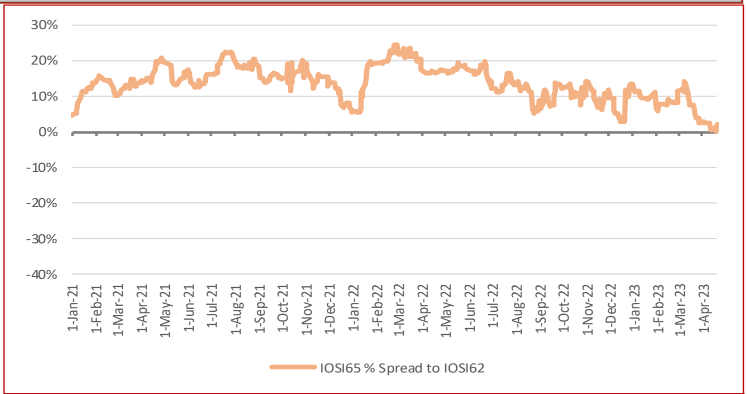
	Applicable range	Value	Change
1% Fe	High Grade Fe 60 - 63%	2.00	-0.75
	High Grade Fe 63 - 64%	2.00	0.75
	High Grade Fe 64 - 65%	2.00	0.75
	High Grade Fe 65 - 65.5%	2.00	0.75
1% Alumina	High Fe Grade Al <2.25%	0.25	-0.50
	High Fe Grade Al 2.25-4%	0.25	0.00
1% Silica	High Fe Grade Si <4%	1.50	0.00
	High Fe Grade Si 4 - 6.5%	4.25	0.00
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.50	0.00
	High Fe Grade 0.115%<P<0.15%	6.50	0.25

Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

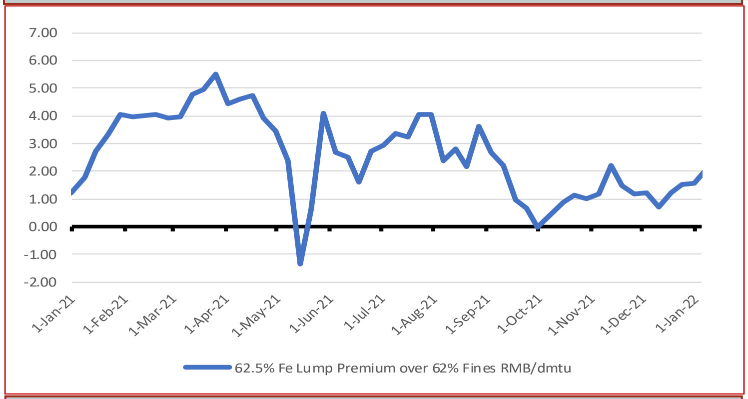
Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-100.00	0.00	Fangcheng	-25.00	0.00	Lanshan	0.00	0.00	Rizhao	0.00	0.00
Beilun	0.00	0.00	Jiangyin	-30.00	0.00	Lianyungang	0.00	0.00	Shekou	0.00	0.00
Caofeidian	-10.00	0.00	Jingtang	-10.00	0.00	Majishan	0.00	0.00	Taicang	-30.00	0.00
Dalian	0.00	0.00	Lanqiao	0.00	0.00	Qingdao	0.00	0.00	Tianjin	-15.00	0.00

IRON ORE INDEX PREMIUMS/DISCOUNTS

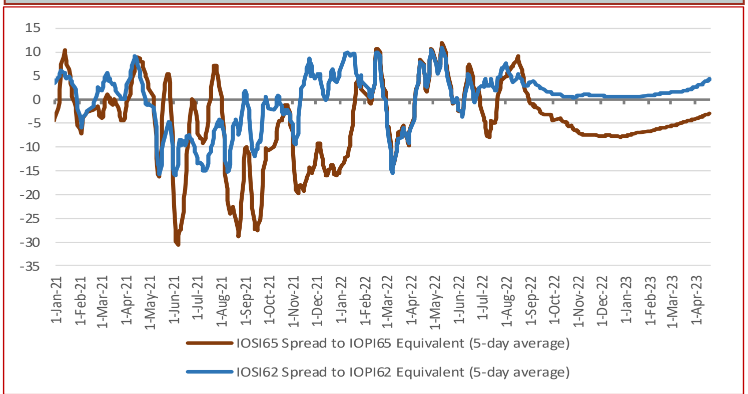




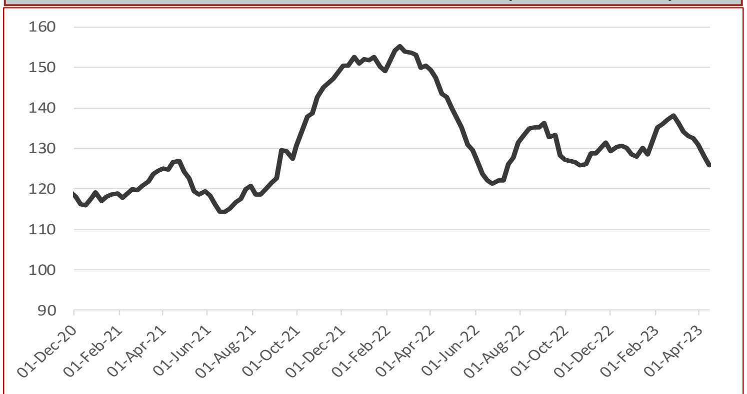
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



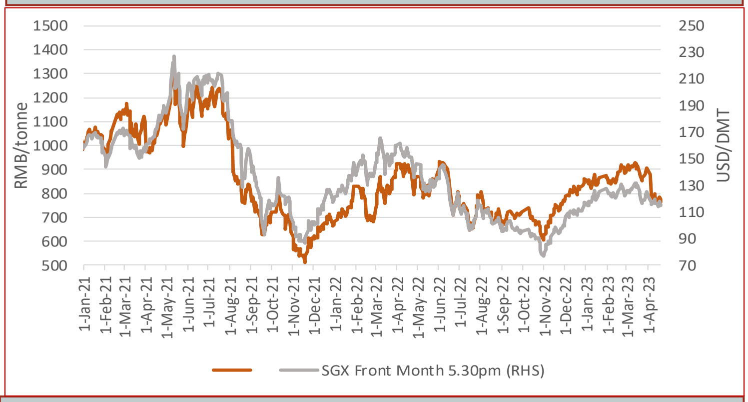
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

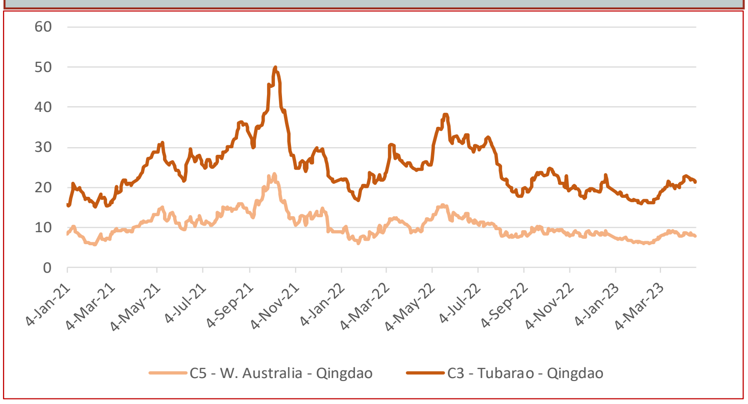
Week Ending Apr 14th, 2023

Province	This week	Change %	Low [2]	High [2]
Jingtang	12.59	0.48%	9.84	19.20
Qingdao	24.55	-0.41%	9.41	26.24
Caofeidian	12.41	2.73%	9.05	16.29
Tianjin	8.83	-4.33%	7.14	12.97
Rizhao	17.03	2.16%	9.44	19.26
Total (35 Ports)	125.77	-1.64%	98.80	155.39

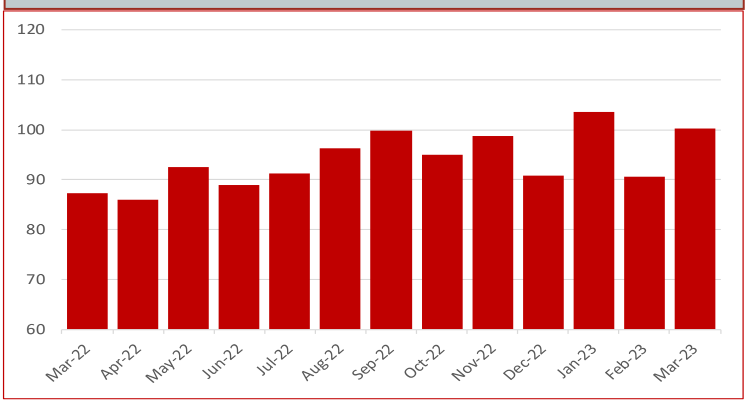
IRON ORE FUTURES CONTRACTS

	DCE (RMB/WMT)			SGX (USD/DMT)		
Closing Date	Apr 20th, 3pm close			Apr 20th, 5:30pm		
Contract	I2309	Change	Change %	May. 23	Change	Change %
Closing Price	761.50	-16.00	-2.06%	115.45	0.45	0.39%
Vol traded ('000 lots)	80.16	10.27	14.69%	4.39	0.53	13.79%
Open positions ('000 lots)	77.09	2.46	3.30%	26.81	0.09	0.33%
Day Low	757.0	-16.50	-2.13%	114.65	-2.05	-1.76%
Day High	776.5	-15.00	-1.90%	117.55	-1.25	-1.05%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne

Product	2023/4/14	Change	Change %
ReBar HRB400 ϕ18mm	4,060	-70	-1.69%
Wirerod Q300 ϕ6.5mm	4,270	-70	-1.61%
HRC Q235/SS400 5.5mm*1500*C	4,200	-50	-1.18%
CRC SPCC/ST12 1.0mm*1250*2500	4,670	-50	-1.06%
Medium & Heavy Plate Q235B 20mm	4,380	-30	-0.68%
GI ST02Z 1.0mm*1000*C	5,000	-40	-0.79%
Colour Coated Plate	7,450	0	0.00%

CHINESE STEEL MILL PROFITABILITY

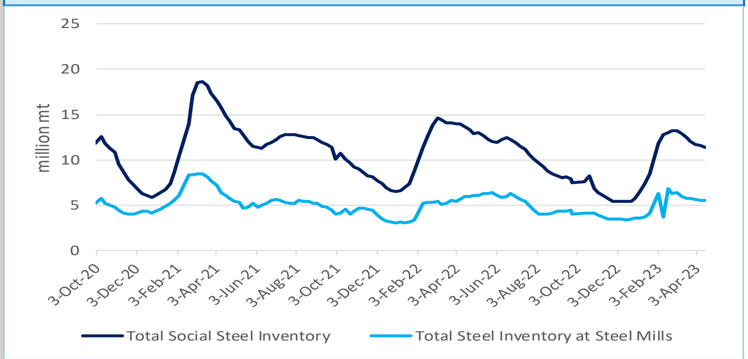
SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)

Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt exluding tax	146.75	2	Mmi CFR Equivalent index for 1st Feb
Coke	2,810	-50	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	3,070	-50	steel scrap (6mm) in Zhangjiagang, exl. tax
Billet Cost	3,537	-29	Q234, incl. tax
Rebar cost - Blast furnace	4,063	0	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	-51	-48	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	4,042	-33	based on actual weight, incl. tax
Hot-rolled coil proft - Blast furnace	168	3	based on Shanghai prices, incl. tax

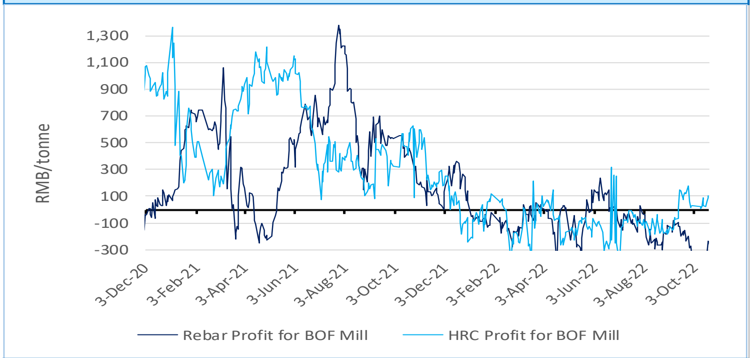
Note: 1. Costs in the table are caluclated based on todays market prices and facout our management, sales, financial and depreciations fe

2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

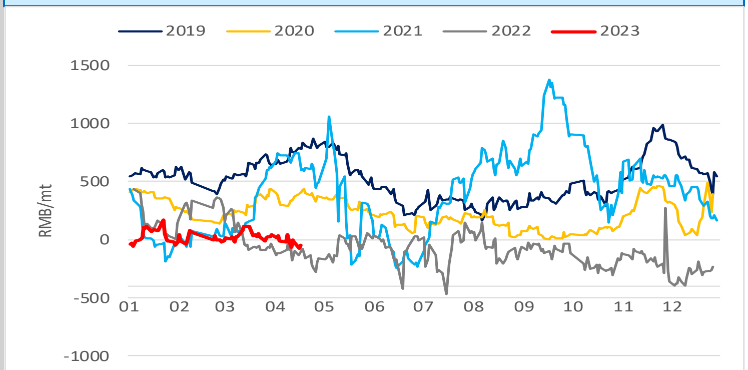
CHINESE STEEL INVENTORIES



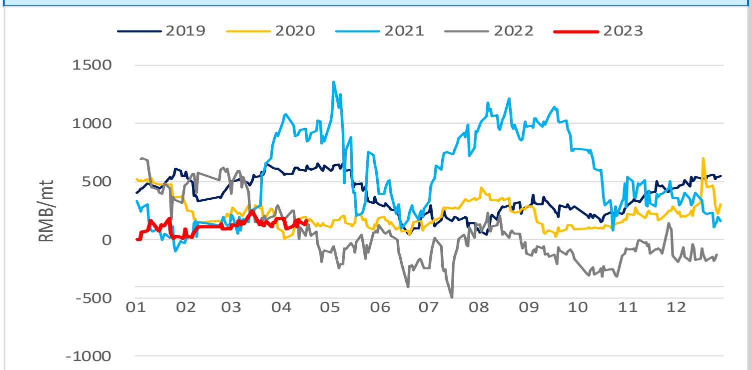
CHINESE STEEL MILL PROFITABILITY



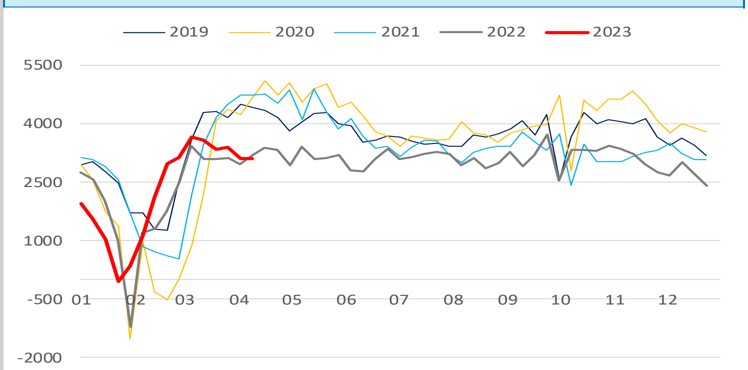
CHINESE STEEL MILL PROFITABILITY—Rebar



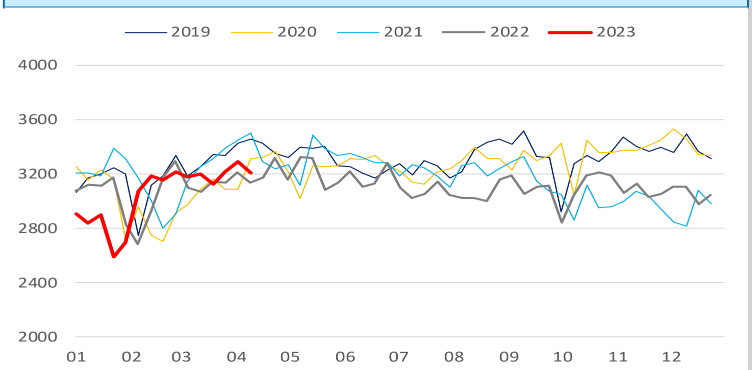
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



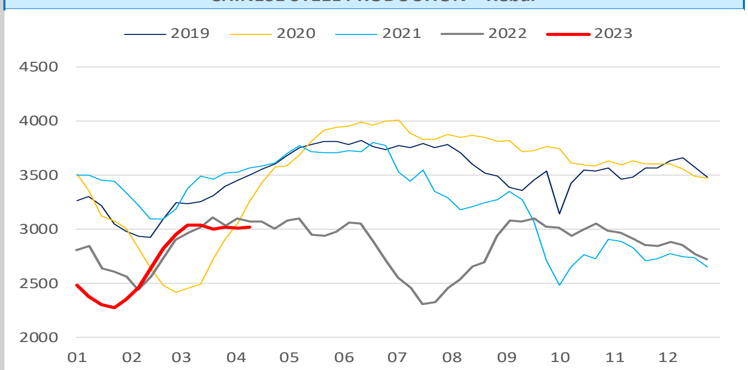
CHINESE STEEL CONSUMPTION—Rebar



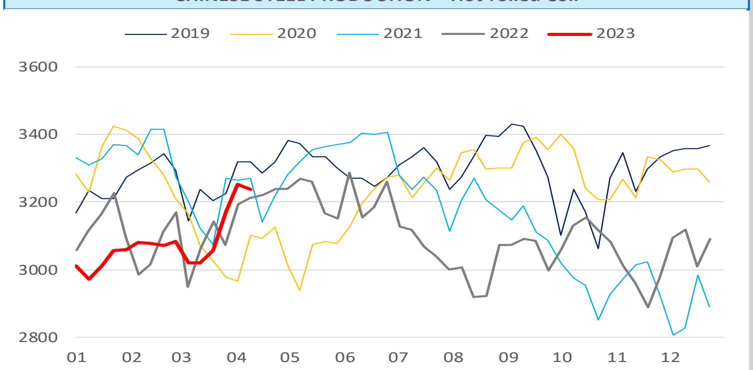
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



CHINESE STEEL PRODUCTION—Rebar



CHINESE STEEL PRODUCTION—Hot-rolled Coil



IRON ORE INDEX SPECIFICATIONS, COMPILATION RATIONALE AND DATA EXCLUSIONS

Iron Ore Index Specifications (Port and Seaborne)

	65% Fe Fines	62% Fe Fines	58% Fe Fines	62.5% Fe Lump
Fe %	65.00	62.00	58.00	62.50
Alumina %	1.40	2.25	2.25	1.50
Silica%	1.50	4.00	5.50	3.50
Phosphorus %	0.06	0.09	0.05	0.08
Sulphur %	0.01	0.02	0.02	0.02
Moisture %	8.00	8.00	9.00	4.00
Sizing	Granular size below 10mm for at least 90% of cargo; maximum of 40% below 150 micron			Size below 6.3mm max 15% Size above 31.15mm max 25%
Pricing Point	Qingdao Port (FOT and CFR respectively)			FOT Qingdao Port
Timing (Seaborne)	Loading within 4 weeks, Delivery within 8 weeks			Delivery within 2 weeks
Payment Terms	L/C at sight			L/C at sight or CAD

Iron Ore Index Compilation Rationale and Data Exclusions

MMi iron ore indices are compiled from data provided by companies that are part of the iron ore supply chain and involved in spot market transactions. The indices are calculated using detailed transaction-level data submitted to MMi by these companies. This data is normalised to the appropriate specifications and screened to remove outliers before volume-weighted average prices are calculated from the remaining core set of data.

For more details on MMi's iron ore methodology please download the guide published on our website at: www.mmiprices.com

Data Exclusions*

	62%	58%	65%
Port Index	0	0	0
Seaborne index	0		0
Lump Index 62.5	0		

* Number of price submissions for iron ore indices that were excluded from index calculations today as they were anomalous and could not be verified

IRON ORE DOMESTIC CONCENTRATE INDEX CALCULATION METHODOLOGY

The compilation method for price index generally refers to the compilation method of CPI price index and other price indices, breakdown the price data and calculate the average value according to a certain method, taking the vertical axis as the regional composite index (average of different grade index) and the horizontal axis as the grade composite index (average of different regional index), a total composite index for domestic ore can be output ultimately. The process system is also adopted in the calculation i.e. each sub-index can be obtained as well.

AVERAGE IRON ORE SPECIFICATIONS APPLIED FOR BRAND PRICE ASSESSMENTS

PORT STOCK BRANDS

Apr 20th, 2023	Specifications applied for 62% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture
Roy Hill	60.88%	2.35%	4.45%	0.055%	9.26%
SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%
PB Fines	61.64%	2.31%	3.87%	0.099%	9.45%
Newman Fines	62.49%	2.31%	3.98%	0.090%	7.72%
MAC Fines	60.43%	2.38%	4.64%	0.078%	7.57%
Jimblebar Blended Fines	60.87%	2.95%	4.53%	0.111%	7.32%
Carajas Fines	64.90%	1.39%	1.82%	0.080%	7.78%
Brazilian SSF	62.00%	1.00%	6.50%	0.040%	6.00%
Brazilian Blend Fines	62.56%	1.58%	4.79%	0.091%	8.72%
RTX Fines	61.00%	3.10%	4.50%	0.135%	7.50%
West Pilbara Fines	60.10%	2.30%	4.70%	0.075%	8.50%

Apr 20th, 2023	Specifications applied for 58% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture
SSF	56.49%	3.20%	6.19%	0.065%	9.18%
FMG Blended Fines	58.20%	2.43%	5.54%	0.057%	8.29%
Robe River	56.44%	3.16%	5.73%	0.042%	8.44%
Western Fines	57.88%	2.87%	7.50%	0.062%	7.45%
Atlas Fines	58.00%	1.85%	5.50%	0.090%	9.00%
Yandi	56.87%	1.58%	6.41%	0.042%	9.53%

SEABORNE BRANDS

	Specifications applied for 62% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture
Roy Hill	60.70%	2.30%	4.90%	0.055%	8.00%
SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%
PB Fines 62%	62.00%	2.60%	4.30%	0.090%	9.50%
Newman Fines	62.30%	2.40%	4.30%	0.095%	8.00%
MAC Fines	60.80%	2.35%	4.40%	0.075%	7.80%
Jimblebar Blended Fines	60.50%	3.10%	4.80%	0.120%	7.80%
Carajas Fines	65.10%	1.50%	1.70%	0.080%	8.50%
Brazilian SSF	62.00%	1.00%	6.50%	0.040%	6.00%
Brazilian Blend Fines	63.00%	1.50%	5.00%	0.070%	7.00%
RTX Fines	61.00%	3.10%	4.50%	0.135%	7.50%
West Pilbara Fines	60.10%	2.30%	4.70%	0.075%	8.50%

BLOOMBERG TICKERS

	PORT STOCK INDICES	
	FOT Qingdao (RMB/wet tonne)	CFR Qingdao Equivalent (USD/dry tonne)
IOPI62	IRCNQ001	IRCNQ004
IOPI58	IRCNQ002	IRCNQ005
IOPI65	IRCNQ003	IRCNQ006
IOPLI62	IRCN0036	IRCN0037

	SEABORNE INDICES
	CFR Qingdao (USD/DMT)
IOSI62	IRCN0034
IOSI65	IRCN0035

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