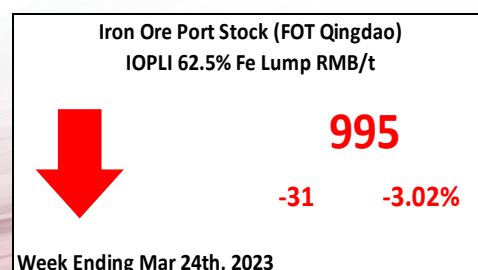
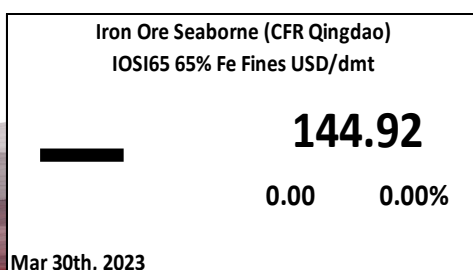
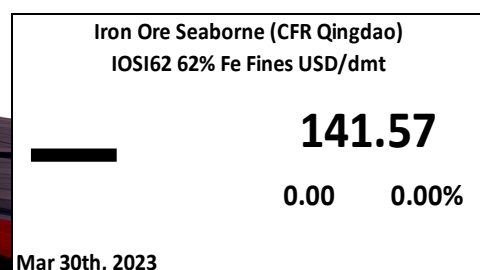
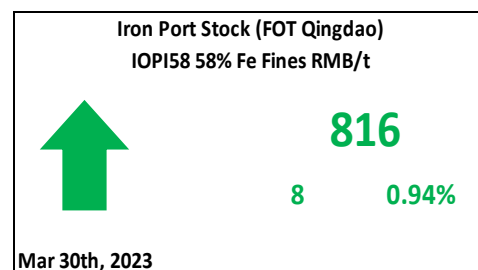
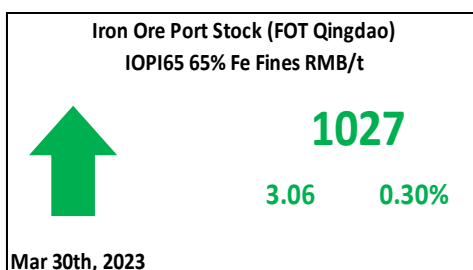
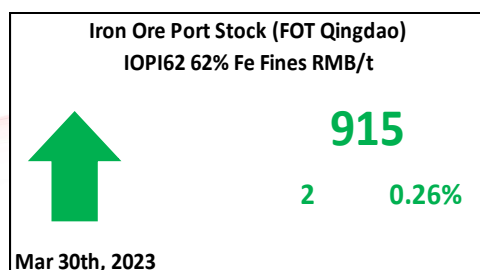


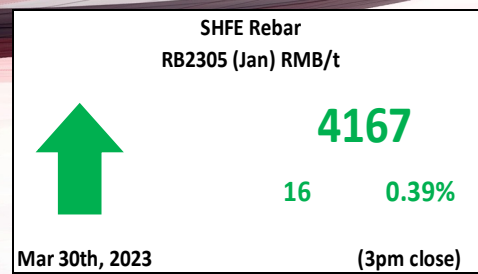
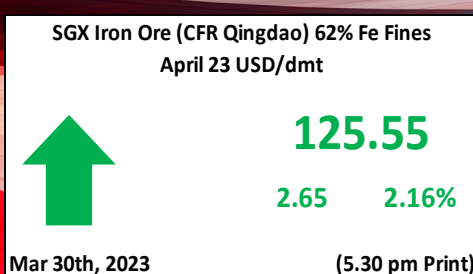
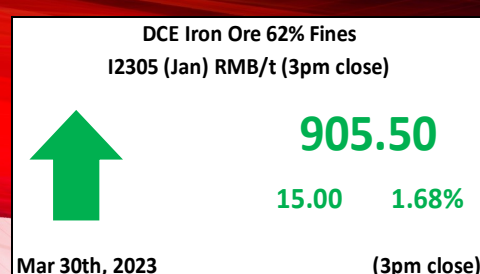


MMi Dashboard

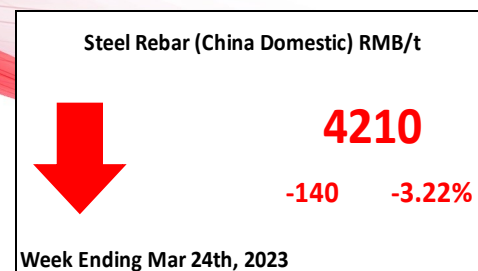
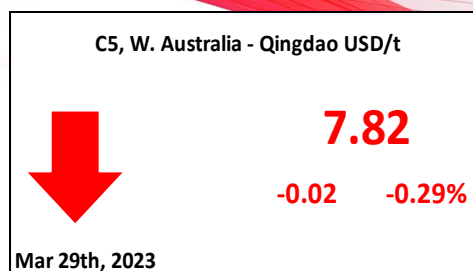
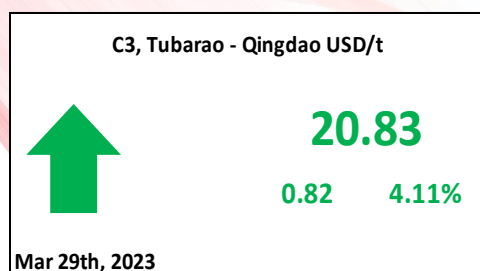
Iron Ore Price Indices



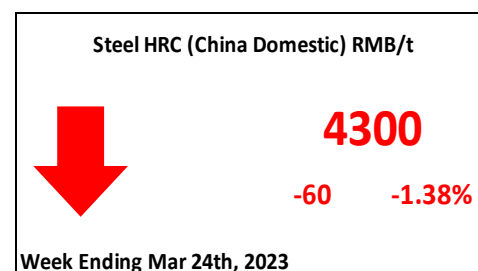
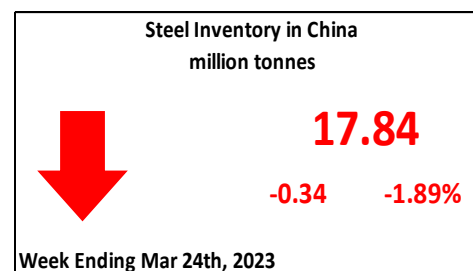
Exchange Traded Contracts



Freight Rates



Inventory Levels



IRON ORE PORT STOCK INDEX (IOPI)

Mar 30th, 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	915.36	2	0.3%	869	880	858	892	123.91	0.12	0.1%	120.06	120.58	117.93	122.93
IOPI58	58% Fe Fines	815.6	8	0.9%	813	798	761	793	111.19	0.89	0.8%	113.29	110.17	105.29	110.04
IOPI65	65% Fe Fines	1027.06	3	0.3%	981	992	970	1003	139.51	0.19	0.1%	136.05	136.43	133.84	138.73

IRON ORE SEABORNE INDEX (IOSI)

MARKET COMMENTARY

Mar 30th, 2023		CFR Qingdao, USD/dry tonne							DCE iron ore futures market rose sharply trends in the afternoon, the main contract closed 905.5, an increase of 1.91% throughout the day, some traders were active to sell, but some steel mills tended to be wait-and-see, and purchasing enthusiasm is not high, today's overall market transaction atmosphere in general. PBF at Shandong port dealt 910-915 yuan/mt, increased 2-7 yuan/mt over yesterday. PBF at Tangshan port dealt 920-923 yuan/mt, the increased 2-5 yuan/mt over yesterday. Today, steel inventory continues to go slightly to storage, the apparent demand increased slightly compared with the previous month; Superposition Prime Minister said the main economic indicators in March, iron ore prices surged late in the day. Considering the release of PMI data in March tomorrow, iron ore is still expected to have rising power, but the current iron ore price is on the high side, steel mills purchasing enthusiasm is weak, spot transaction is weak, suppress the upward space of mine price, it is expected that the high and volatile operation of mine price tomorrow.
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²	
IOSI62	62% Fe Fines	141.57	0.00	0.00%	111.61	123.30	83.90	159.45	
IOSI65	65% Fe Fines	144.92	0.00	0.00%	122.05	139.87	94.45	185.82	

IRON ORE PORT LUMP INDEX (IOPLI)

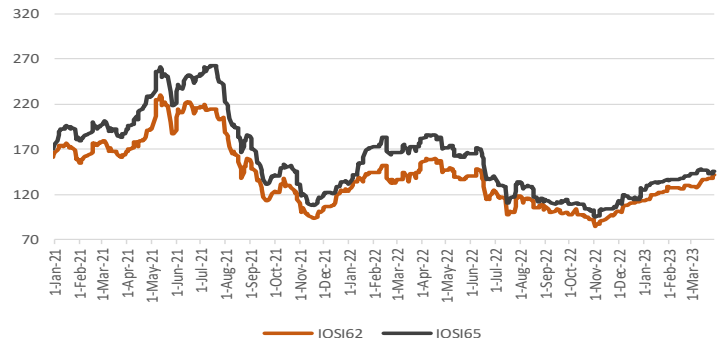
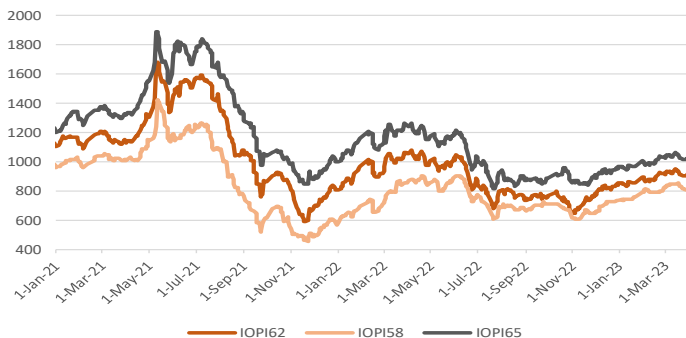
Week Ending Mar 24th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne ³						
Index	Fe Content	Price	W-o-W	Change %	MTD	YTD	Low ²	High ²	Price	W-o-W	Change %	MTD	YTD	Low ²	High ²
IOPLI62	62.5% Fe Lump	995	-31	-3.0%	917	1033	770	1405	128.66	-4.59	-3.45%	118.08	138.23	95.00	199.00

IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending Mar 24th, 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	1107	2.3%	779	1645	161.25	2.89%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	1085	-0.9%	780	1630	158.05	-0.35%	110.51	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	845	0.0%	620	1310	123.09	0.57%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	1133	2.6%	800	1752	165.04	3.21%	117.19	272.32
Week Ending Mar 24th, 2023				This week	Change %	Low ²	High ²	¹ Exchange rate applied: RMB/USD = 6.7522 ² Last 12 months ³ Weekly exchange rate applied: RMB/USD = 6.8651			
China Mines Concentrate Composite Index RMB/WT				983.82	-0.06%	706.36	1511.22				

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

Mar 30th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	November	December	January	February	MTD	QTD	YTD	November	December	January	February	MTD	QTD	YTD
IOPI62	62% Fe Fines	714	822	856	892	869	881	880	92.18	109.43	117.00	121.64	120.06	120.90	120.58
IOPI58	58% Fe Fines	635	711	751	799	813	792	798	82.39	95.17	103.34	109.79	113.29	109.35	110.17
IOPI65	65% Fe Fines	865	935	968	1003	981	993	992	112.37	124.90	132.80	137.36	136.05	136.72	136.43

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

FREIGHT RATES

Mar 30th, 2023		CFR Qingdao, USD/dry tonne							Mar 29th, 2023		FREIGHT RATES - DRY BULK US\$/wet tonne				
Index	Fe Content	November	December	January	February	MTD	QTD	YTD	Route	Designation	Change	Change %	Low ²	High ²	
IOSI62	62% Fe Fines	93.05	108.92	119.76	127.73	111.61	111.44	123.30	W. Australia - Qingdao	C5	7.82	-0.02	-0.29%	3.57	16.77
IOSI65	65% Fe Fines	102.40	116.83	132.39	138.06	122.05	122.32	139.87	Tubarao - Qingdao	C3	20.83	0.82	4.11%	6.70	36.40

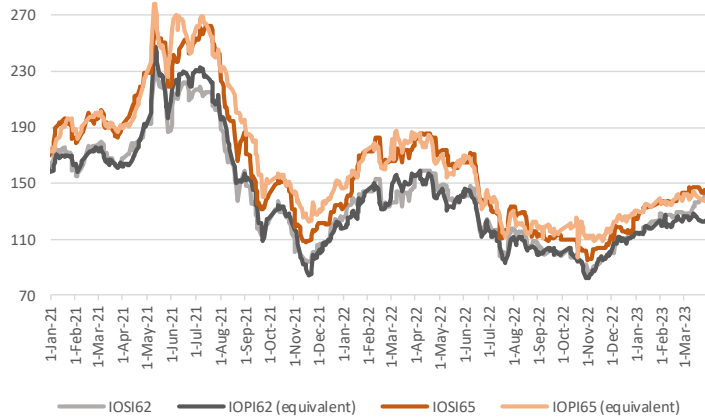
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending Mar 24th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne ¹						
Index	Fe Content	November	December	January	February	MTD	QTD	YTD	November	December	January	February	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	811	922	964	988	917	915	1033	100.83	117.06	126.47	129.95	118.08	118.39	138.23

IRON ORE INDEX PREMIUMS/DISCOUNTS

Mar 30th, 2023		PORT STOCK INDEX (RMB/WT)		Mar 30th, 2023		SEABORNE INDEX (USD/DMT)	
Index	Fe Content	Spread to IOPI62	% Spread to IOPI62	Index	Fe Content	Spread to IOSI62	% Spread to IOSI62
IOPI58	58% Fe Fines	-100	-10.90%	IOSI65	65% Fe Fines	3.35	2.37%
IOPI65	65% Fe Fines	112	12.20%				

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

Mar 30th, 2023				Mar 30th, 2023			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	858	2	-57	Roy Hill	137.05	0.00	-4.52
SIMEC Fines	788	2	-127	SIMEC Fines	133.55	0.00	-8.02
PB Fines	883	2	-32	PB Fines	137.80	0.00	-3.77
Newman Fines	884	2	-31	Newman Fines	140.70	0.00	-0.87
MAC Fines	865	2	-50	MAC Fines	137.80	0.00	-3.77
Jimblebar Blended Fines	780	2	-135	Jimblebar Blended Fines	130.20	0.00	-11.37
Carajas Fines	1096	2	181	Carajas Fines	171.10	0.00	29.53
Brazilian SSF	880	2	-35	Brazilian SSF	145.30	0.00	3.73
Brazilian Blend Fines	896	2	-19	Brazilian Blend Fines	146.95	0.00	5.38
RTX Fines	798	2	-117	RTX Fines	131.45	0.00	-10.12
West Pilbara Fines	826	2	-89	West Pilbara Fines	135.80	0.00	-5.77

Mar 30th, 2023			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	816	8	0
FMG Blended Fines	826	8	10
Robe River	827	8	11
Western Fines	830	8	14
Atlas Fines	823	8	7
Yandi	808	8	-8

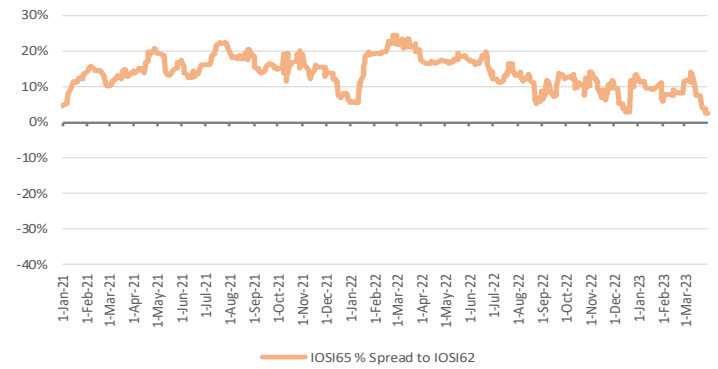
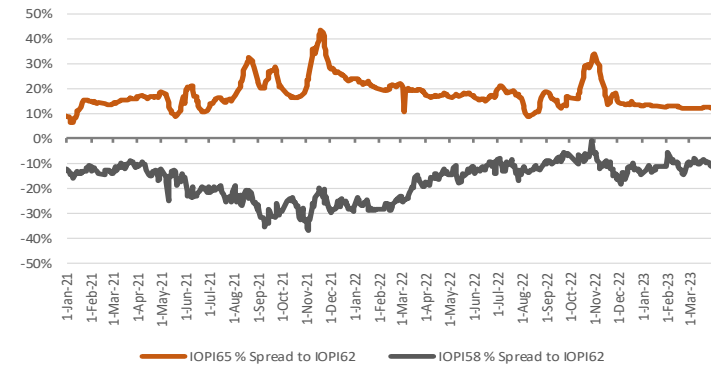
IRON ORE INDEX NORMALISATION DIFFERENTIALS

Port Stock Index Product Differentials (RMB/wet tonne)				Seaborne Index Product Differentials (USD/dry tonne)			
	Applicable range	Value	Change		Applicable range	Value	Change
1% Fe	High Grade Fe 60 - 63%	5.00	0.00	1% Fe	High Grade Fe 60 - 63%	1.75	0.00
	High Grade Fe 63 - 64%	5.00	-4.00		High Grade Fe 63 - 64%	2.50	0.00
	High Grade Fe 64 - 65%	5.00	-4.00		High Grade Fe 64 - 65%	2.50	0.00
	High Grade Fe 65 - 65.5%	5.00	-4.00		High Grade Fe 65 - 65.5%	2.50	0.00
	Low Grade Fe	17.00	-2.00	1% Alumina	High Fe Grade Al <2.25%	2.50	0.00
1% Alumina	High Fe Grade Al <2.25%	29.00	7.00		High Fe Grade Al 2.25-4%	1.25	0.00
	High Fe Grade Al 2.25-4%	10.00	4.00				
	Low Fe Grade Al <2.25%	44.00	7.00				
	Low Fe Grade Al 2.25-4%	20.00	-7.00				
1% Silica	High Fe Grade Si <4%	12.00	2.00	1% Silica	High Fe Grade Si <4%	3.00	0.00
	High Fe Grade Si 4-6.5%	15.00	6.00		High Fe Grade Si 4 - 6.5%	1.75	0.00
	Low Fe Grade	9.00	0.00	0.01% Phosphorus			
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	5.00	0.00		High Fe Grade 0.09%<P<0.115%	1.00	0.00
	High Fe Grade 0.115%<P<0.15%	5.00	0.00		High Fe Grade 0.115%<P<0.15%	5.00	0.00
	Low Fe Grade 0.09%<P<0.1%	5.00	0.00				

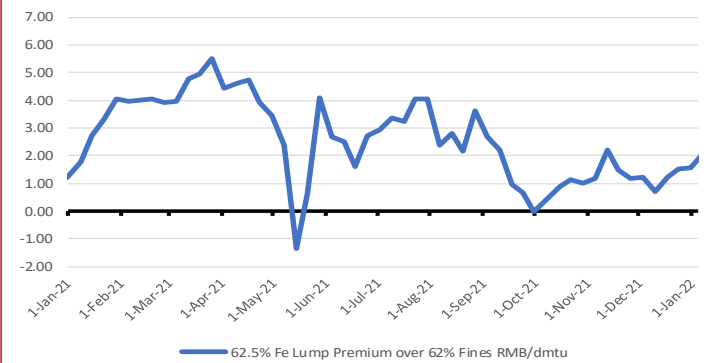
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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	0.00	0.00

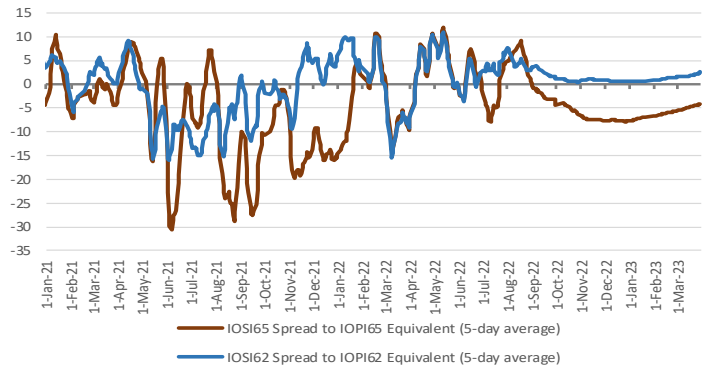
IRON ORE INDEX PREMIUMS/DISCOUNTS



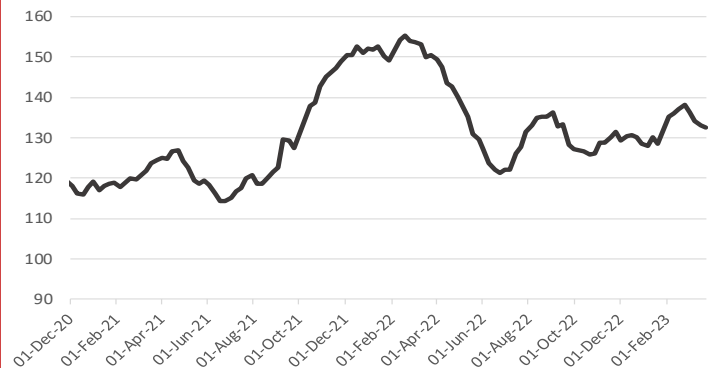
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



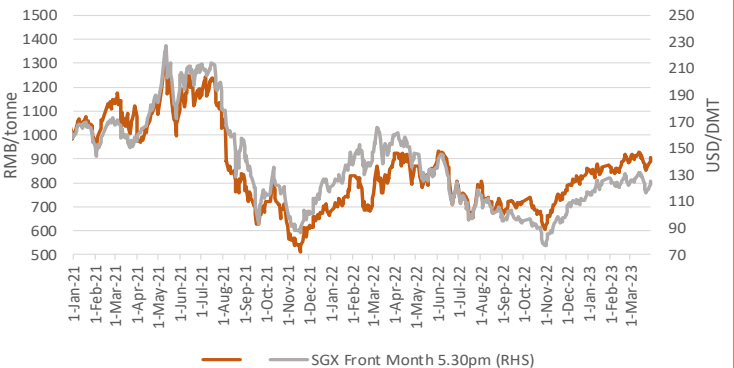
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

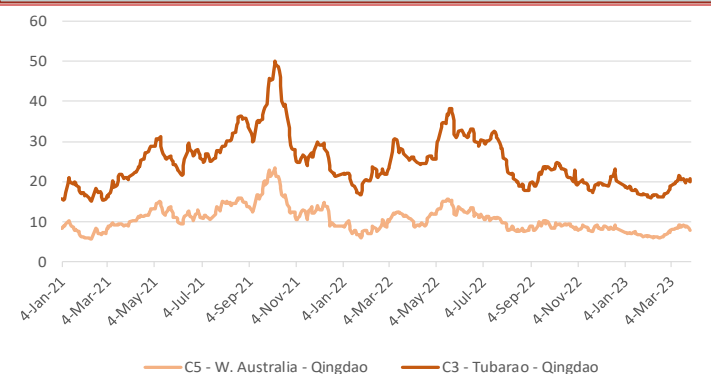
Week Ending Mar 24th, 2023

Province	This week	Change %	Low ²	High ²
Jingtang	12.97	-1.59%	9.84	19.20
Qingdao	25.25	0.40%	9.41	26.24
Caofeidian	12.23	4.80%	9.05	16.29
Tianjin	9.91	-2.17%	7.14	12.97
Rizhao	18.93	0.32%	9.44	19.26
Total (35 Ports)	132.50	-0.47%	98.80	155.39

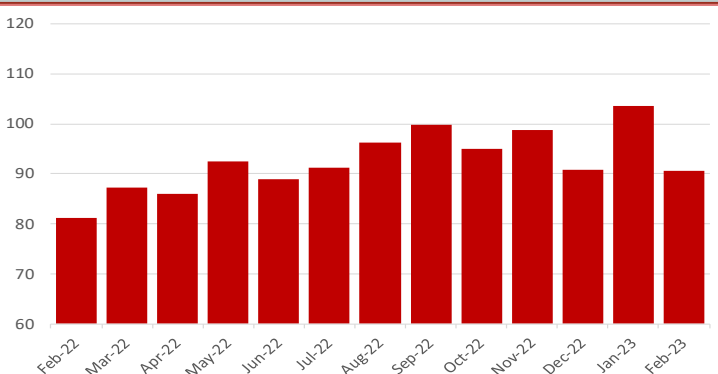
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Mar 30th, 3pm close			Mar 30th, 5:30pm		
Contract	I2305	Change	Change %	Apr. 23	Change	Change %
Closing Price	905.50	15.00	1.68%	125.55	2.65	2.16%
Vol traded ('000 lots)	46.23	3.28	7.65%	3.08	-0.38	-10.93%
Open positions ('000 lots)	55.45	-0.91	-1.61%	24.45	-0.74	-2.93%
Day Low	888.5	6.00	0.68%	122.60	1.10	0.91%
Day High	908.0	13.00	1.45%	127.00	2.30	1.84%

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	2023/3/24	Change	Change %
ReBar HRB400 ϕ 18mm	4,210	-140	-3.22%
Wirerod Q300 ϕ 6.5mm	4,420	-140	-3.07%
HRC Q235/SS400 5.5mm*1500*C	4,300	-60	-1.38%
CRC SPCC/ST12 1.0mm*1250*2500	4,770	-30	-0.63%
Medium & Heavy Plate Q235B 20mm	4,430	-90	-1.99%
GI ST02Z 1.0mm*1000*C	5,100	-30	-0.58%
Colour Coated Plate	7,500	-50	-0.66%

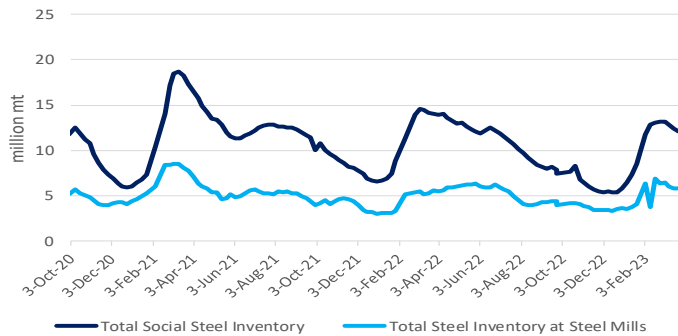
CHINESE STEEL MILL PROFITABILITY

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

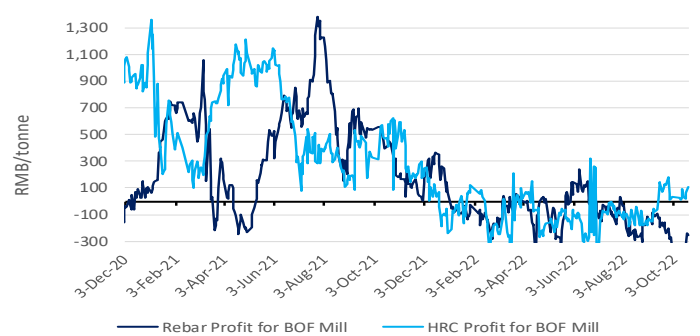
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	138.17	2	Mmi CFR Equivalent index for 1st Feb
Coke	2,960	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	3,120	-110	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,628	-72	Q234, incl. tax
Rebar cost - Blast furnace	4,133	-81	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	17	-29	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	4,141	-80	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	149	-10	based on Shanghai prices, incl. tax

Note: 1. Costs in the table are calculated based on today's market prices and factored our management, sales, financial and depreciations fees.
2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

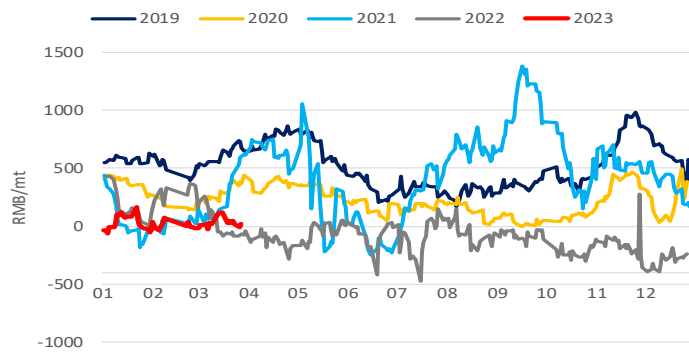
CHINESE STEEL INVENTORIES



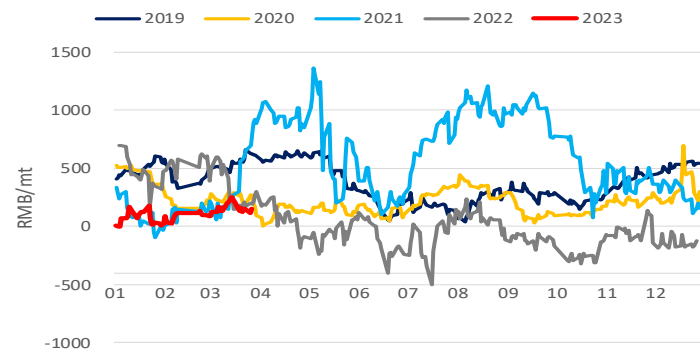
CHINESE STEEL MILL PROFITABILITY



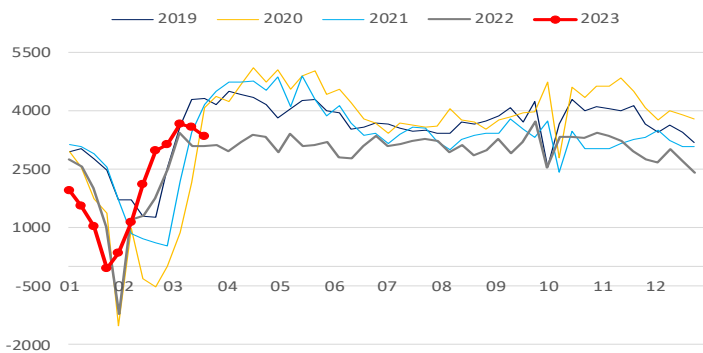
CHINESE STEEL MILL PROFITABILITY—Rebar



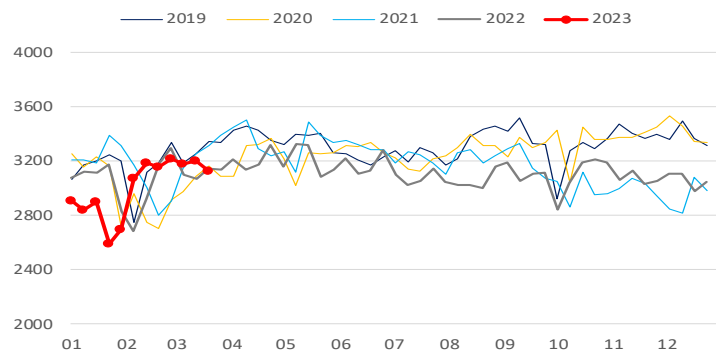
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



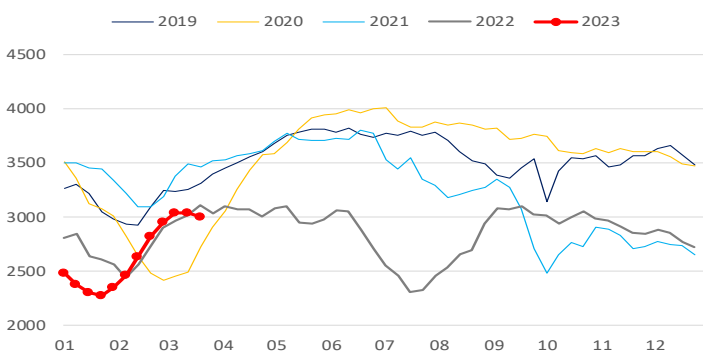
CHINESE STEEL CONSUMPTION—Rebar



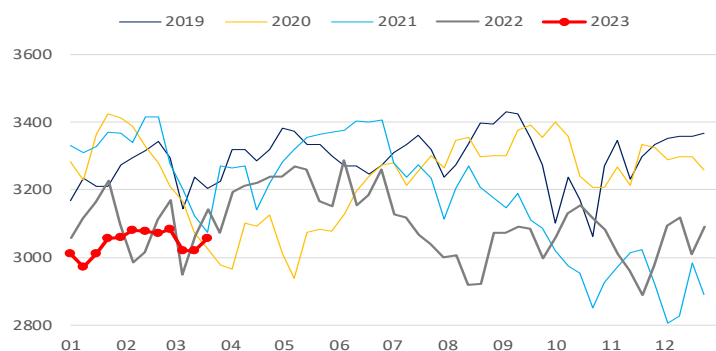
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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)					Iron Ore Index Compilation Rationale and Data Exclusions																				
Fe %	65% Fe Fines	62% Fe Fines	58% Fe Fines	62.5% Fe Lump	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																				
Alumina %	65.00	62.00	58.00	62.50																					
Silica%	1.40	2.25	2.25	1.50																					
Phosphorus %	1.50	4.00	5.50	3.50																					
Sulphur %	0.06	0.09	0.05	0.08																					
Moisture %	0.01	0.02	0.02	0.02																					
	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																					
					<table><tr><th colspan="4">Data Exclusions*</th></tr><tr><td></td><th>62%</th><th>58%</th><th>65%</th></tr><tr><td>Port Index</td><td>0</td><td>0</td><td>0</td></tr><tr><td>Seaborne index</td><td>0</td><td></td><td>0</td></tr><tr><td>Lump Index 62.5</td><td>0</td><td></td><td></td></tr></table>	Data Exclusions*					62%	58%	65%	Port Index	0	0	0	Seaborne index	0		0	Lump Index 62.5	0		
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						SEABORNE BRANDS					
Mar 30th, 2023	Specifications applied for 62% brand assessments						Specifications applied for 62% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture		Fe	Alumina	Silica	Phos	Moisture
Roy Hill	60.88%	2.35%	4.45%	0.055%	9.26%	Roy Hill	60.70%	2.30%	4.90%	0.055%	8.00%
SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%	SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%
PB Fines	61.64%	2.31%	3.87%	0.099%	9.45%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	9.50%
Newman Fines	62.49%	2.31%	3.98%	0.090%	7.72%	Newman Fines	62.30%	2.40%	4.30%	0.095%	8.00%
MAC Fines	60.43%	2.38%	4.64%	0.078%	7.57%	MAC Fines	60.80%	2.35%	4.40%	0.075%	7.80%
Jimblebar Blended Fines	60.87%	2.95%	4.53%	0.111%	7.32%	Jimblebar Blended Fines	60.50%	3.10%	4.80%	0.120%	7.80%
Carajas Fines	64.90%	1.39%	1.82%	0.080%	7.78%	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 SSF	62.00%	1.00%	6.50%	0.040%	6.00%
Brazilian Blend Fines	62.56%	1.58%	4.79%	0.091%	8.72%	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%	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%	West Pilbara Fines	60.10%	2.30%	4.70%	0.075%	8.50%
Mar 30th, 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%						

BLOOMBERG TICKERS

PORT STOCK INDICES			SEABORNE INDICES		
	FOT Qingdao (RMB/wet tonne)	CFR Qingdao Equivalent (USD/dry tonne)		CFR Qingdao (USD/DMT)	
IOPI62	IRCNQ001	IRCNQ004	IOSI62	IRCN0034	
IOPI58	IRCNQ002	IRCNQ005	IOSI65	IRCN0035	
IOPI65	IRCNQ003	IRCNQ006			
IOPLI62	IRCN0036	IRCN0037			

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