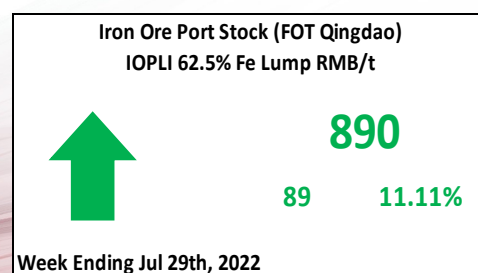
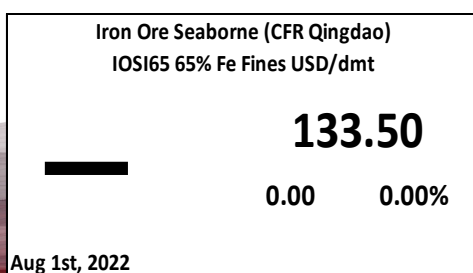
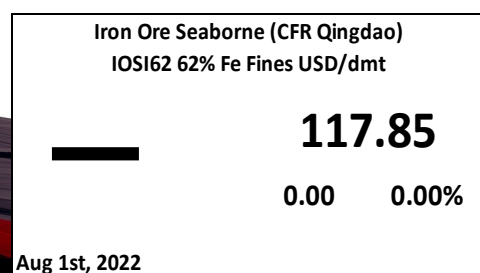
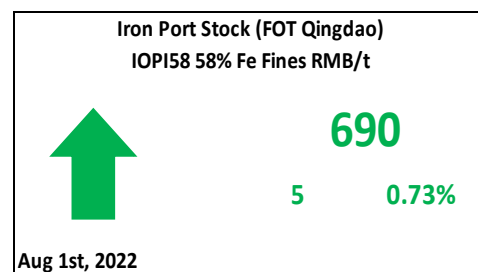
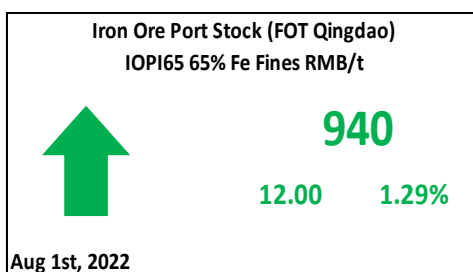
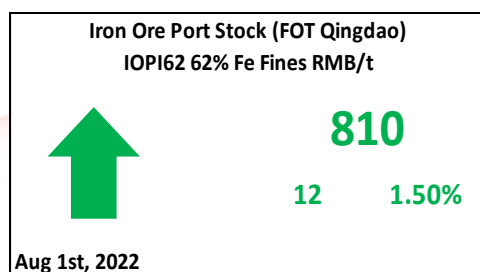


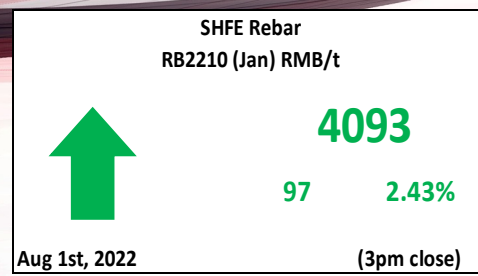
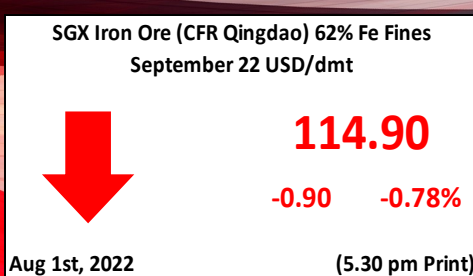
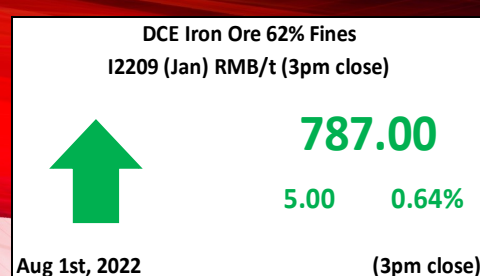


MMi Dashboard

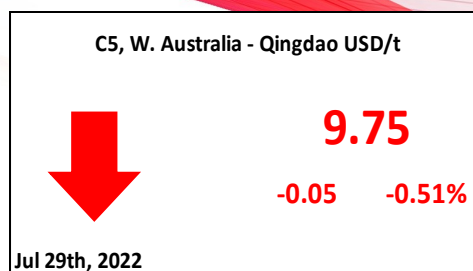
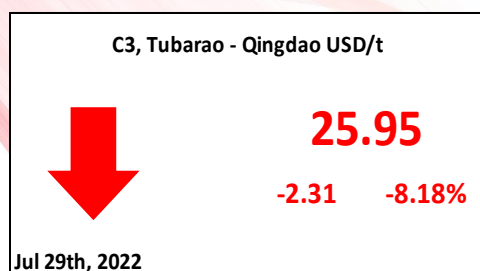
Iron Ore Price Indices



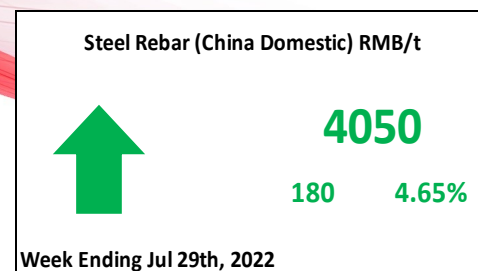
Exchange Traded Contracts



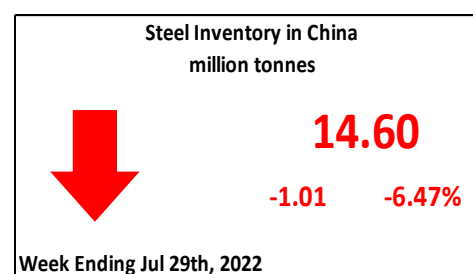
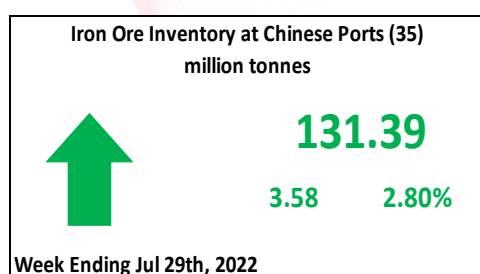
Freight Rates



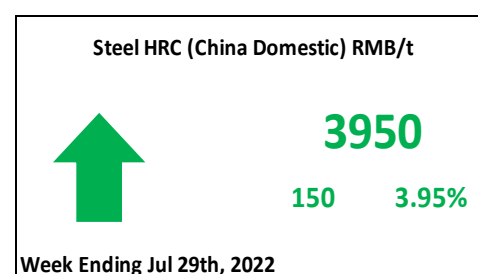
Steel Price



Inventory Levels



Steel Price



IRON ORE PORT STOCK INDEX (IOPI)

Aug 1st, 2022		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	810	12	1.5%	810	936	587	1355	111.49	1.66	1.5%	106.26	134.18	84.25	197.56
IOPI58	58% Fe Fines	690	5	0.7%	690	769	454	1090	95.42	0.68	0.7%	94.48	110.52	64.78	159.72
IOPI65	65% Fe Fines	940	12	1.3%	940	1111	811	1595	130.028	1.65	1.3%	126.88	160.03	111.38	233.00

IRON ORE SEABORNE INDEX (IOSI)

MARKET COMMENTARY

Aug 1st, 2022		CFR Qingdao, USD/dry tonne							DCE iron ore was shocked sharply all the day. The main contract closed at 787, increased of 0.83%. Traders are actively motivated to ship. Speculative demand increases. Steel mills are mainly on the sidelines, and market turnover continues to pick up. PBF at Shandong port dealt 790,795 yuan/mt, increase 3-15 yuan/mt than last week. On the supply side, according to SMM statistics, from July 25 to July 31, the global iron ore shipments to China were 21.21 million tons, an increase of 8.2% month on month. Among them, the volume of shipments from Australia to China increased by 9.6% month on month, and the volume of shipments from Brazil to China decreased by 22.8% month on month. The shipment volume of the four major mines increased slightly. On the demand side, some steel mills will resume production smoothly in early August, and the increased demand for raw materials will support the ore price. However, the recovery of terminal demand is still less than expected, and some steel mills are still in the wait-and-see stage, and the number of blast furnaces may increase slowly. In addition, the risk of rapid rise in ore prices has increased recently, and it is expected that the ore prices may fluctuate in the short term.						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²							
IOSI62	62% Fe Fines	117.85	0.00	0.00%	110.44	137.00	93.75	205.05							
IOSI65	65% Fe Fines	133.50	0.00	0.00%	125.03	160.76	108.20	242.40							

IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending Jul 29th, 2022		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	890	89	11.1%	906	1167	730	1745	117.68	12.12	11.48%	120.36	161.25	101.31	244.28

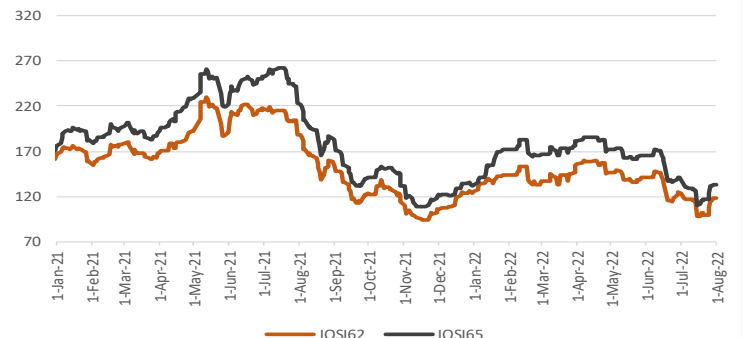
IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending Jul 29th, 2022				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	888	-3.2%	779	1645		131.51	-3.19%	110.31	255.69	
Hebei	Qian'an	65% Fe Concentrate	Dry	885	2.3%	780	1630		131.07	2.28%	110.51	251.57	
Liaoning	Anshan	65% Fe Concentrate	Wet	720	-2.7%	620	1310		106.63	-2.73%	87.40	202.32	
Shandong	Zibo	65% Fe Concentrate	Dry	911	-3.1%	800	1752		134.92	-3.11%	122.55	272.32	
Week Ending Jul 29th, 2022				This week	Change %	Low ²	High ²	¹ Exchange rate applied: RMB/USD = 6.7522 ² Last 12 months					
China Mines Concentrate Composite Index RMB/WT				806.95	-2.06%	706.36	1511.22	³ Weekly exchange rate applied: RMB/USD = 6.7521					

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

Aug 1st, 2022		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	April	May	June	July	MTD	QTD	YTD	May	June	June	July	MTD	QTD	YTD
IOPI62	62% Fe Fines	1030	981	934	770	810	772	936	150.00	136.86	130.13	106.01	106.26	106.26	134.18
IOPI58	58% Fe Fines	874	841	823	682	690	682	769	128.09	118.11	115.45	94.43	94.48	94.48	110.52
IOPI65	65% Fe Fines	1206	1152	1086	915	940	916	1111	176.31	161.44	151.89	126.73	126.88	126.88	160.03

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

FREIGHT RATES

Aug 1st, 2022		CFR Qingdao, USD/dry tonne							FREIGHT RATES - DRY BULK US\$/wet tonne						
Index	Fe Content	April	May	June	July	MTD	QTD	YTD	Route	Designation	Change	Change %	Low ²	High ²	
IOSI62	62% Fe Fines	155.13	141.17	131.96	110.07	110.44	110.44	137.00	W. Australia - Qingdao	C5	9.75	-0.05	-0.51%	3.57	16.77
IOSI65	65% Fe Fines	181.23	166.30	154.17	124.60	125.03	125.03	160.76	Tubarao - Qingdao	C3	25.95	-2.31	-8.18%	6.70	36.40

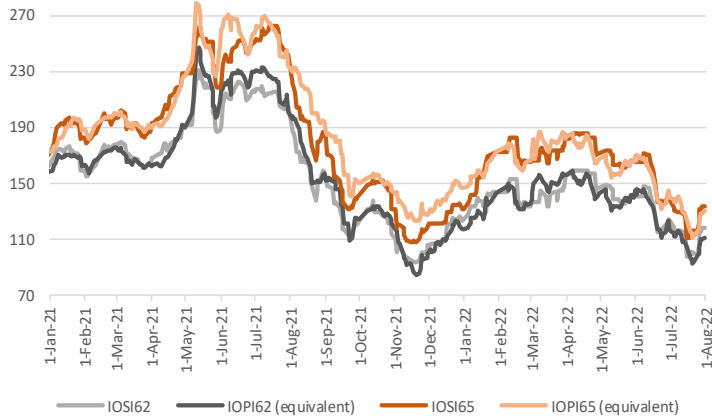
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending Jul 29th, 2022		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne ¹						
Index	Fe Content	April	May	June	July	MTD	QTD	YTD	April	May	June	July	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	1328	1232	1189	906	906	906	1167	187.99	164.53	159.78	120.36	120.36	120.36	161.25

IRON ORE INDEX PREMIUMS/DISCOUNTS

Aug 1st, 2022		PORT STOCK INDEX (RMB/WT)		Aug 1st, 2022		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	-120	-14.81%	IOSI65	65% Fe Fines	15.65	13.28%
IOPI65	65% Fe Fines	130	16.05%				

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

Aug 1st, 2022				Aug 1st, 2022			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	751	12	-59	Roy Hill	113.35	0.00	-4.50
SIMEC Fines	681	12	-129	SIMEC Fines	109.85	0.00	-8.00
PB Fines	779	12	-31	PB Fines	114.10	0.00	-3.75
Newman Fines	796	12	-14	Newman Fines	117.00	0.00	-0.85
MAC Fines	753	12	-57	MAC Fines	114.10	0.00	-3.75
Jimblebar Blended Fines	672	12	-138	Jimblebar Blended Fines	106.50	0.00	-11.35
Carajas Fines	989	13	179	Carajas Fines	147.40	0.00	29.55
Brazilian SSF	773	13	-37	Brazilian SSF	121.60	0.00	3.75
Brazilian Blend Fines	789	11	-21	Brazilian Blend Fines	123.25	0.00	5.40
RTX Fines	693	12	-117	RTX Fines	107.75	0.00	-10.10
West Pilbara Fines	722	12	-88	West Pilbara Fines	112.10	0.00	-5.75

Aug 1st, 2022			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	690	5	0
FMG Blended Fines	698	5	8
Robe River	694	5	4
Western Fines	702	5	12
Atlas Fines	696	5	6
Yandi	685	5	-5

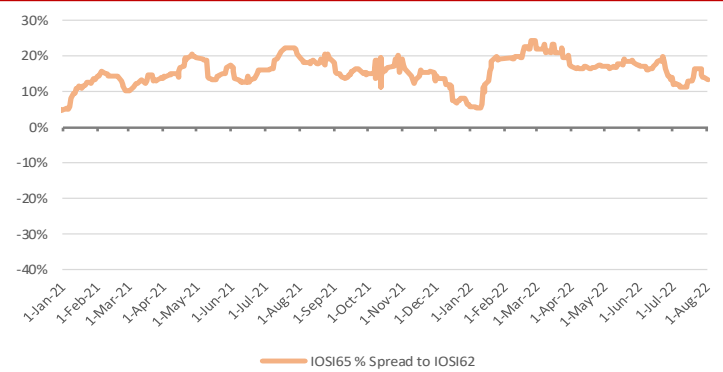
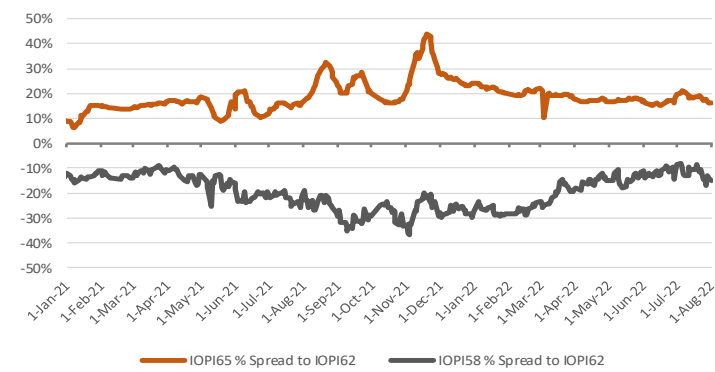
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	10.00	0.00	1% Fe	High Grade Fe 60 - 63%	3.25	0.00
	High Grade Fe 63 - 64%	43.00	0.00		High Grade Fe 63 - 64%	2.00	0.00
	High Grade Fe 64 - 65%	43.00	0.00		High Grade Fe 64 - 65%	2.00	0.00
	High Grade Fe 65 - 65.5%	43.00	0.00		High Grade Fe 65 - 65.5%	2.00	0.00
	Low Grade Fe	18.00	0.00	1% Alumina	High Fe Grade Al <2.25%	0.25	0.00
1% Alumina	High Fe Grade Al <2.25%	26.00	0.00		High Fe Grade Al 2.25-4%	2.00	0.00
	High Fe Grade Al 2.25-4%	5.00	0.00		High Fe Grade Si <4%	3.25	0.00
	Low Fe Grade Al <2.25%	100.00	0.00		High Fe Grade Si 4 - 6.5%	5.50	0.00
	Low Fe Grade Al 2.25-4%	5.00	0.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	2.25	0.00
1% Silica	High Fe Grade Si <4%	5.00	0.00		High Fe Grade 0.115%<P<0.15%	3.25	0.00
	High Fe Grade Si 4 - 6.5%	5.00	0.00		Low Fe Grade 0.09%<P<0.1%	5.00	0.00
	Low Fe Grade	12.00	0.00				

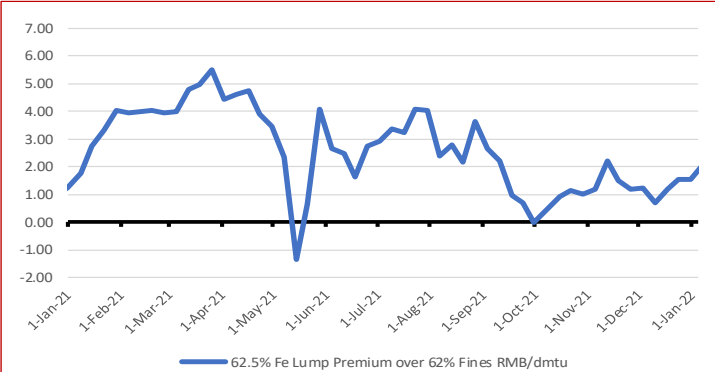
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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	10.00	Jingtang	0.00	0.00	Majishan	0.00	0.00	Taicang	-40.00	0.00
Dalian	0.00	0.00	Lanqiao	0.00	0.00	Qingdao	0.00	0.00	Tianjin	-20.00	0.00

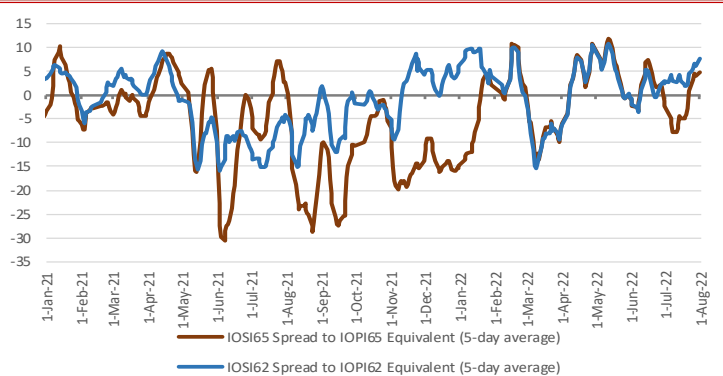
IRON ORE INDEX PREMIUMS/DISCOUNTS



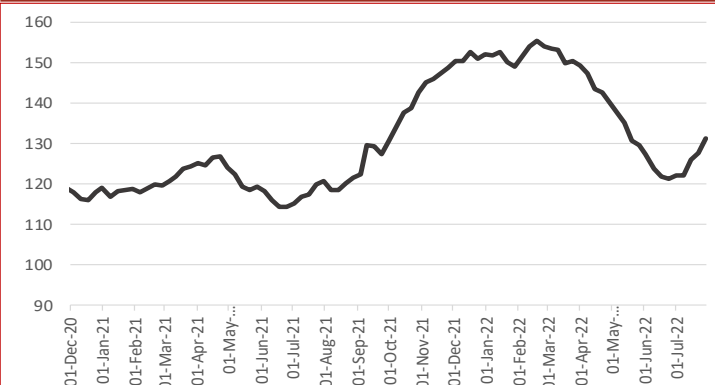
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



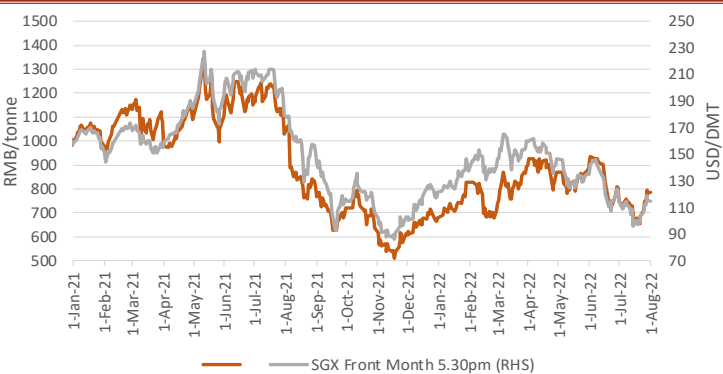
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending Jul 29th, 2022

Province	This week	Change %	Low ²	High ²
Jingtang	11.27	5.43%	9.84	19.20
Qingdao	24.26	0.83%	9.41	26.24
Caofeidian	9.95	-3.02%	9.05	16.29
Tianjin	10.28	4.05%	7.14	12.97
Rizhao	16.89	6.49%	9.44	19.26
Total (35 Ports)	131.39	2.80%	98.80	155.39

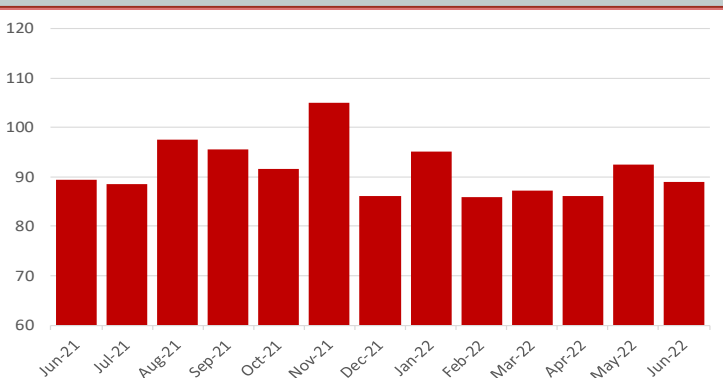
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Aug 1st, 3pm close			Aug 1st, 5:30pm		
Contract	I2209	Change	Change %	Sep. 22	Change	Change %
Closing Price	787.00	5.00	0.64%	114.90	-0.90	-0.78%
Vol traded ('000 lots)	57.65	9.48	19.67%	5.19	-1.46	-21.99%
Open positions ('000 lots)	54.59	0.96	1.80%	32.02	1.16	3.75%
Day Low	780.0	12.00	1.56%	113.25	0.95	0.85%
Day High	817.5	24.00	3.02%	120.95	1.50	1.26%

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	2022/7/29	Change	Change %
ReBar HRB400 ϕ 18mm	4,050	180	4.65%
Wirerod Q300 ϕ 6.5mm	4,520	180	4.15%
HRC Q235/SS400 5.5mm*1500*C	3,950	150	3.95%
CRC SPCC/ST12 1.0mm*1250*2500	4,400	60	1.38%
Medium & Heavy Plate Q235B 20mm	4,150	50	1.22%
GI ST02Z 1.0mm*1000*C	4,760	60	1.28%
Colour Coated Plate	7,550	-50	-0.66%

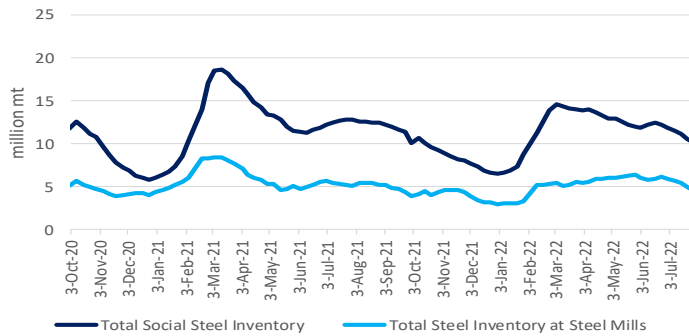
CHINESE STEEL MILL PROFITABILITY

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

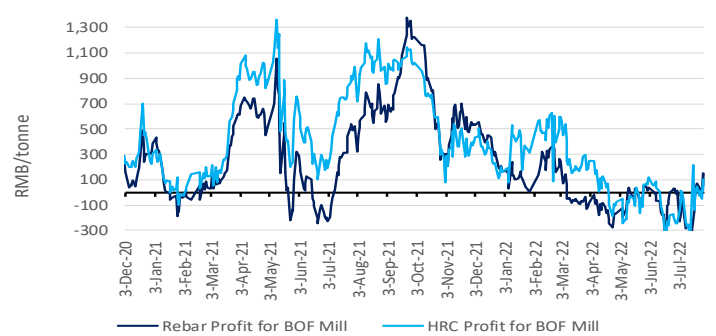
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	115.10	-23	Mmi CFR Equivalent index for 1st Feb
Coke	2,560	-240	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,670	0	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,482	152	Q234, incl. tax
Rebar cost - Blast furnace	3,968	171	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	52	-21	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,931	176	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	19	-26	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

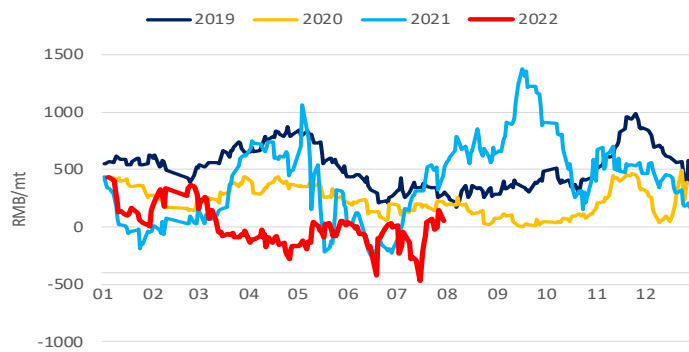
CHINESE STEEL INVENTORIES



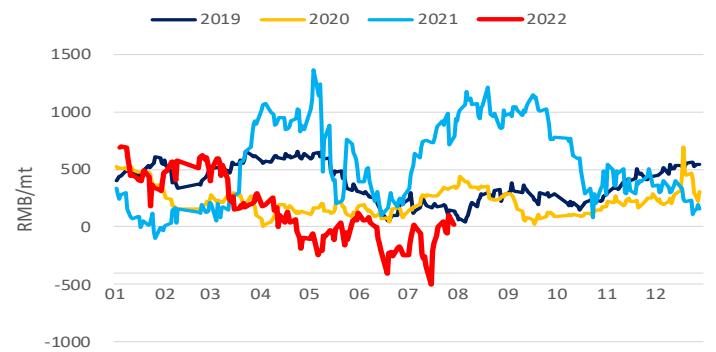
CHINESE STEEL MILL PROFITABILITY



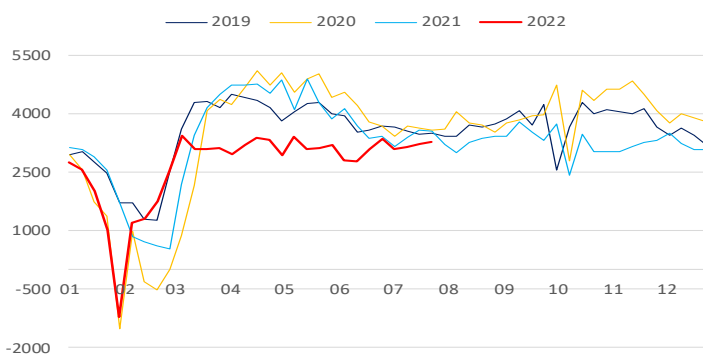
CHINESE STEEL MILL PROFITABILITY—Rebar



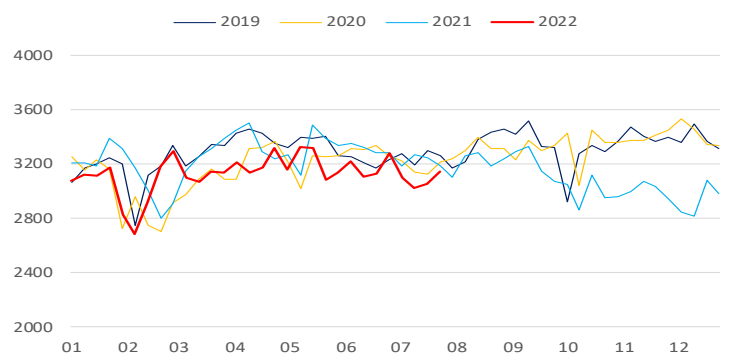
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



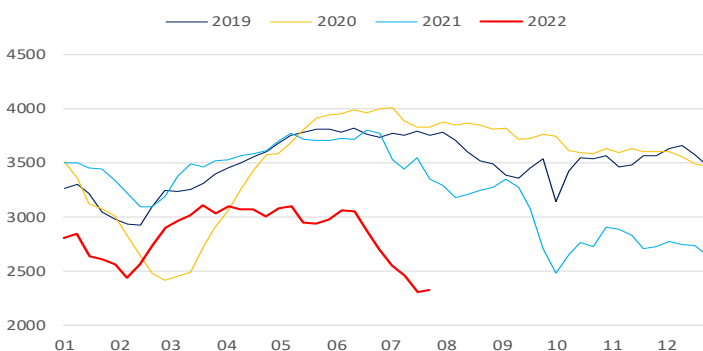
CHINESE STEEL CONSUMPTION—Rebar



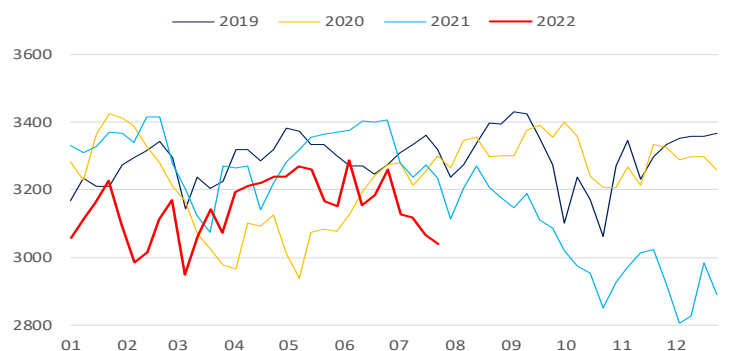
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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	<p>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.</p> <p>For more details on MMi's iron ore methodology please download the guide published on our website at: www.mmiprices.com</p>																				
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					
Aug 1st, 2022	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%
Aug 1st, 2022	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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