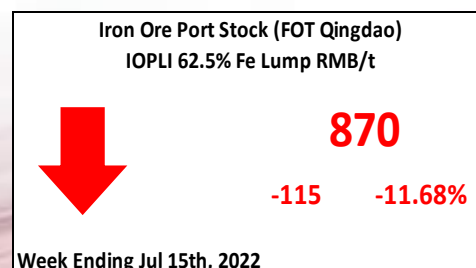
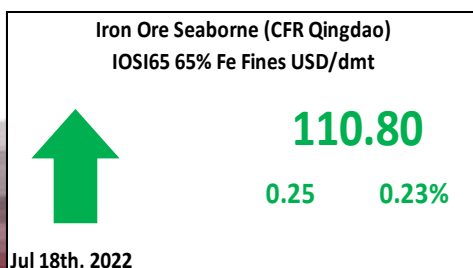
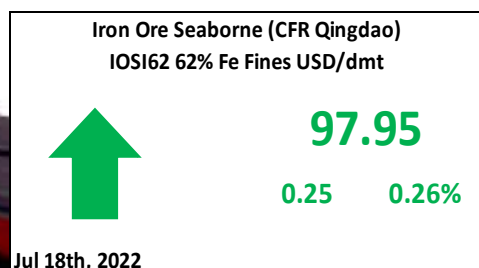
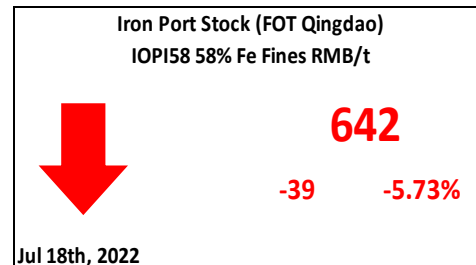
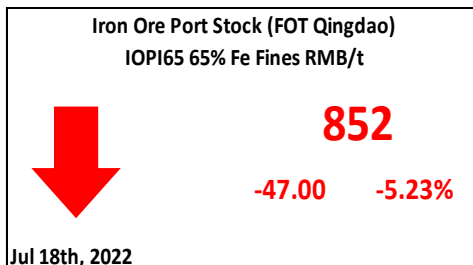
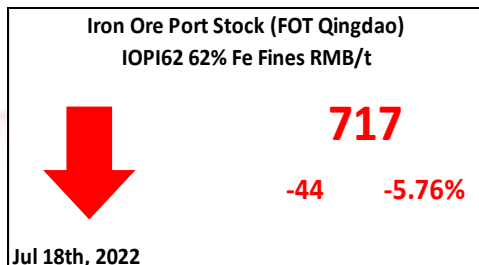


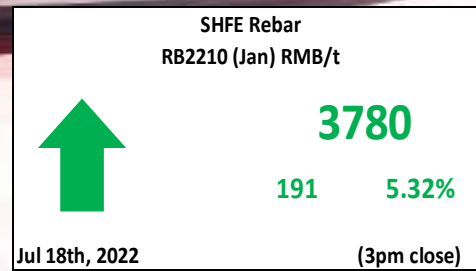
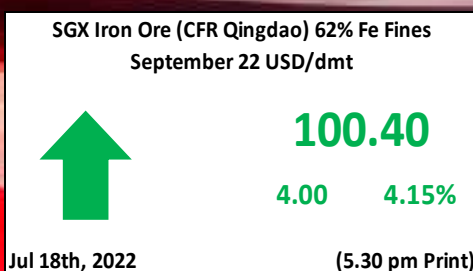
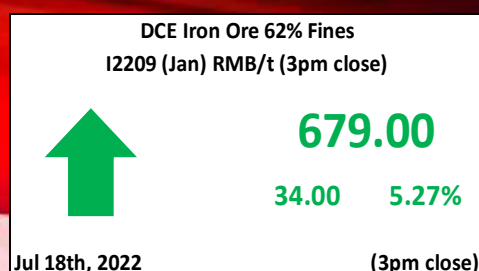


MMi Dashboard

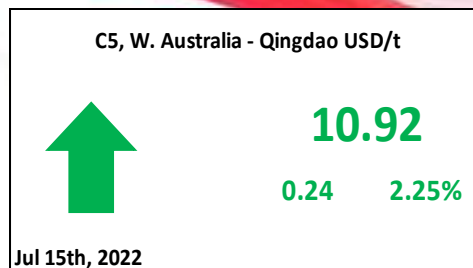
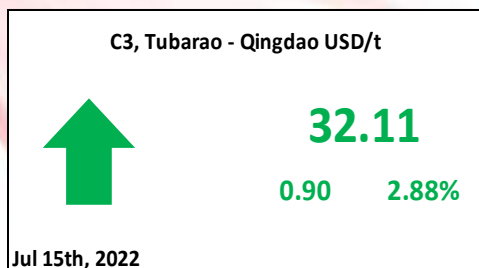
Iron Ore Price Indices



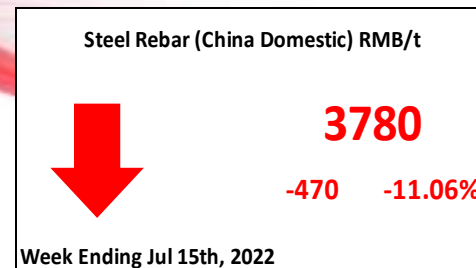
Exchange Traded Contracts



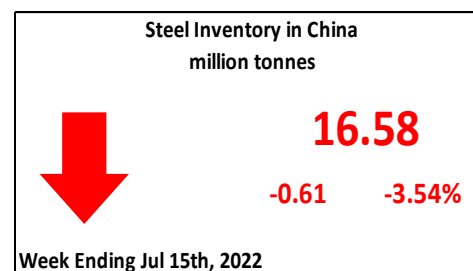
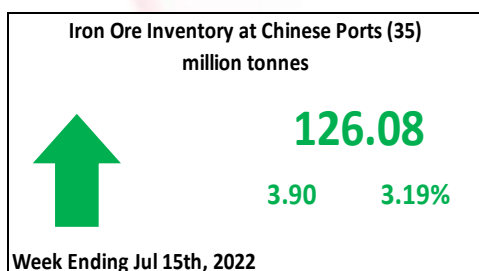
Freight Rates



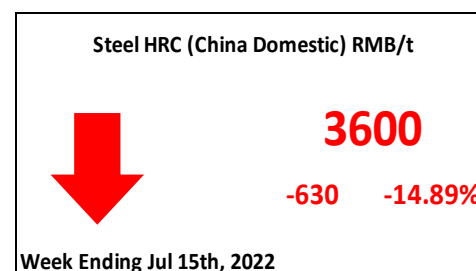
Steel Price



Inventory Levels



Steel Price



IRON ORE PORT STOCK INDEX (IOPI)

Jul 18th, 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	717.15	-44	-5.8%	800	951	587	1542	98.28	-6.34	-6.1%	110.50	136.76	84.25	225.07
IOPI58	58% Fe Fines	642	-39	-5.7%	715	779	454	1208	88.53	-5.70	-6.1%	99.43	112.24	64.78	177.35
IOPI65	65% Fe Fines	852	-47	-5.2%	956	1130	843	1781	117.516	-6.81	-5.5%	132.93	163.19	117.52	260.60

IRON ORE SEABORNE INDEX (IOSI)

MARKET COMMENTARY

Jul 18th, 2022		CFR Qingdao, USD/dry tonne						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²
IOSI62	62% Fe Fines	97.95	0.25	0.26%	113.13	139.22	93.75	215.00
IOSI65	65% Fe Fines	110.80	0.25	0.23%	126.65	163.58	108.20	262.95

DCE iron ore futures open lower and go higher, an increase of 2.18% throughout the day, the main contract closed 679, the quotation in the morning was increased by 10-20 yuan/mt from last week, some traders were active to sell, steel mills purchased on demand, total transactions remained inspid, PBF at Shandong port dealt 700 yuan/mt, increased 20 yuan/mt from last week, PBF at Tangshan port dealt 708 yuan/mt, decreased 2 yuan/mt from last week, SMM tracking data shows that from July 11 to July 17, a total of 78 ships arrived at China's major ports, the arrival cargo volume is estimated to be 11.66 million tons, the arrival volume is 150,000 tons less than the previous period, 670,000 tons more than the same period last year. During this period, The outbound shipments from Australia increased by 380,000 tons to 16.42 million tons, down by 1.15 million tons compared with the same period last year. Brazil's outbound shipments increased by 980,000 tons to 7.06 million tons, down by 460,000 tons compared with the same period last year. This period to port by the impact of early shipment has a small drop, give a certain support to the mine price. In addition, the early pessimism and panic in the release of last week, today to ease, but SMM

IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending Jul 15th, 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	870	-115	-11.7%	946	1192	730	1825	115.44	-16.03	-12.19%	126.18	165.07	101.31	262.13

IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

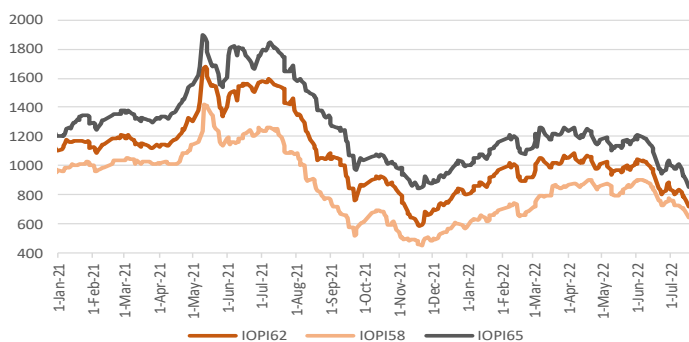
Week Ending Jul 15th, 2022				RMB/tonne (excluding tax) ³				USD/tonne (excluding tax) ³			
Province	Region	Product	Basis	This week	Change %	Low ²	High ²	This week	Change %	Low ²	High ²
Hebei	Hanxing	66% Fe Concentrate	Dry	983	-4.8%	779	1645	146.15	-5.05%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	940	-1.1%	780	1630	139.76	-1.27%	110.51	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	780	-7.1%	620	1310	115.97	-7.35%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	1014	-3.5%	800	1752	150.76	-3.74%	122.55	272.32

Week Ending Jul 15th, 2022

	This week	Change %	Low ²	High ²
China Mines Concentrate Composite Index RMB/WT	858.57	-4.01%	706.36	1511.22

¹ Exchange rate applied: RMB/USD = 6.411864 ² Last 12 months
³ Weekly exchange rate applied: RMB/USD = 6.72594

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

Jul 18th, 2022		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	March	April	May	June	MTD	QTD	YTD	March	April	May	June	MTD	QTD	YTD
IOPI62	62% Fe Fines	1020	1030	981	934	800	800	951	150.42	150.00	136.86	130.13	110.50	110.50	136.76
IOPI58	58% Fe Fines	812	874	841	823	715	715	779	120.15	128.09	118.11	115.45	99.43	99.43	112.24
IOPI65	65% Fe Fines	1219	1206	1152	1086	956	956	1130	180.56	176.31	161.44	151.89	132.93	132.93	163.19

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

FREIGHT RATES

Jul 18th, 2022		CFR Qingdao, USD/dry tonne							FREIGHT RATES - DRY BULK US\$/wet tonne						
Index	Fe Content	March	April	May	June	MTD	QTD	YTD	Route	Designation	Change	Change %	Low ²	High ²	
IOSI62	62% Fe Fines	141.23	155.13	141.17	131.96	113.13	113.13	139.22	W. Australia - Qingdao	C5	10.92	0.24	2.25%	3.57	16.77
IOSI65	65% Fe Fines	171.21	181.23	166.30	154.17	126.65	126.65	163.58	Tubarao - Qingdao	C3	32.11	0.90	2.88%	6.70	36.40

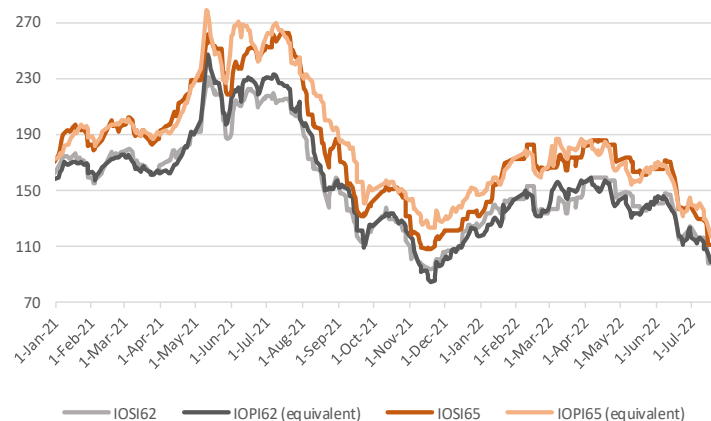
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending Jul 15th, 2022		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne ¹						
Index	Fe Content	March	April	May	June	MTD	QTD	YTD	March	April	May	June	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	1355	1328	1232	1189	946	946	1192	191.90	187.99	164.53	159.78	126.18	126.18	165.07

IRON ORE INDEX PREMIUMS/DISCOUNTS

Jul 18th, 2022		PORT STOCK INDEX (RMB/WT)				Jul 18th, 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	-75		-10.48%		IOSI65	65% Fe Fines	12.85		13.12%	
IOPI65	65% Fe Fines	135		18.80%							

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

Jul 18th, 2022				Jul 18th, 2022			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	658	-44	-59	Roy Hill	93.45	0.25	-4.50
SIMEC Fines	586	-45	-131	SIMEC Fines	89.95	0.25	-8.00
PB Fines	688	-43	-29	PB Fines	94.20	0.25	-3.75
Newman Fines	702	-44	-15	Newman Fines	97.10	0.25	-0.85
MAC Fines	660	-44	-57	MAC Fines	94.20	0.25	-3.75
Jimblebar Blended Fines	578	-45	-139	Jimblebar Blended Fines	86.60	0.25	-11.35
Carajas Fines	895	-44	178	Carajas Fines	127.50	0.25	29.55
Brazilian SSF	678	-45	-39	Brazilian SSF	101.70	0.25	3.75
Brazilian Blend Fines	698	-43	-19	Brazilian Blend Fines	103.35	0.25	5.40
RTX Fines	599	-44	-118	RTX Fines	87.85	0.25	-10.10
West Pilbara Fines	629	-44	-88	West Pilbara Fines	92.20	0.25	-5.75

Jul 18th, 2022			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	642	-39	0
FMG Blended Fines	649	-40	7
Robe River	646	-39	4
Western Fines	653	-40	11
Atlas Fines	648	-39	6
Yandi	637	-39	-5

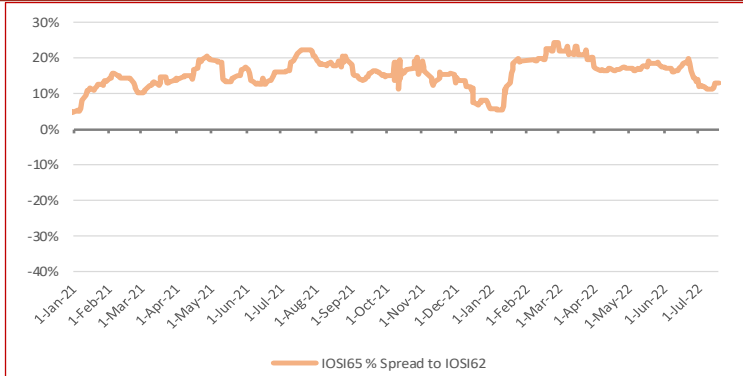
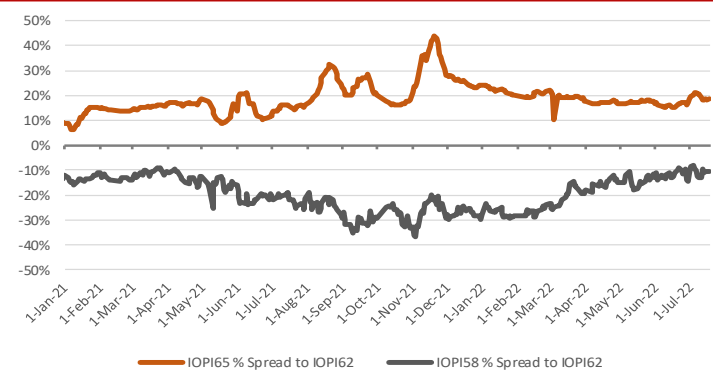
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	15.00	-2.00	1% Fe	High Grade Fe 60 - 63%	2.50	0.25
	High Grade Fe 63 - 64%	48.00	0.00		High Grade Fe 63 - 64%	1.75	0.25
	High Grade Fe 64 - 65%	48.00	0.00		High Grade Fe 64 - 65%	1.75	0.25
	High Grade Fe 65 - 65.5%	48.00	0.00		High Grade Fe 65 - 65.5%	1.75	0.25
1% Alumina	Low Grade Fe	22.00	0.00	1% Alumina	High Fe Grade Al <2.25%	0.25	0.00
	High Fe Grade Al <2.25%	13.00	-1.00		High Fe Grade Al 2.25-4%	0.75	0.25
	High Fe Grade Al 2.25-4%	5.00	0.00				
	Low Fe Grade Al <2.25%	100.00	0.00				
1% Silica	Low Fe Grade Al 2.25-4%	5.00	0.00	1% Silica	High Fe Grade Si <4%	3.25	0.25
	High Fe Grade Si <4%	5.00	0.00		High Fe Grade Si 4 - 6.5%	4.25	0.25
	High Fe Grade Si 4-6.5%	5.00	0.00				
0.01% Phosphorus	Low Fe Grade	13.00	3.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	1.25	0.25
	High Fe Grade 0.09%<P<0.115%	5.00	0.00		High Fe Grade 0.115%<P<0.15%	3.00	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

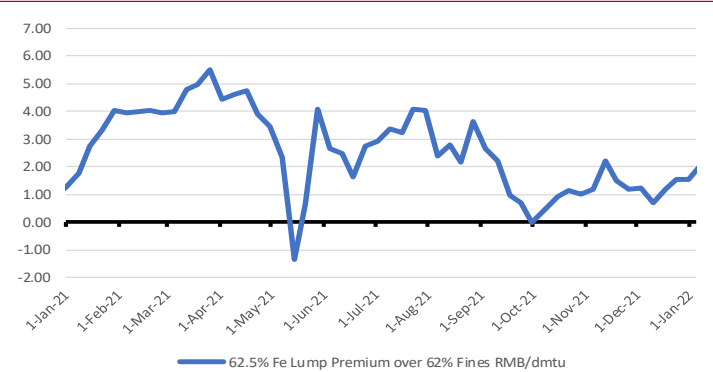
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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	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

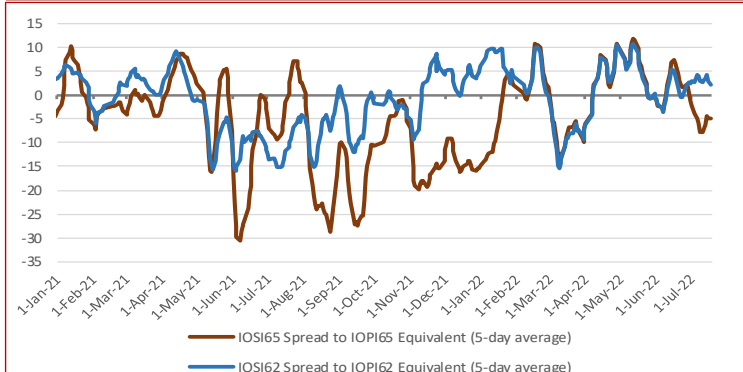
IRON ORE INDEX PREMIUMS/DISCOUNTS



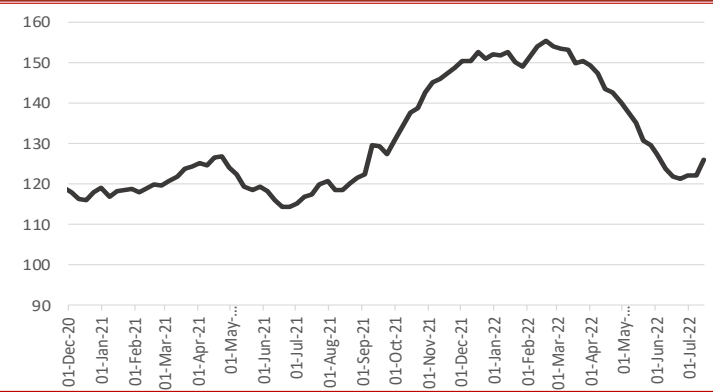
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



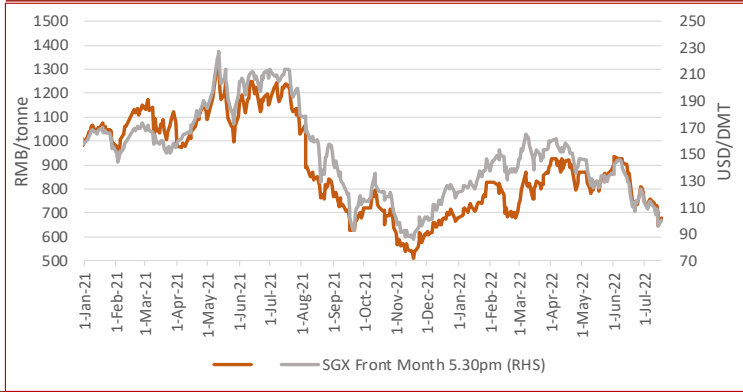
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



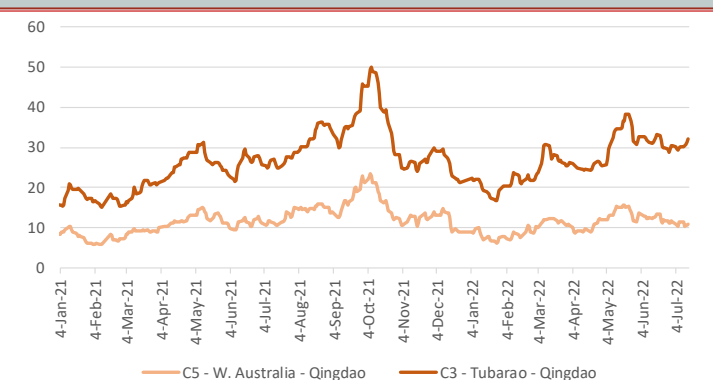
IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending Jul 15th, 2022				
Province	This week	Change %	Low ²	High ²
Jingtang	10.62	1.92%	9.84	19.20
Qingdao	23.76	5.74%	9.41	26.24
Caofeidian	9.73	0.31%	9.05	16.29
Tianjin	9.90	0.51%	7.14	12.97
Rizhao	15.25	6.57%	9.44	19.26
Total (35 Ports)	126.08	3.19%	98.80	155.39

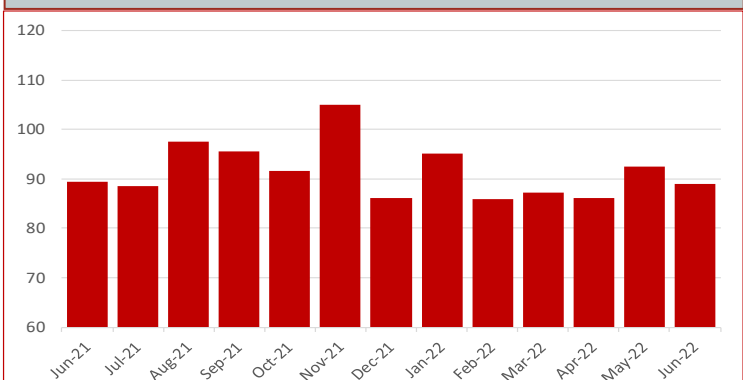
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Jul 18th, 3pm close			Jul 18th, 5:30pm		
Contract	12209	Change	Change %	Sep. 22	Change	Change %
Closing Price	679.00	34.00	5.27%	100.40	4.00	4.15%
Vol traded ('000 lots)	72.68	-13.97	-16.12%	3.61	-3.16	-46.66%
Open positions ('000 lots)	63.23	-2.88	-4.36%	23.06	0.18	0.79%
Day Low	638.5	-3.00	-0.47%	95.50	-0.50	-0.52%
Day High	685.0	7.50	1.11%	101.05	-0.15	-0.15%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

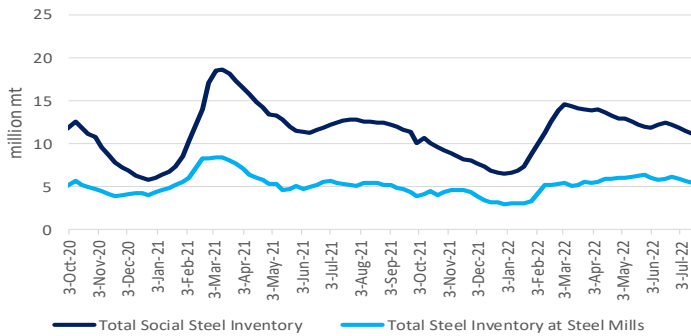
Product	2022/7/15	Change	Change %
ReBar HRB400 φ18mm	3,780	-470	-11.06%
Wirerod Q300 φ6.5mm	4,270	-460	-9.73%
HRC Q235/SS400 5.5mm*1500*C	3,600	-630	-14.89%
CRC SPCC/ST12 1.0mm*1250*2500	4,210	-540	-11.37%
Medium & Heavy Plate Q235B 20mm	4,100	-460	-10.09%
GI ST02Z 1.0mm*1000*C	4,730	-410	-7.98%
Colour Coated Plate	7,700	-250	-3.14%

CHINESE STEEL MILL PROFITABILITY

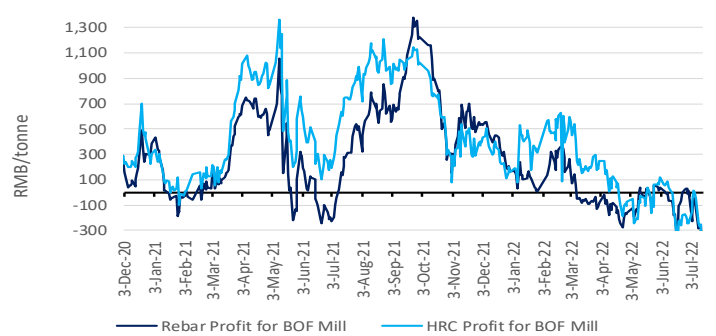
SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)			
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	112.75	-3	Mmi CFR Equivalent index for 1st Feb
Coke	3,240	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,770	-530	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,642	-164	Q234, incl. tax
Rebar cost - Blast furnace	4,150	-186	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	-470	-334	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	4,100	-174	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	-500	-446	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

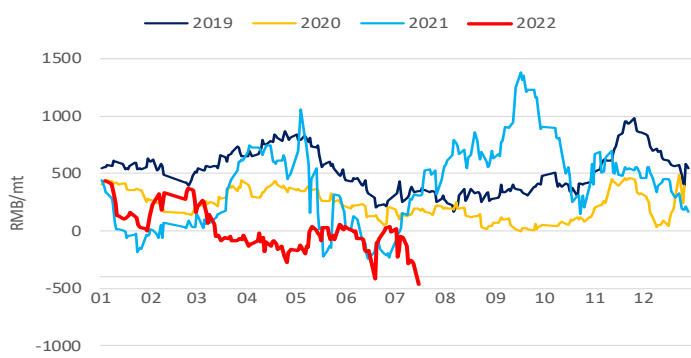
CHINESE STEEL INVENTORIES



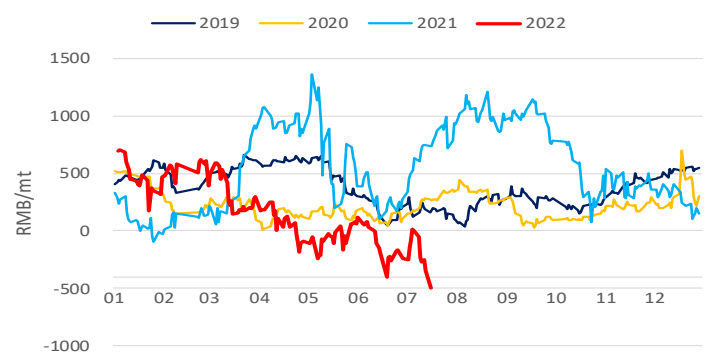
CHINESE STEEL MILL PROFITABILITY



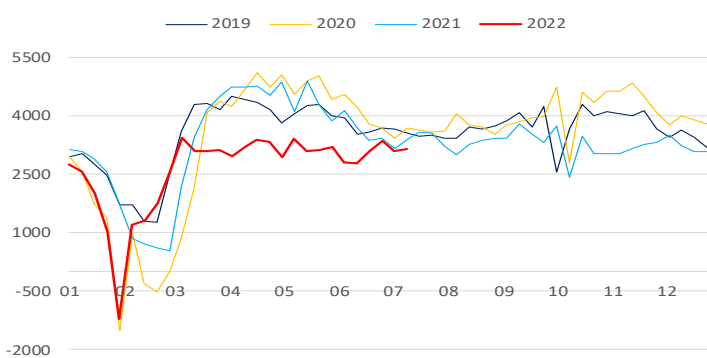
CHINESE STEEL MILL PROFITABILITY—Rebar



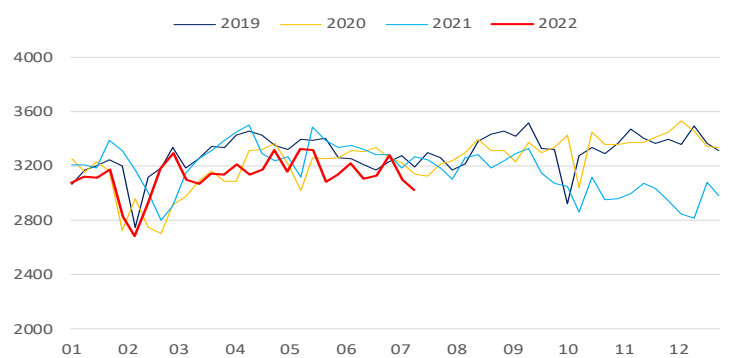
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



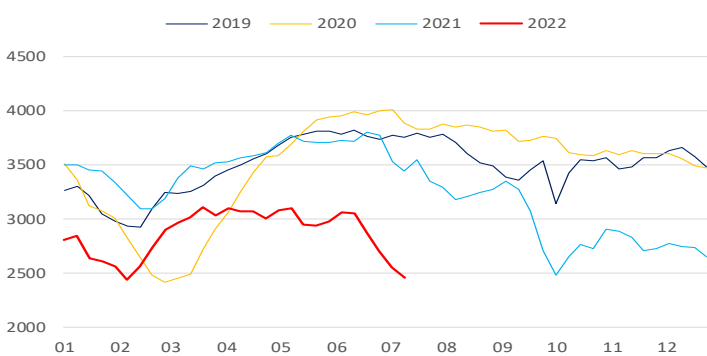
CHINESE STEEL CONSUMPTION—Rebar



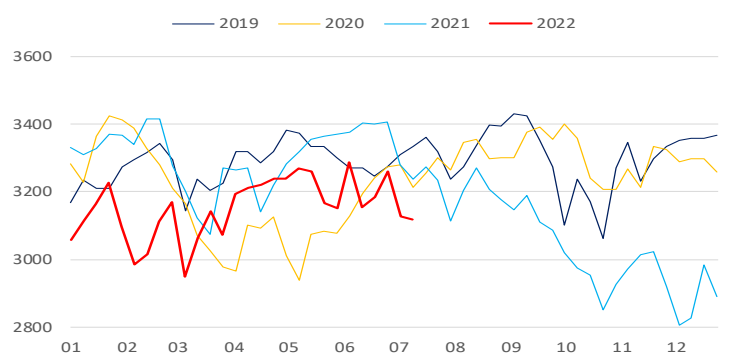
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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
	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
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		
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					
Jul 18th, 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%
Jul 18th, 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	IRCN0034	
IOPI58	IRCNQ002		IRCNQ005	IRCN0035	
IOPI65	IRCNQ003		IRCNQ006		
IOPLI62	IRCN0036		IRCN0037		

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