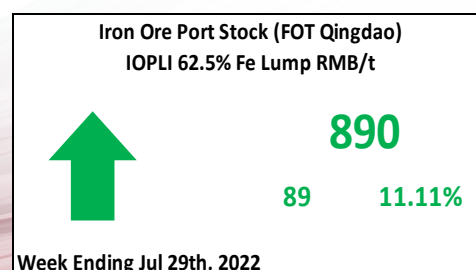
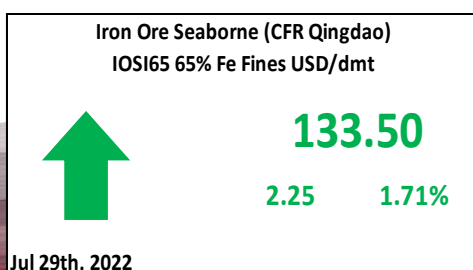
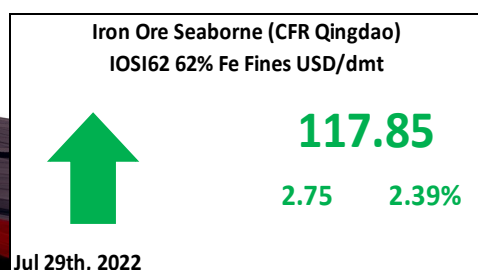
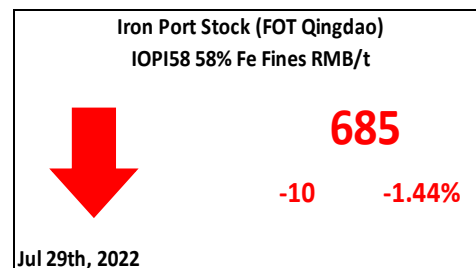
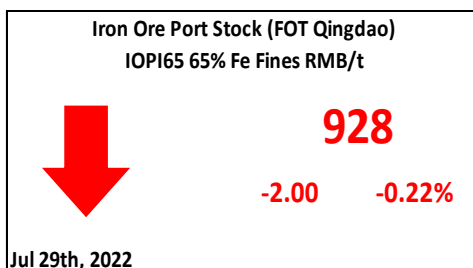
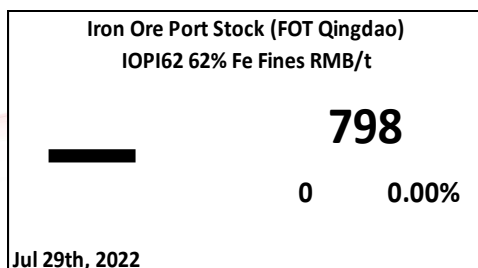


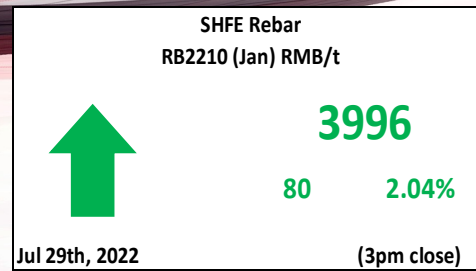
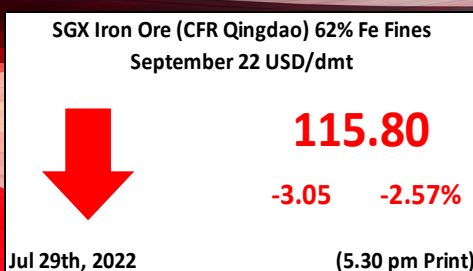
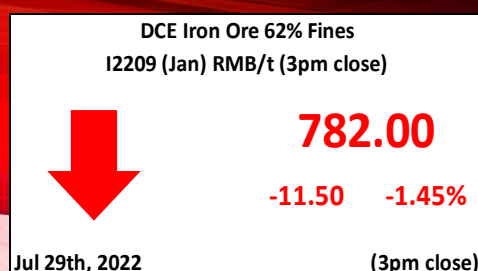


MMi Dashboard

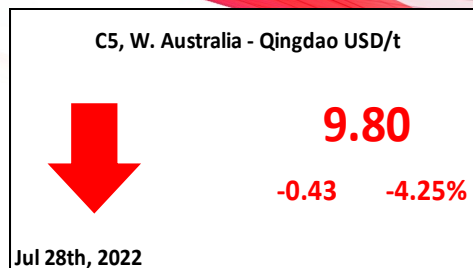
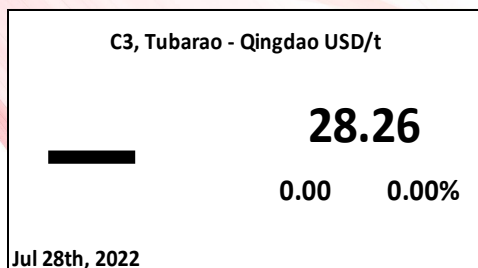
Iron Ore Price Indices



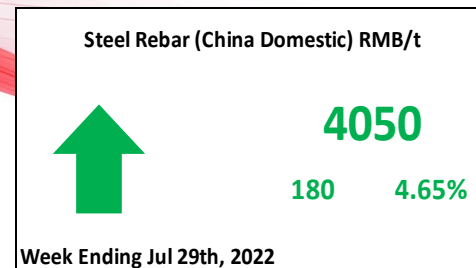
Exchange Traded Contracts



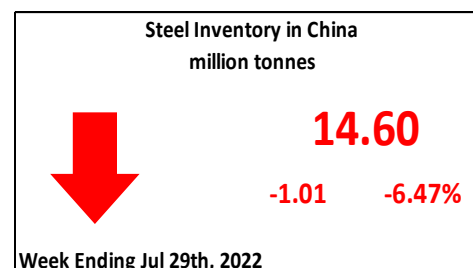
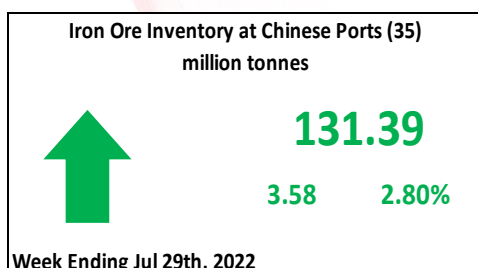
Freight Rates



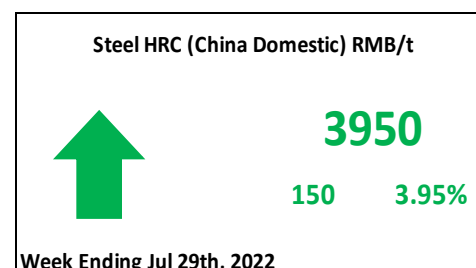
Steel Price



Inventory Levels



Steel Price



IRON ORE PORT STOCK INDEX (IOPI)

Jul 29th, 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	798	0	0.0%	770	937	587	1376	109.83	-0.04	0.0%	106.01	134.34	84.25	200.71
IOPI58	58% Fe Fines	685	-10	-1.4%	682	770	454	1090	94.74	-1.48	-1.5%	94.43	110.63	64.78	159.72
IOPI65	65% Fe Fines	928	-2	-0.2%	915	1112	811	1596	128.374	-0.33	-0.3%	126.73	160.25	111.38	233.47

IRON ORE SEABORNE INDEX (IOSI)

Jul 29th, 2022		CFR Qingdao, USD/dry tonne						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²
IOSI62	62% Fe Fines	117.85	2.75	2.39%	110.07	137.14	93.75	205.05
IOSI65	65% Fe Fines	133.50	2.25	1.71%	124.60	160.95	108.20	242.40

MARKET COMMENTARY

DCE iron ore was shocked and kept upward all the day. The main contract closed at 782, increased of 1.82%. 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 775-792 yuan/mt, keep stable compare with yesterday. SSF at Shandong port dealt 540 yuan/mt. PBF at Tangshan port dealt 182-794 yuan/mt, decrease 10 yuan/mt. SSF at Tangshan port dealt 680 yuan/mt. In the macro aspect, the fourth meeting of the Sixth General Assembly of China Iron and steel industry association was held in Beijing. The meeting mentioned that the steel industry should continue to reduce crude steel production and increase iron ore development in the second half of the year. In terms of fundamentals, as of July 29, the inventory of 35 ports tracked by SMM totaled 131.39 million tons, 3.58 million tons more than last week and 5.16 million tons more than the same period last year. The port inventory has accumulated for five consecutive periods. The average daily port-dredging volume of imported mines in this period increased by 6000 tons to 2,499 million tons on a weekly basis, mainly due to the increased demand for replenishment of raw materials under

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

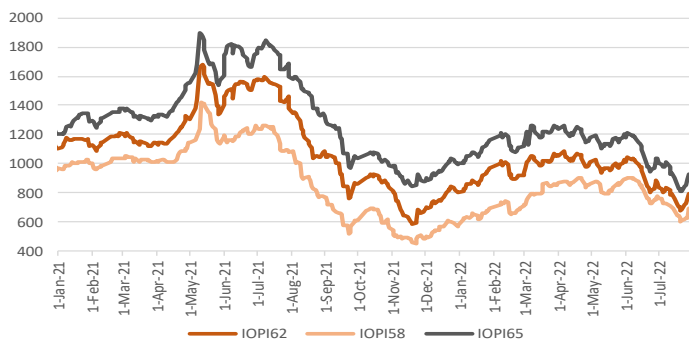
IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

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

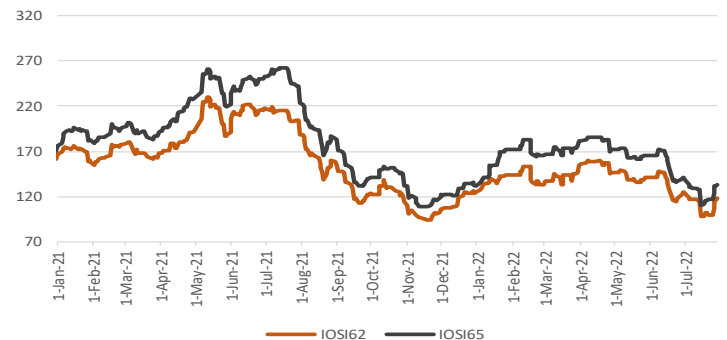
Week Ending Jul 29th, 2022		This week	Change %	Low ²	High ²
China Mines Concentrate Composite Index RMB/WT		806.95	-2.06%	706.36	1511.22

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

Jul 29th, 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	770	770	937	150.00	136.86	130.13	106.01	106.01	106.01	134.34
IOPI58	58% Fe Fines	874	841	823	682	682	682	770	128.09	118.11	115.45	94.43	94.43	94.43	110.63
IOPI65	65% Fe Fines	1206	1152	1086	915	915	915	1112	176.31	161.44	151.89	126.73	126.73	126.73	160.25

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

Jul 29th, 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	110.07	110.07	137.14	W. Australia - Qingdao	C5	9.80	-0.43	-4.25%	3.57	16.77
IOSI65	65% Fe Fines	181.23	166.30	154.17	124.60	124.60	124.60	160.95	Tubarao - Qingdao	C3	28.26	0.00	0.00%	6.70	36.40

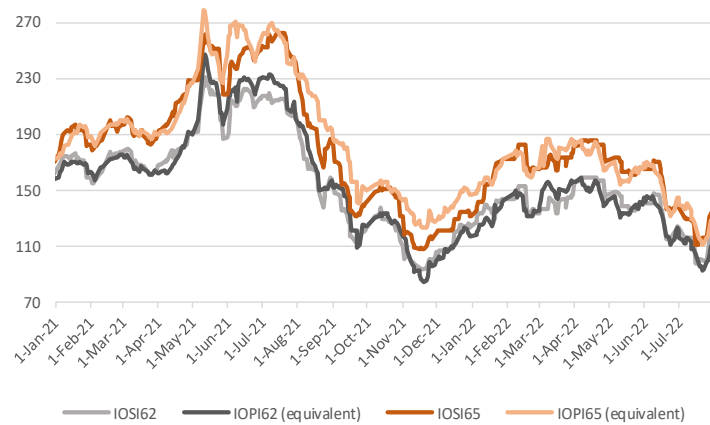
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

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

Jul 29th, 2022		PORT STOCK INDEX (RMB/WT)		Jul 29th, 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	-113	-14.16%	IOSI65	65% Fe Fines	15.65	13.28%
IOPI65	65% Fe Fines	130	16.29%				

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

Jul 29th, 2022				Jul 29th, 2022			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	739	0	-59	Roy Hill	113.35	2.75	-4.50
SIMEC Fines	669	0	-129	SIMEC Fines	109.85	2.75	-8.00
PB Fines	767	0	-31	PB Fines	114.10	2.75	-3.75
Newman Fines	784	0	-14	Newman Fines	117.00	2.75	-0.85
MAC Fines	741	0	-57	MAC Fines	114.10	2.75	-3.75
Jimblebar Blended Fines	660	0	-138	Jimblebar Blended Fines	106.50	2.75	-11.35
Carajas Fines	976	0	178	Carajas Fines	147.40	2.75	29.55
Brazilian SSF	760	0	-38	Brazilian SSF	121.60	2.75	3.75
Brazilian Blend Fines	778	0	-20	Brazilian Blend Fines	123.25	2.75	5.40
RTX Fines	681	0	-117	RTX Fines	107.75	2.75	-10.10
West Pilbara Fines	710	0	-88	West Pilbara Fines	112.10	2.75	-5.75

Jul 29th, 2022			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	685	-10	0
FMG Blended Fines	693	-10	8
Robe River	689	-10	4
Western Fines	697	-10	12
Atlas Fines	691	-10	6
Yandi	680	-9	-5

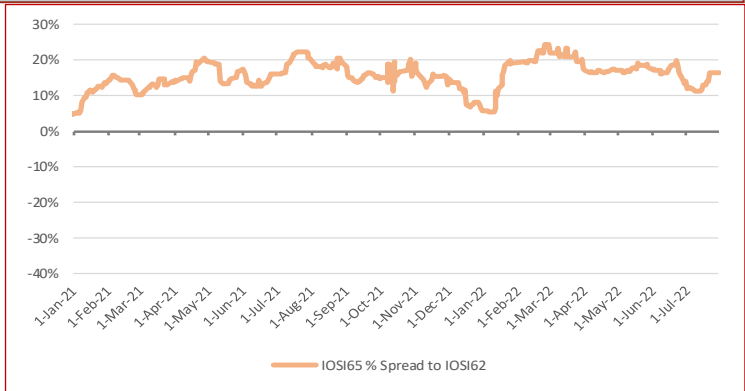
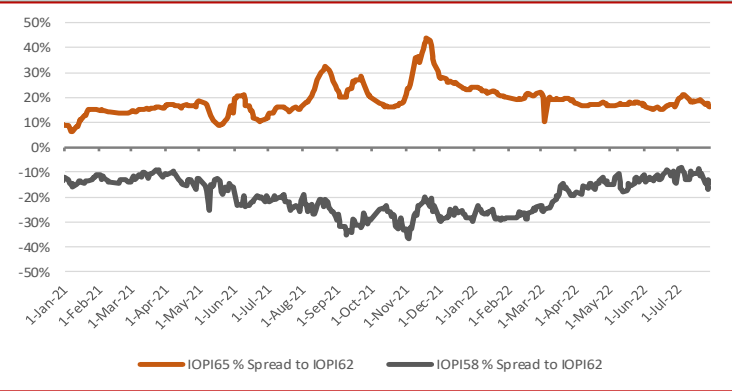
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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	-3.00		High Grade Fe 63 - 64%	2.00	0.00
	High Grade Fe 64 - 65%	43.00	-3.00		High Grade Fe 64 - 65%	2.00	0.00
	High Grade Fe 65 - 65.5%	43.00	-3.00		High Grade Fe 65 - 65.5%	2.00	0.00
1% Alumina	Low Grade Fe	18.00	0.00	1% Alumina	High Fe Grade Al <2.25%	0.25	0.00
	High Fe Grade Al <2.25%	26.00	0.00		High Fe Grade Al 2.25-4%	2.00	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%	5.50	0.25
0.01% Phosphorus	High Fe Grade Si 4-6.5%	5.00	0.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	2.25	0.00
	Low Fe Grade	12.00	-2.00		High Fe Grade 0.115%<P<0.15%	3.25	0.00
	High Fe Grade 0.09%<P<0.115%	5.00	0.00		Low Fe Grade 0.09%<P<0.1%	5.00	0.00
	High Fe Grade 0.115%<P<0.15%	5.00	0.00				

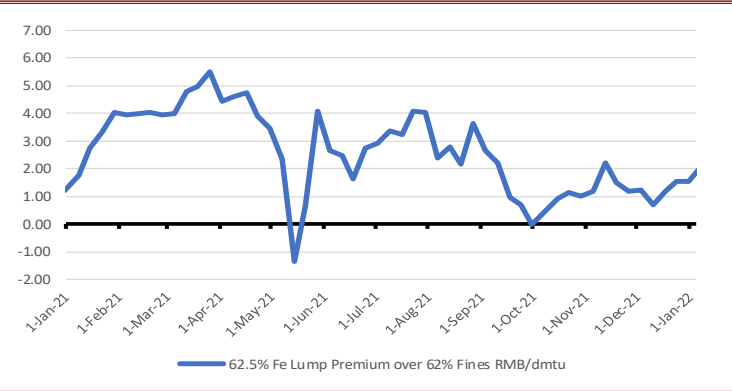
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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	0.00	-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

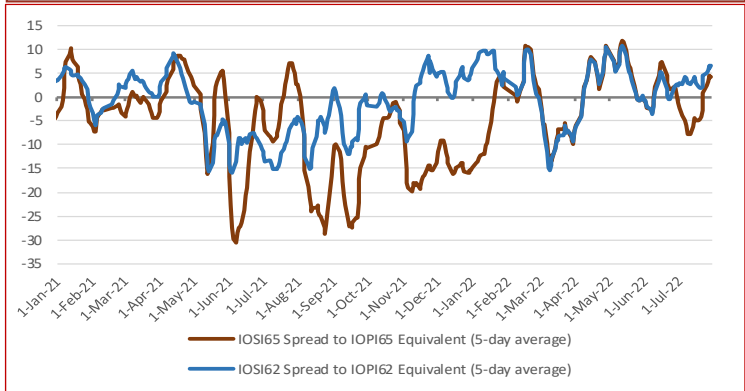
IRON ORE INDEX PREMIUMS/DISCOUNTS



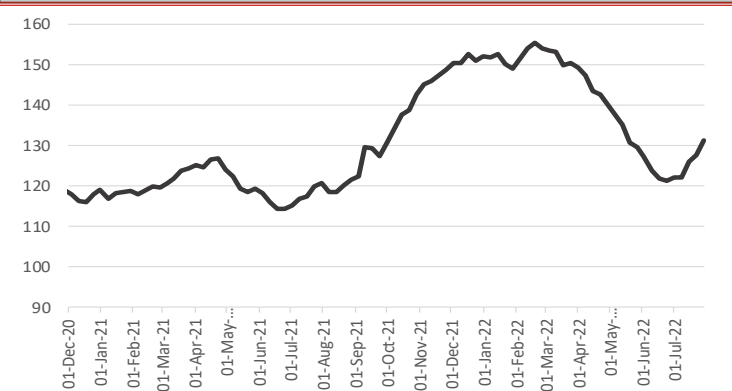
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



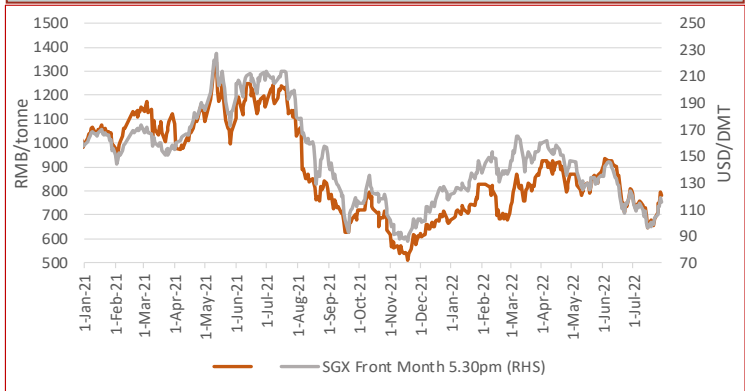
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



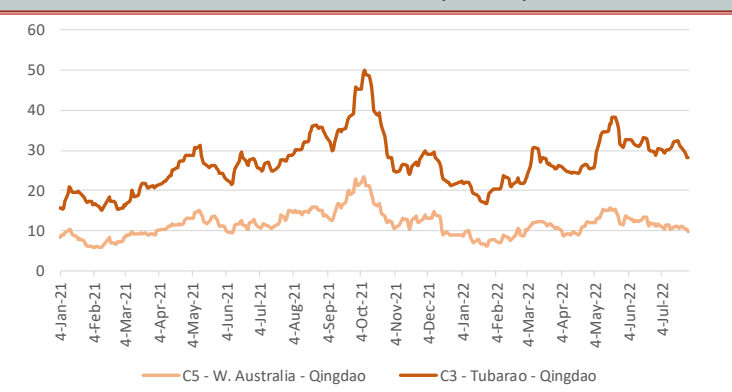
IRON ORE PORT INVENTORIES (MILLION TONNES)

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

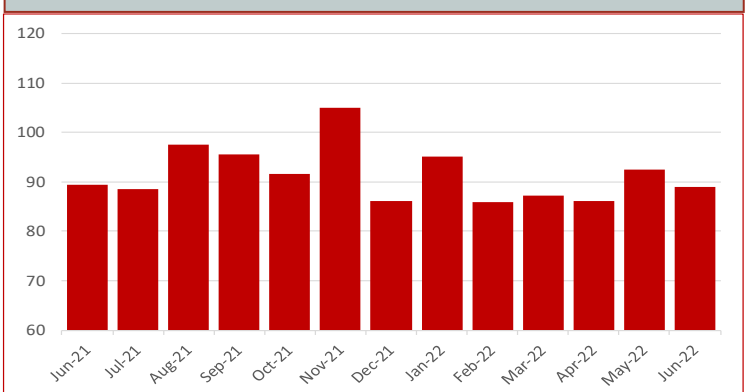
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Jul 29th, 3pm close			Jul 29th, 5:30pm		
Contract	12209	Change	Change %	Sep. 22	Change	Change %
Closing Price	782.00	-11.50	-1.45%	115.80	-3.05	-2.57%
Vol traded ('000 lots)	48.18	-11.71	-19.56%	6.65	0.87	14.98%
Open positions ('000 lots)	53.63	-4.15	-7.19%	30.86	1.52	5.19%
Day Low	768.0	31.00	4.21%	112.30	0.85	0.76%
Day High	793.5	-5.00	-0.63%	119.45	-0.45	-0.38%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

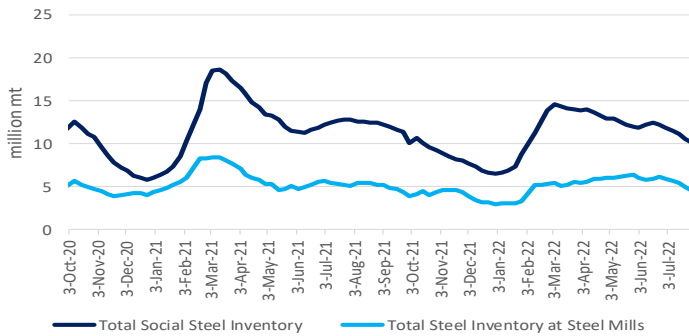
Product	2022/7/29	Change	Change %
ReBar HRB400 φ18mm	4,050	180	4.65%
Wirerod Q300 φ6.5mm	4,520	180	4.15%
HRC Q235/SS400 5.5mm*1500*C	3,950	150	3.95%
CRC SPCC/ST12 1.0mm*1250*2500	4,400	60	1.38%
Medium & Heavy Plate Q235B 20mm	4,150	50	1.22%
GI ST02Z 1.0mm*1000*C	4,760	60	1.28%
Colour Coated Plate	7,550	-50	-0.66%

CHINESE STEEL MILL PROFITABILITY

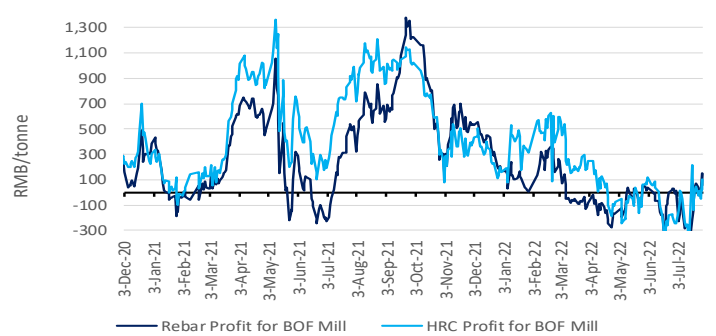
SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)			
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	115.10	-23	Mmi CFR Equivalent index for 1st Feb
Coke	2,560	-240	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,670	0	steel scrap (6mm) in Zhangjiagang, ext. 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

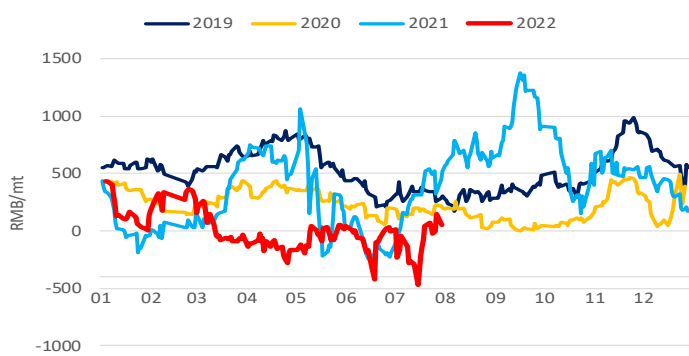
CHINESE STEEL INVENTORIES



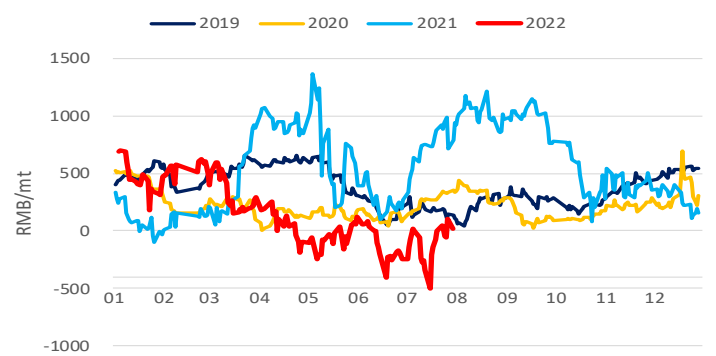
CHINESE STEEL MILL PROFITABILITY



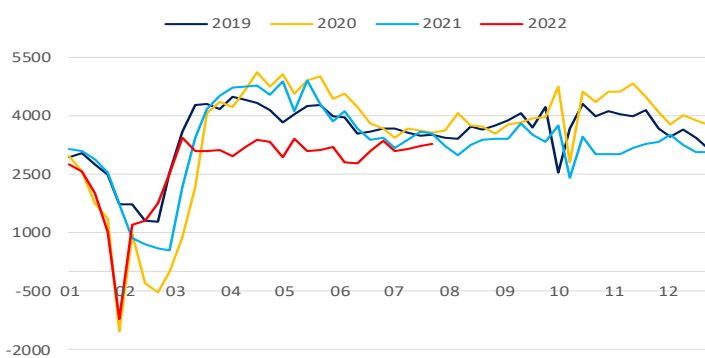
CHINESE STEEL MILL PROFITABILITY—Rebar



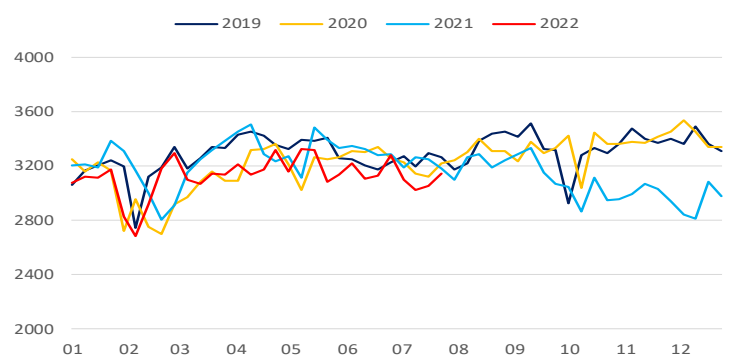
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



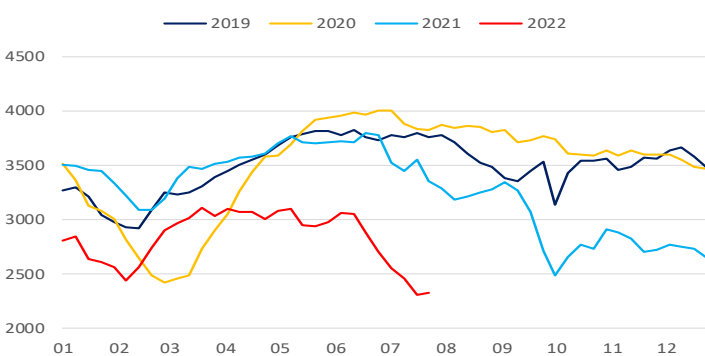
CHINESE STEEL CONSUMPTION—Rebar



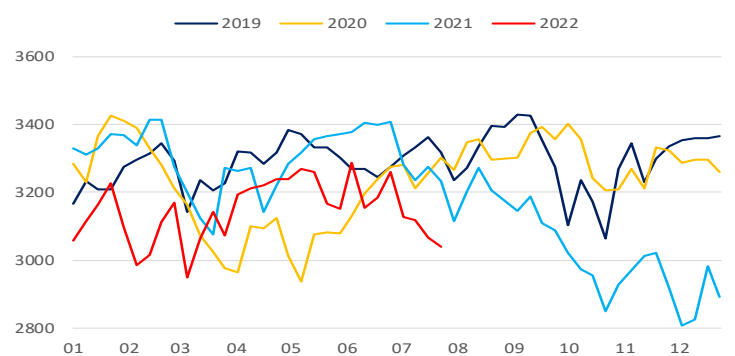
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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
	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*			
Port Index	62%	58%	65%
Seaborne index	0	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 29th, 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 29th, 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			

CONTACT US

MMi Singapore Office Details: Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7629 E: prices@mmiprices.com
 SMM Singapore Office Details: Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7630 E: service.en@smm.cn
 SMM Shanghai Office Details: 9th FL, Building 9, Lujiazui Software Park, No.20, Lane 91, Pudong, Shanghai Tel: +86 021 5155 0306 E: service.en@smm.cn

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