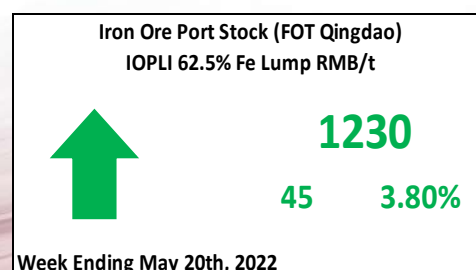
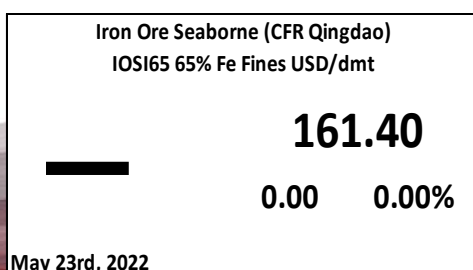
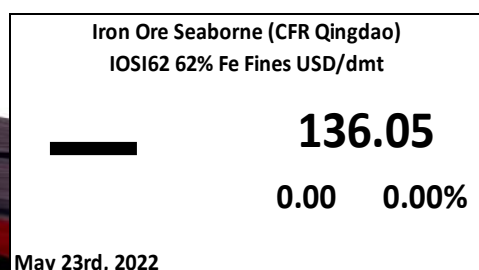
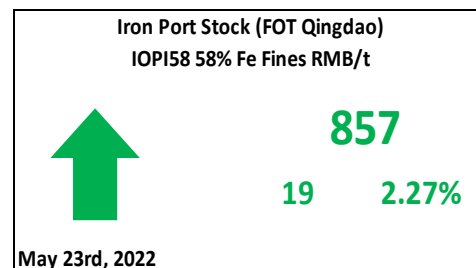
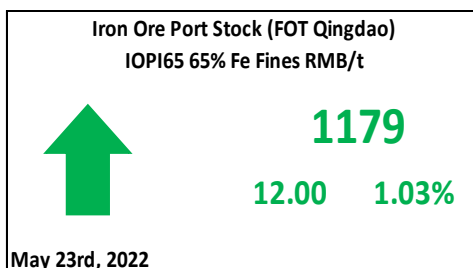
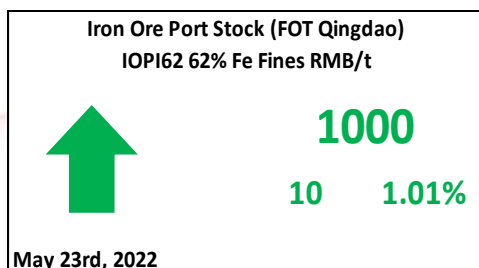


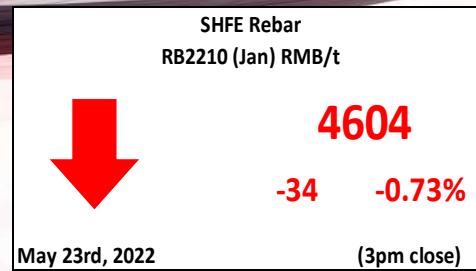
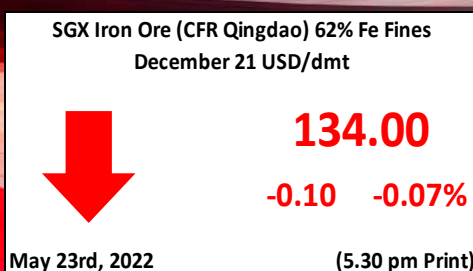
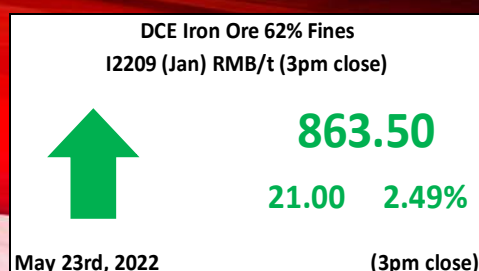


MMi Dashboard

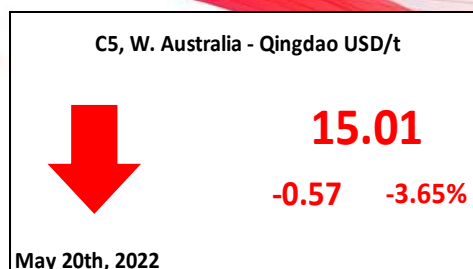
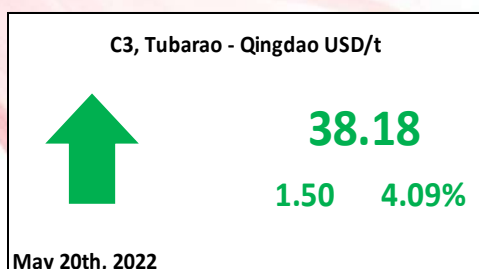
Iron Ore Price Indices



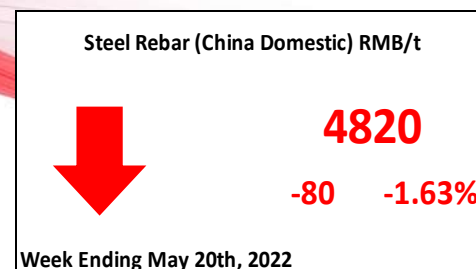
Exchange Traded Contracts



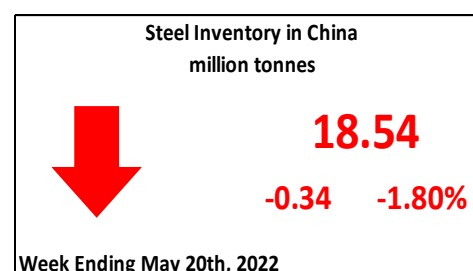
Freight Rates



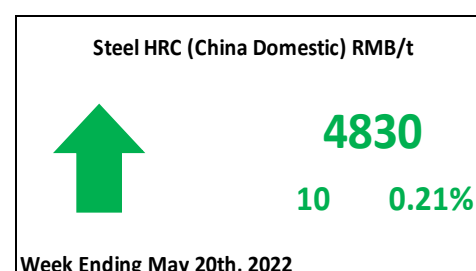
Steel Price



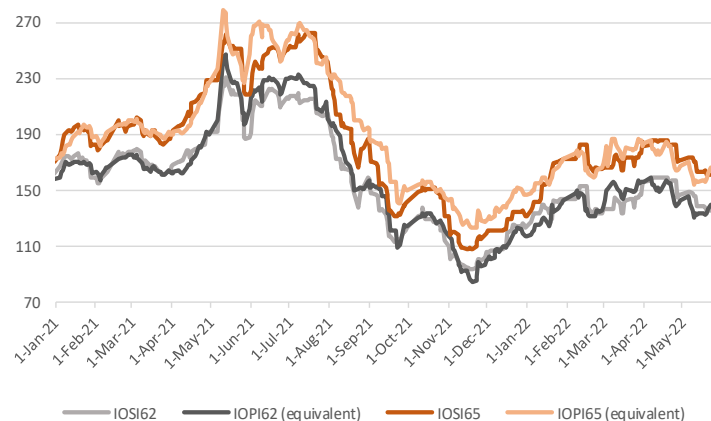
Inventory Levels



Steel Price



IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

May 23rd, 2022				May 23rd, 2022			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	940	10	-60	Roy Hill	131.55	0.00	-4.50
SIMEC Fines	875	10	-125	SIMEC Fines	128.05	0.00	-8.00
PB Fines	966	10	-34	PB Fines	132.30	0.00	-3.75
Newman Fines	987	10	-13	Newman Fines	135.20	0.00	-0.85
MAC Fines	943	10	-57	MAC Fines	132.30	0.00	-3.75
Jimblebar Blended Fines	863	10	-137	Jimblebar Blended Fines	124.70	0.00	-11.35
Carajas Fines	1179	10	179	Carajas Fines	165.60	0.00	29.55
Brazilian SSF	967	10	-33	Brazilian SSF	139.80	0.00	3.75
Brazilian Blend Fines	977	10	-23	Brazilian Blend Fines	141.45	0.00	5.40
RTX Fines	884	10	-116	RTX Fines	125.95	0.00	-10.10
West Pilbara Fines	911	10	-89	West Pilbara Fines	130.30	0.00	-5.75

May 23rd, 2022			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	857	19	0
FMG Blended Fines	867	20	10
Robe River	862	19	5
Western Fines	872	20	15
Atlas Fines	865	20	8
Yandi	850	18	-7

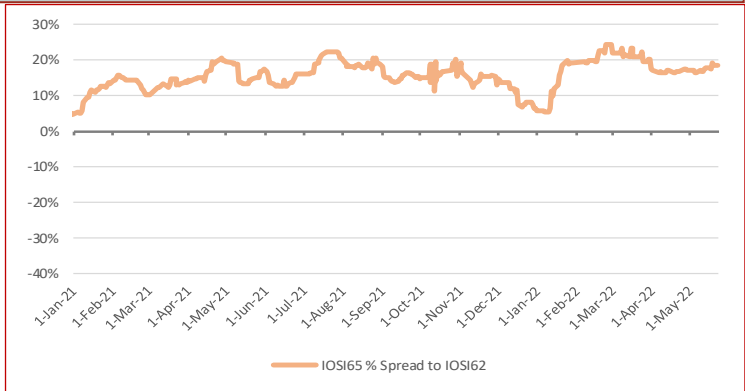
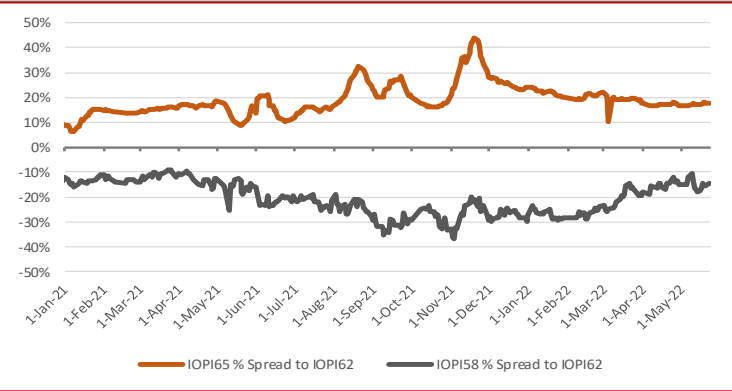
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	45.00	0.00	1% Fe	High Grade Fe 60 - 63%	6.80	0.00
	High Grade Fe 63 - 64%	56.00	0.00		High Grade Fe 63 - 64%	0.25	0.00
	High Grade Fe 64 - 65%	56.00	0.00		High Grade Fe 64 - 65%	0.25	0.00
	High Grade Fe 65 - 65.5%	56.00	0.00		High Grade Fe 65 - 65.5%	0.25	0.00
1% Alumina	Low Grade Fe	78.00	1.00	1% Alumina	High Fe Grade Al <2.25%	5.80	0.00
	High Fe Grade Al <2.25%	8.00	2.00		High Fe Grade Al 2.25-4%	6.50	0.00
	High Fe Grade Al 2.25-4%	48.00	0.00				
	Low Fe Grade Al <2.25%	100.00	0.00				
1% Silica	Low Fe Grade Al 2.25-4%	18.00	0.00	1% Silica	High Fe Grade Si <4%	5.50	0.00
	High Fe Grade Si <4%	6.00	0.00		High Fe Grade Si 4 - 6.5%	7.75	0.00
	High Fe Grade Si 4-6.5%	40.00	0.00				
0.01% Phosphorus	Low Fe Grade	5.00	0.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	3.25	0.00
	High Fe Grade 0.09%<P<0.115%	7.00	0.00		High Fe Grade 0.115%<P<0.15%	3.50	0.00
	High Fe Grade 0.115%<P<0.15%	7.00	0.00		Low Fe Grade 0.09%<P<0.1%	8.00	1.00

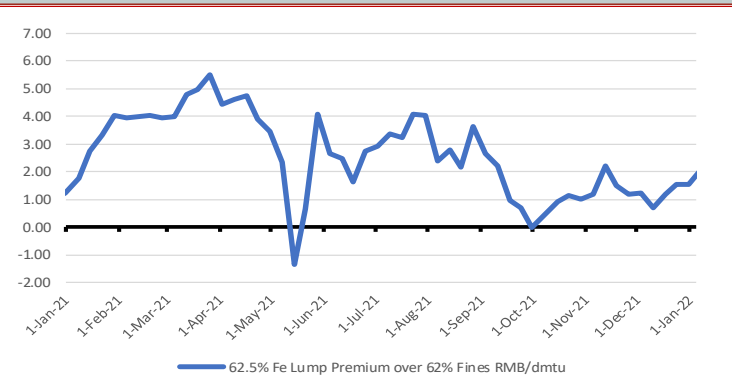
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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	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

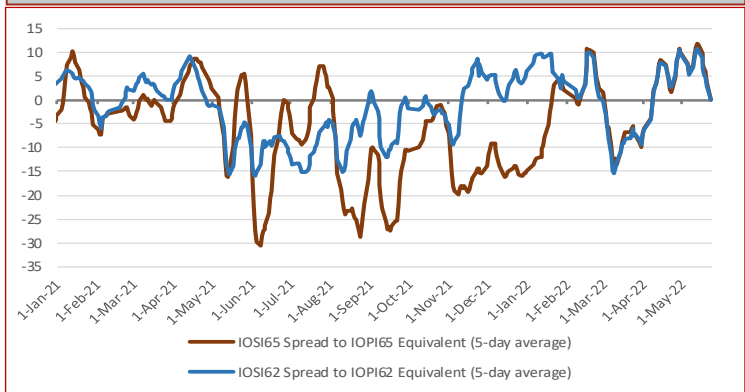
IRON ORE INDEX PREMIUMS/DISCOUNTS



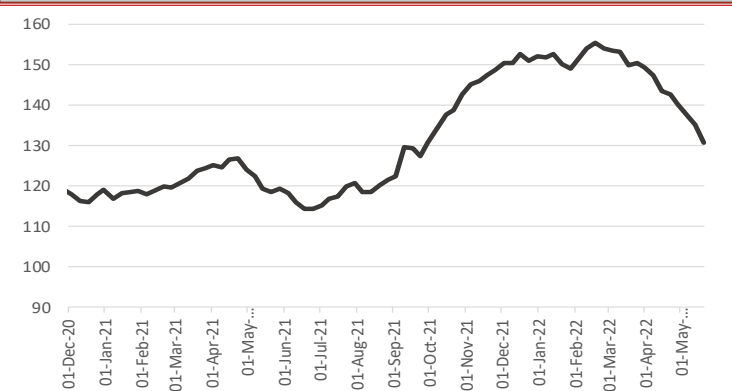
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



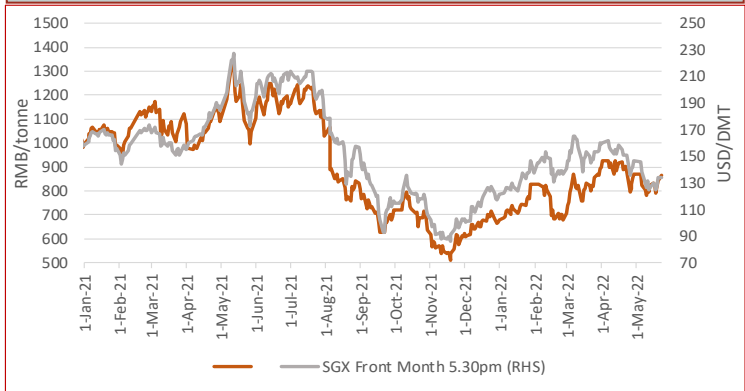
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



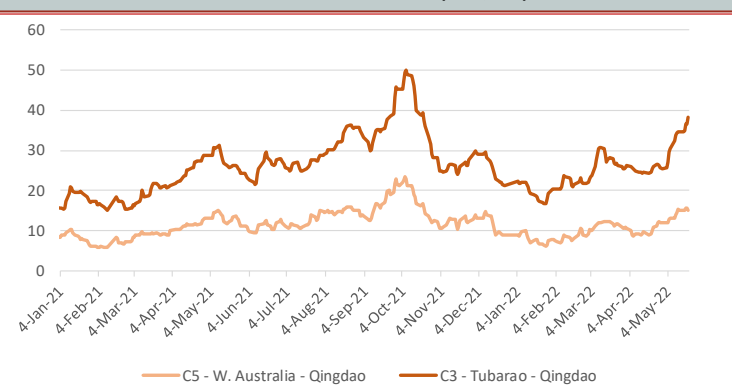
IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending May 20th, 2022				
Province	This week	Change %	Low ²	High ²
Jingtang	12.54	-9.91%	12.26	19.20
Qingdao	22.08	-0.90%	9.41	26.24
Caofeidian	13.09	-9.29%	11.25	16.29
Tianjin	10.33	2.48%	7.14	12.97
Rizhao	15.32	-4.31%	9.44	19.26
Total (35 Ports)	130.84	-3.16%	98.80	155.39

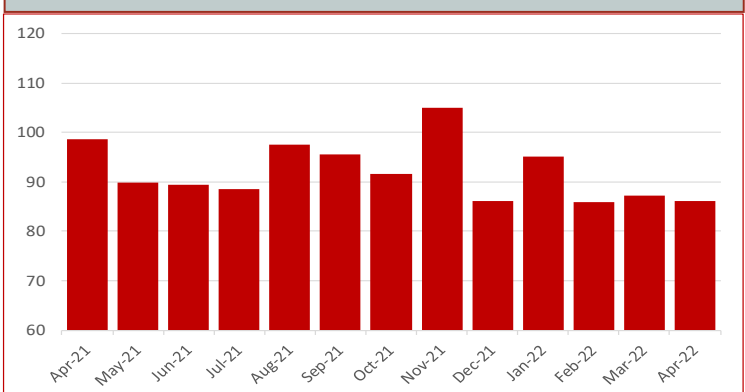
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	May 23rd, 3pm close			May 23rd, 5:30pm		
Contract	12209	Change	Change %	Nov. 21	Change	Change %
Closing Price	863.50	21.00	2.49%	134.00	-0.10	-0.07%
Vol traded ('000 lots)	69.16	18.06	35.36%	4.56	0.88	23.89%
Open positions ('000 lots)	70.29	3.19	4.75%	20.55	-0.02	-0.08%
Day Low	842.0	30.00	3.69%	130.45	4.90	3.90%
Day High	884.0	38.50	4.55%	139.15	4.40	3.27%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

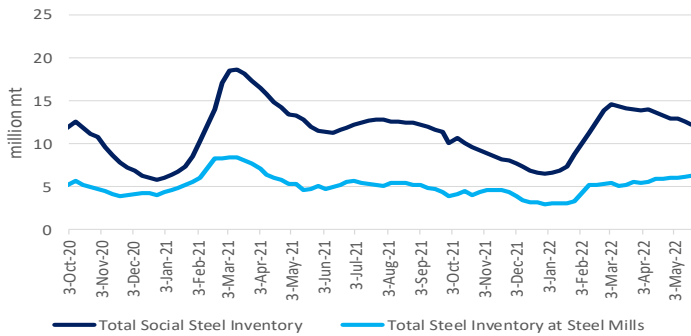
Product	2022/5/20	Change	Change %
ReBar HRB400 φ18mm	4,820	-80	-1.63%
Wirerod Q300 φ6.5mm	5,100	-70	-1.35%
HRC Q235/SS400 5.5mm*1500*C	4,830	10	0.21%
CRC SPCC/ST12 1.0mm*1250*2500	5,470	-30	-0.55%
Medium & Heavy Plate Q235B 20mm	5,100	-20	-0.39%
GI ST02Z 1.0mm*1000*C	6,020	-20	-0.33%
Colour Coated Plate	8,300	0	0.00%

CHINESE STEEL MILL PROFITABILITY

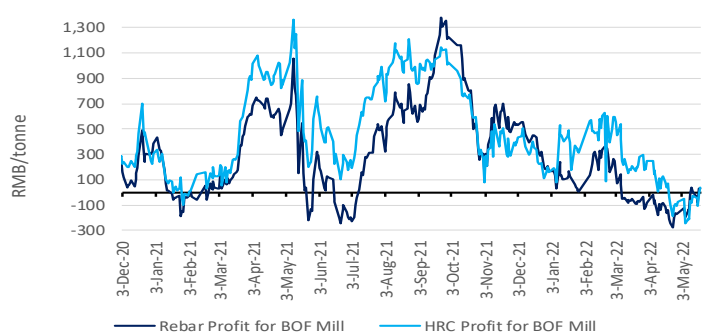
SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)			
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	136.05	-3	Mmi CFR Equivalent index for 1st Feb
Coke	3,620	-200	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	3,920	0	steel scrap (6mm) in Zhangjiagang, ext. tax
Billet Cost	4,261	-66	Q234, incl. tax
Rebar cost - Blast furnace	4,848	-74	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	32	24	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	4,771	-74	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	39	64	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

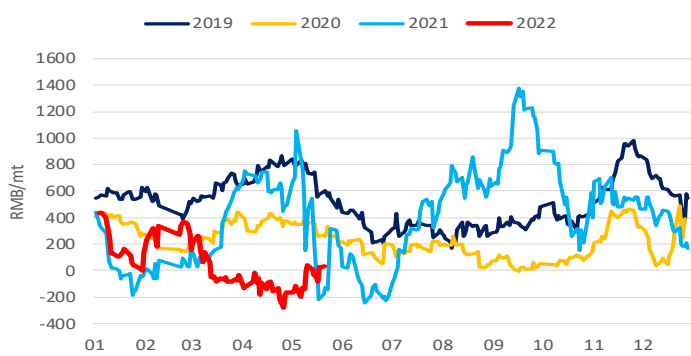
CHINESE STEEL INVENTORIES



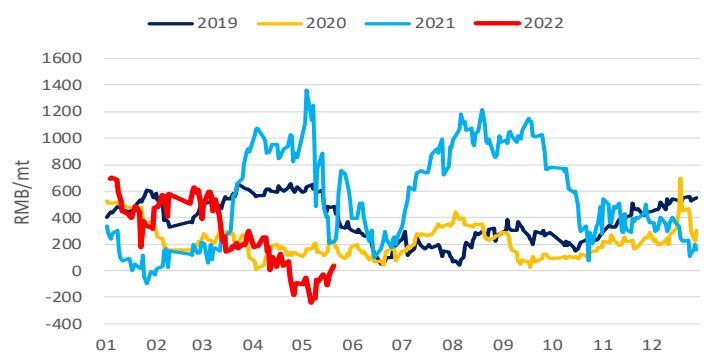
CHINESE STEEL MILL PROFITABILITY



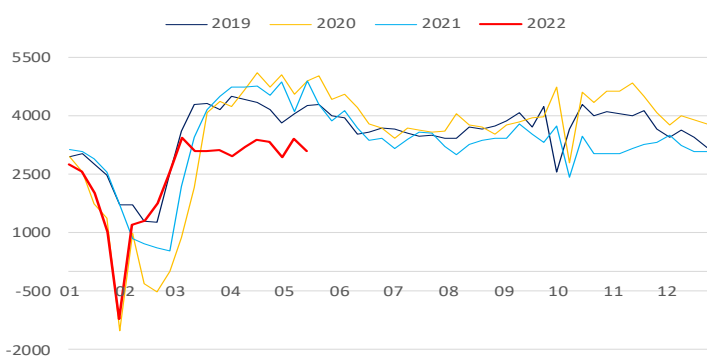
CHINESE STEEL MILL PROFITABILITY—Rebar



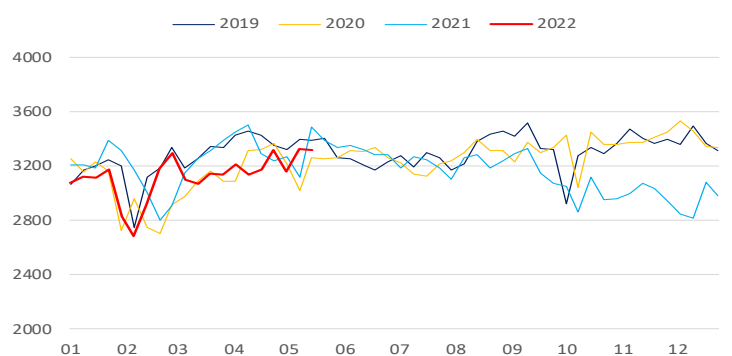
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



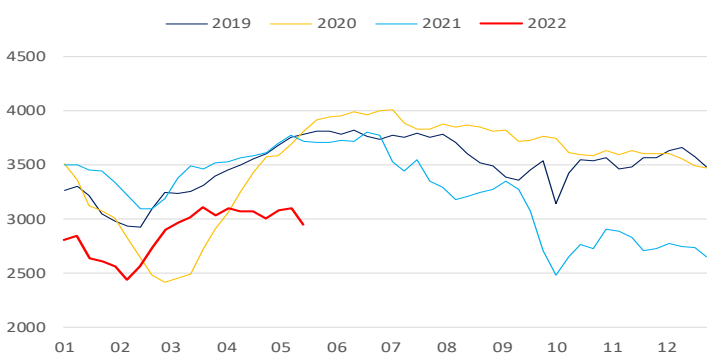
CHINESE STEEL CONSUMPTION—Rebar



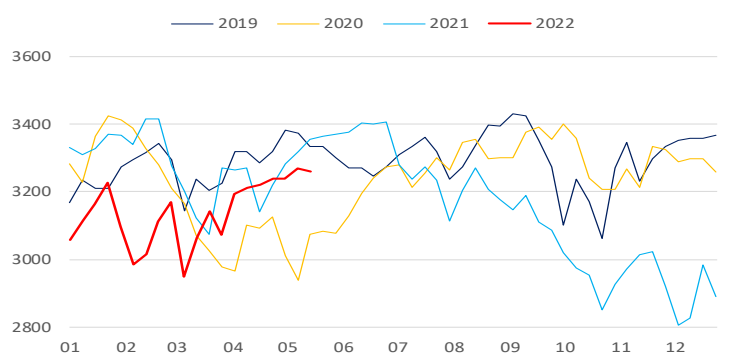
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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																					
Fe %	65.00	62.00	58.00	62.50	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 %	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%	<table border="1"> <thead> <tr> <th colspan="4">Data Exclusions*</th> </tr> <tr> <th></th> <th>62%</th> <th>58%</th> <th>65%</th> </tr> </thead> <tbody> <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> </tbody> </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																								
Pricing Point	Qingdao Port (FOT and CFR respectively)			FOT Qingdao Port	* Number of price submissions for iron ore indices that were excluded from index calculations today as they were anomalous and could not be verified																				
Timing (Seaborne)	Loading within 4 weeks, Delivery within 8 weeks			Delivery within 2 weeks																					
Payment Terms	L/C at sight			L/C at sight or CAD																					

IRON ORE 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					
May 23rd, 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%
May 23rd, 2022	Specifications applied for 58% brand assessments						Specifications applied for 58% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture		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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