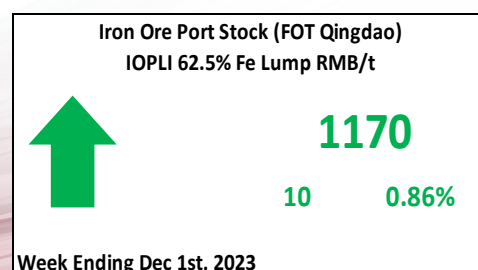
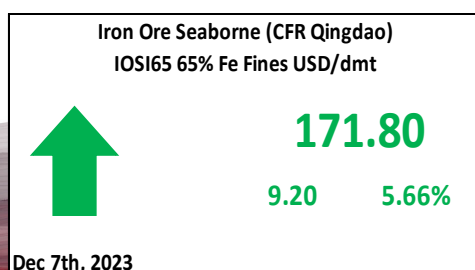
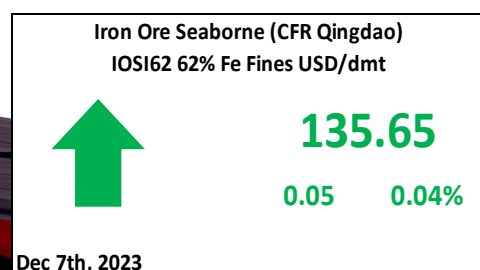
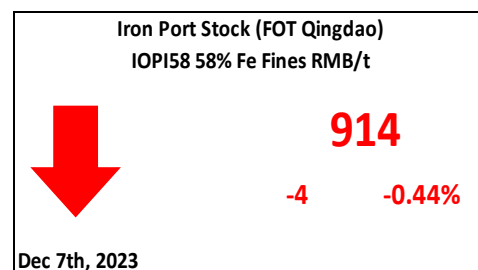
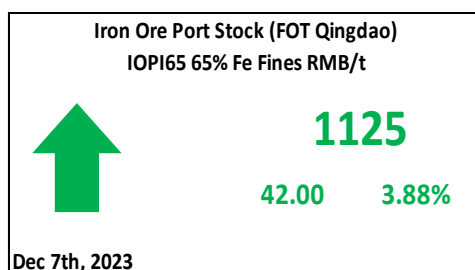
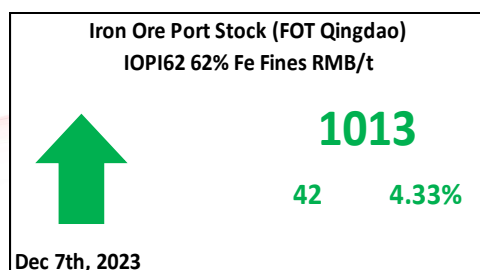


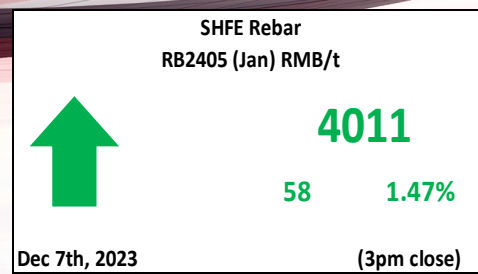
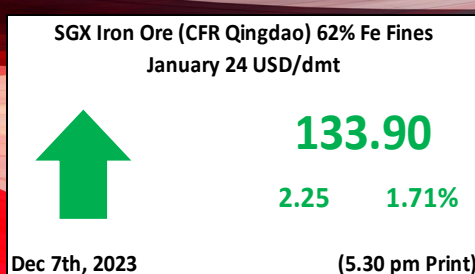
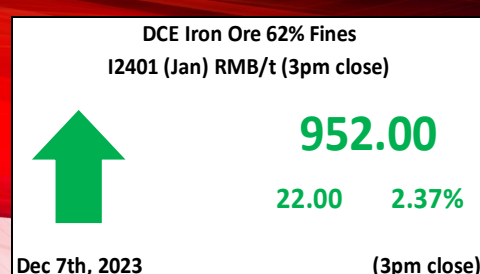


MMi Dashboard

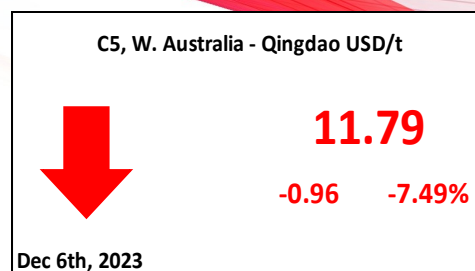
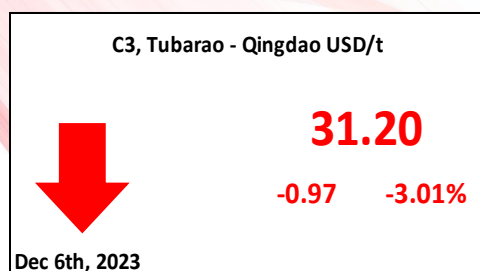
Iron Ore Price Indices



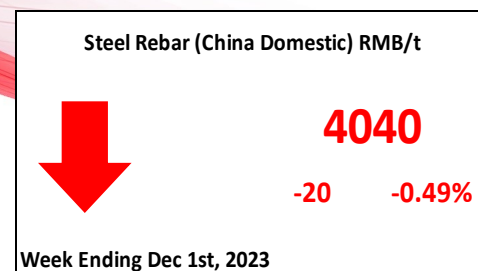
Exchange Traded Contracts



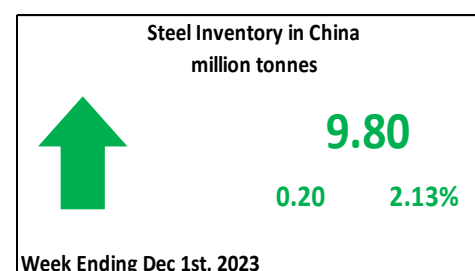
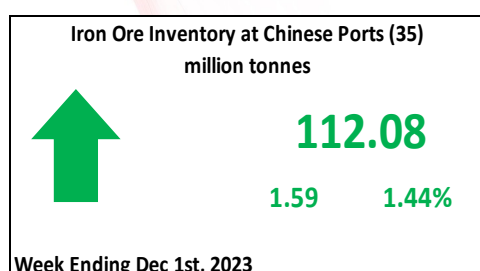
Freight Rates



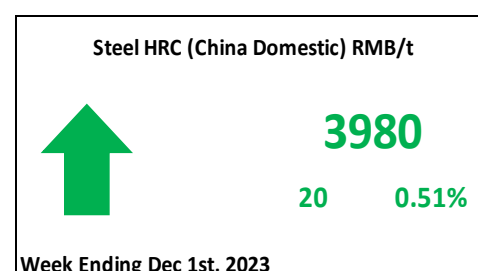
Steel Price



Inventory Levels



Steel Price



IRON ORE PORT STOCK INDEX (IOPI)

Dec 7th, 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	1013	42.0	4.33%	857	881	770	852	133.12	5.61	4.4%	113.48	119.59	100.95	133.00
IOPI58	58% Fe Fines	914	-4.0	-0.44%	761	764	680	756	121.00	-0.66	-0.5%	101.45	104.15	89.86	122.00
IOPI65	65% Fe Fines	1125	42.0	3.88%	974	1014	881	971	148.25	5.60	3.9%	129.47	138.46	116.19	148.00

IRON ORE SEABORNE INDEX (IOSI)

MARKET COMMENTARY

Dec 7th, 2023		CFR Qingdao, USD/dry tonne							DCE iron ore futures rose by 3.93% today, the main contract closed at 952. The steel mills are not active to purchase. The overall trading sentiment of the market is general. PBF at Shandong port deal 998 yuan/mt. PBF at Tangshan port deal 1008-1010 yuan/mt. According to the inventory of the top ten ports tracked by SMM, the total quantity of the four major varieties has slightly accumulated compared to last week. Steel mills are still experiencing slight losses due to slow profit recovery, but their selection of goods has improved. Due to the tight supply of domestic ore, the demand for port refined powder and bulk ore has increased. The current market is still optimistic about future expectations, with iron ore prices fluctuating widely.						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²							
IOSI62	62% Fe Fines	135.65	0.05	0.04%	114.30	114.30	99.20	146.75							
IOSI65	65% Fe Fines	171.80	9.20	5.66%	127.40	127.40	114.75	171.80							

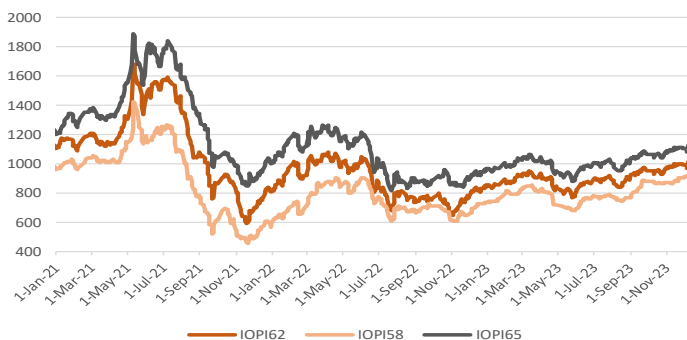
IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending Dec 1st, 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	1170	10	0.9%	965	1028	900	1170	148.09	1.79	1.22%	122.23	134.94	113.00	148.00

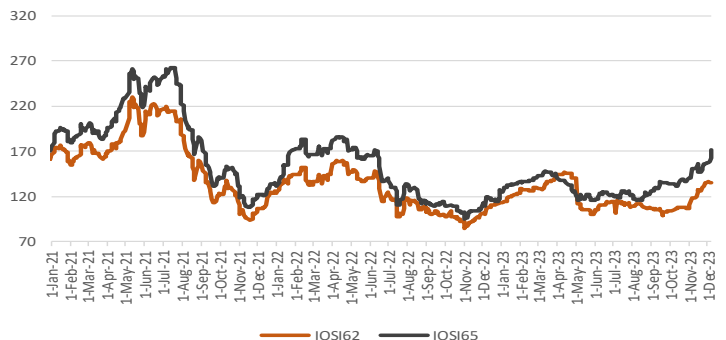
IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending Dec 1st, 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	1173	1.6%	779	1645	165.00	1.90%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	1170	-0.4%	780	1630	164.58	-0.09%	110.51	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	890	2.3%	620	1310	125.20	2.64%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	1234	0.8%	800	1752	173.59	1.15%	0.00	272.32
Week Ending Dec 1st, 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 = 6.87528			
China Mines Concentrate Composite Index RMB/WT				1066.83	0.82%	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

Dec 7th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	August	September	October	November	MTD	QTD	YTD	August	September	October	November	MTD	QTD	YTD
IOPI62	62% Fe Fines	873	945	947	988	857	852	881	113.28	122.79	123.14	129.07	113.48	113.02	119.59
IOPI58	58% Fe Fines	759	838	869	884	761	756	764	99.13	109.67	113.94	116.42	101.45	100.99	104.15
IOPI65	65% Fe Fines	985	1057	1059	1100	974	971	1014	128.31	137.74	138.13	144.10	129.47	129.28	138.46

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

FREIGHT RATES

Dec 7th, 2023		CFR Qingdao, USD/dry tonne							Dec 6th, 2023		FREIGHT RATES - DRY BULK US\$/wet tonne				
Index	Fe Content	August	September	October	November	MTD	QTD	YTD	Route	Designation	Change	Change %	Low ²	High ²	
IOSI62	62% Fe Fines	109.02	104.25	106.44	124.61	112.14	113.29	114.30	W. Australia - Qingdao	C5	11.79	-0.96	-7.49%	3.57	16.77
IOSI65	65% Fe Fines	119.61	132.40	135.69	150.46	122.86	126.22	127.40	Tubarao - Qingdao	C3	31.20	-0.97	-3.01%	6.70	36.40

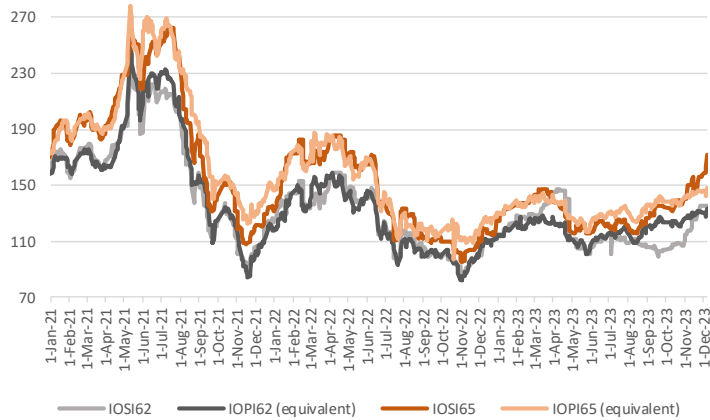
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending Dec 1st, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne ¹						
Index	Fe Content	August	September	October	November	MTD	QTD	YTD	August	September	October	November	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	951	1043	1113	1155	933	960	1017	118.96	130.25	139.38	145.07	119.96	122.09	134.98

IRON ORE INDEX PREMIUMS/DISCOUNTS

Dec 7th, 2023		PORT STOCK INDEX (RMB/WT)		Dec 7th, 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	-99	-9.77%	IOSI65	65% Fe Fines	36.15	26.65%
IOPI65	65% Fe Fines	112	11.06%				

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

Dec 7th, 2023	PORT STOCK INDEX (RMB/WT)			Dec 7th, 2023	SEABORNE INDEX (USD/DMT)		
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	956	42	-57	Roy Hill	131.15	0.05	-4.50
SIMEC Fines	888	42	-125	SIMEC Fines	127.65	0.05	-8.00
PB Fines	979	40	-34	PB Fines	131.90	0.05	-3.75
Newman Fines	983	42	-30	Newman Fines	134.80	0.05	-0.85
MAC Fines	963	42	-50	MAC Fines	131.90	0.05	-3.75
Jimblebar Blended Fines	879	42	-134	Jimblebar Blended Fines	124.30	0.05	-11.35
Carajas Fines	1194	42	181	Carajas Fines	165.20	0.05	29.55
Brazilian SSF	980	43	-33	Brazilian SSF	139.40	0.05	3.75
Brazilian Blend Fines	993	42	-20	Brazilian Blend Fines	141.05	0.05	5.40
RTX Fines	897	42	-116	RTX Fines	125.55	0.05	-10.10
West Pilbara Fines	923	41	-90	West Pilbara Fines	129.90	0.05	-5.75

Dec 7th, 2023	PORT STOCK INDEX (RMB/WT)		
	Price	Change	Diff to IOPI58
SSF	914	-4	0
FMG Blended Fines	925	-4	11
Robe River	926	-4	12
Western Fines	930	-4	16
Atlas Fines	922	-4	8
Yandi	905	-4	-9

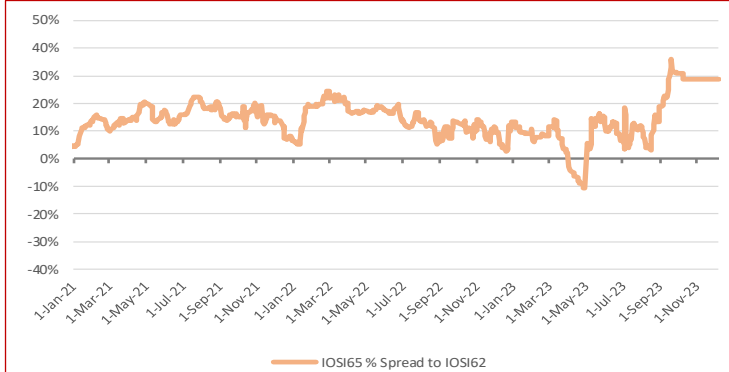
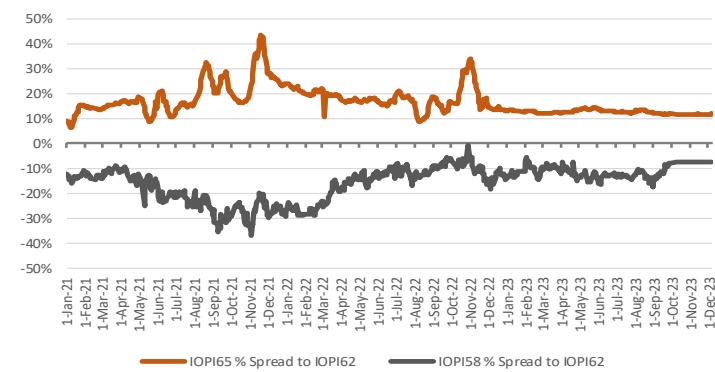
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	4.50	0.25
	High Grade Fe 63 - 64%	15.00	-6.00		High Grade Fe 63 - 64%	2.75	0.00
	High Grade Fe 64 - 65%	15.00	-6.00		High Grade Fe 64 - 65%	2.75	0.00
	High Grade Fe 65 - 65.5%	15.00	-6.00		High Grade Fe 65 - 65.5%	2.75	0.00
1% Alumina	Low Grade Fe	25.00	0.00	1% Alumina	High Fe Grade Al <2.25%	8.00	0.00
	High Fe Grade Al <2.25%	17.00	1.00		High Fe Grade Al 2.25-4%	0.75	-0.50
	High Fe Grade Al 2.25-4%	14.00	3.00		High Fe Grade Si <4%	3.25	-0.25
	Low Fe Grade Al <2.25%	108.00	8.00		High Fe Grade Si 4 - 6.5%	3.25	-0.75
1% Silica	Low Fe Grade Al 2.25-4%	33.00	3.00	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%	3.25	-0.75
0.01% Phosphorus	High Fe Grade Si 4-6.5%	18.00	5.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.25	0.00
	Low Fe Grade	32.00	1.00		High Fe Grade 0.115%<P<0.15%	2.50	0.00
	High Fe Grade 0.09%<P<0.115%	6.00	0.00				
	High Fe Grade 0.115%<P<0.15%	6.00	0.00				
	Low Fe Grade 0.09%<P<0.1%	5.00	0.00				

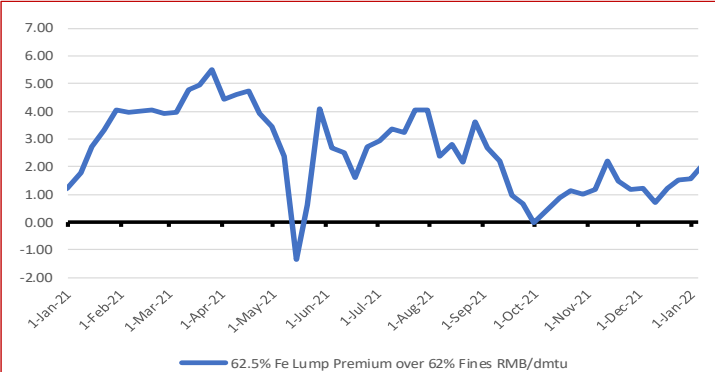
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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	-20.00	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	-30.00	0.00

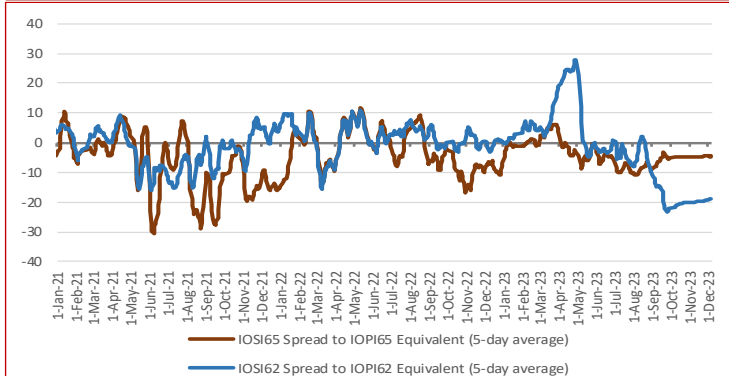
IRON ORE INDEX PREMIUMS/DISCOUNTS



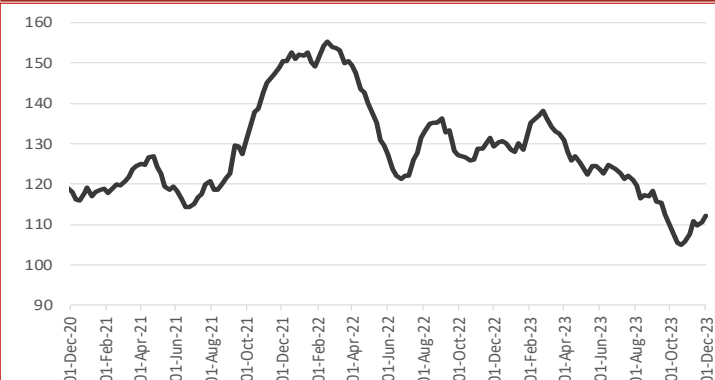
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



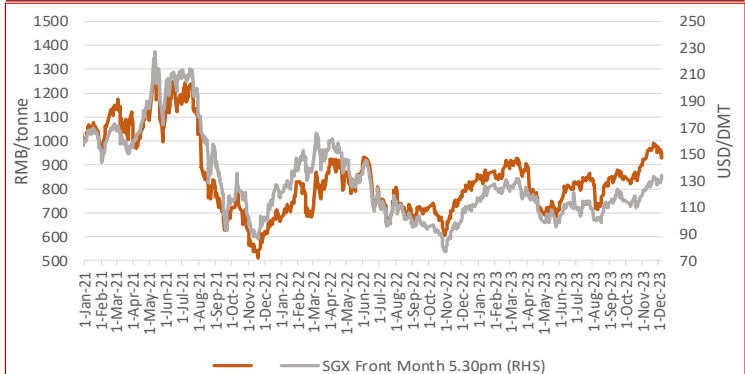
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

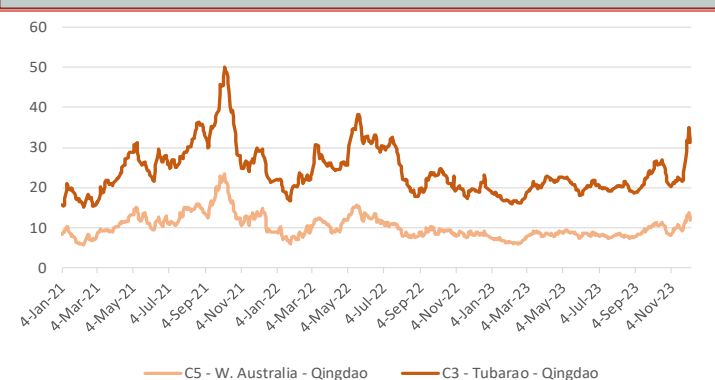
Week Ending Dec 1st, 2023

Province	This week	Change %	Low ²	High ²
Jingtang	9.17	3.27%	8.41	19.20
Qingdao	23.76	2.11%	9.41	26.24
Caofeidian	8.93	4.44%	7.56	16.29
Tianjin	7.68	0.26%	6.49	12.97
Rizhao	12.89	-0.39%	9.44	19.26
Total (35 Ports)	112.08	1.44%	98.80	155.39

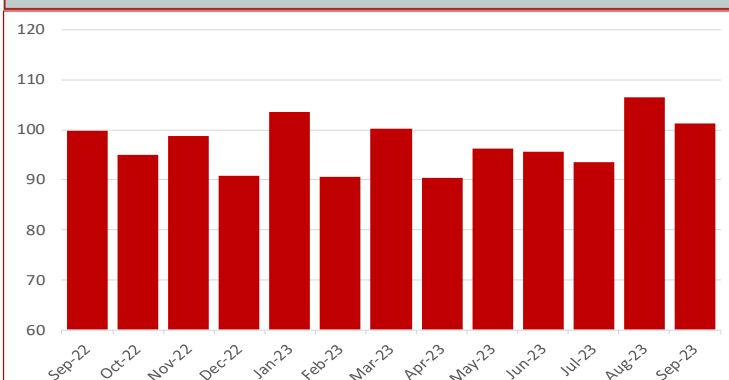
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Dec 7th, 3pm close			Dec 7th, 5:30pm		
Contract	I2405	Change	Change %	Jan. 24	Change	Change %
Closing Price	952.00	22.00	2.37%	133.90	2.25	1.71%
Vol traded ('000 lots)	27.06	4.67	20.86%	10.70	3.24	43.47%
Open positions ('000 lots)	48.00	4.38	10.05%	43.74	-0.71	-1.59%
Day Low	927.5	27.00	3.00%	130.95	2.75	2.15%
Day High	953.0	22.50	2.42%	134.30	2.45	1.86%

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	2023/12/1	Change	Change %
ReBar HRB400 ϕ 18mm	4,040	-20	-0.49%
Wirerod Q300 ϕ 6.5mm	4,270	-20	-0.47%
HRC Q235/SS400 5.5mm*1500*C	3,980	20	0.51%
CRC SPCC/ST12 1.0mm*1250*2500	4,790	-20	-0.42%
Medium & Heavy Plate Q235B 20mm	3,950	-30	-0.75%
GI ST02Z 1.0mm*1000*C	5,050	-10	-0.20%
Colour Coated Plate	7,000	0	0.00%

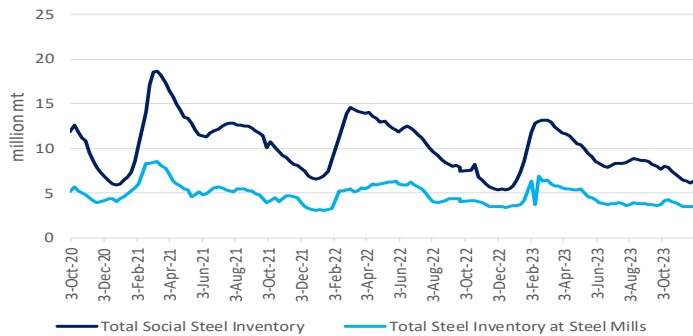
CHINESE STEEL MILL PROFITABILITY

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

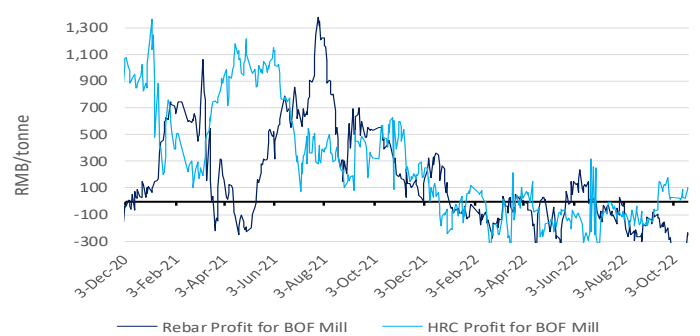
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	135.60	18	Mmi CFR Equivalent index for 1st Feb
Coke	2,670	110	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,910	0	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,354	35	Q234, incl. tax
Rebar cost - Blast furnace	4,016	39	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	-46	-39	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	4,080	42	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	-100	-42	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

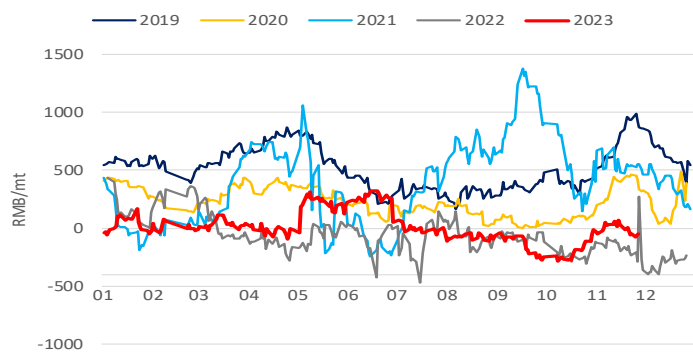
CHINESE STEEL INVENTORIES



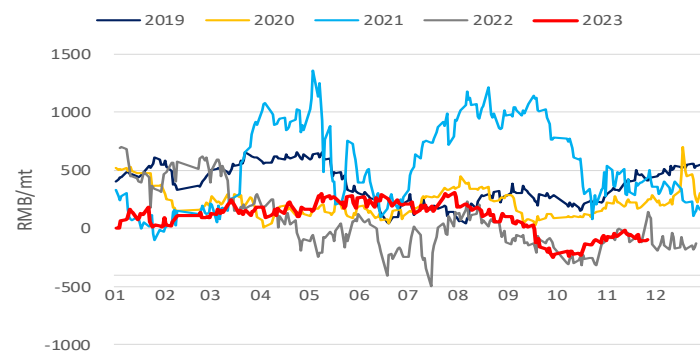
CHINESE STEEL MILL PROFITABILITY



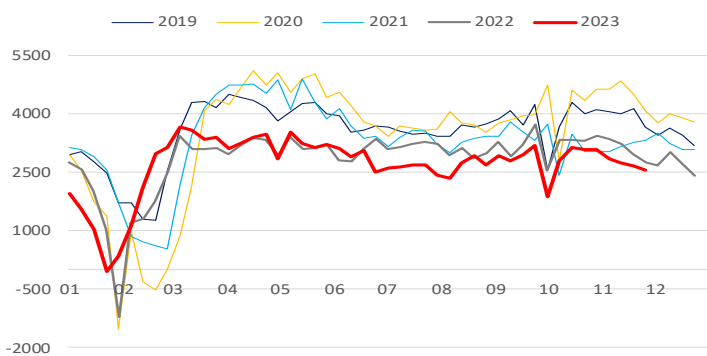
CHINESE STEEL MILL PROFITABILITY—Rebar



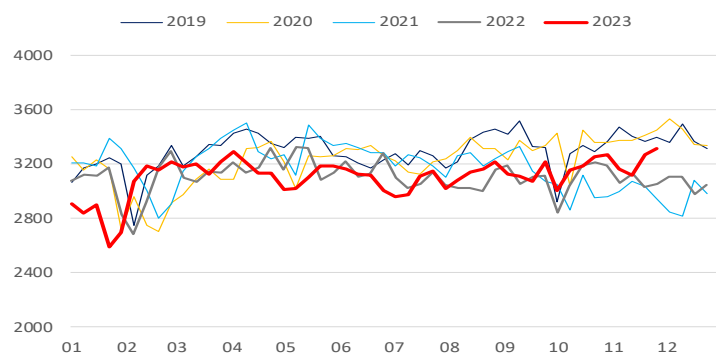
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



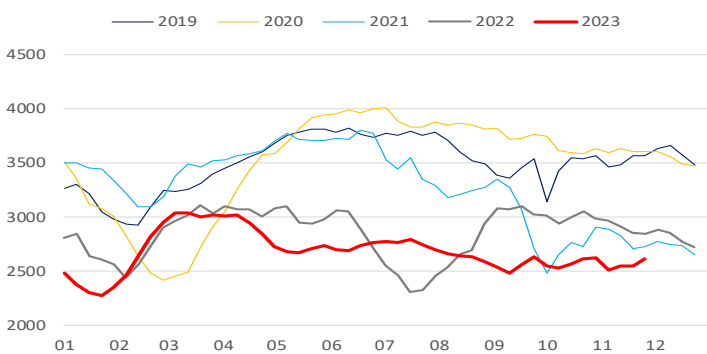
CHINESE STEEL CONSUMPTION—Rebar



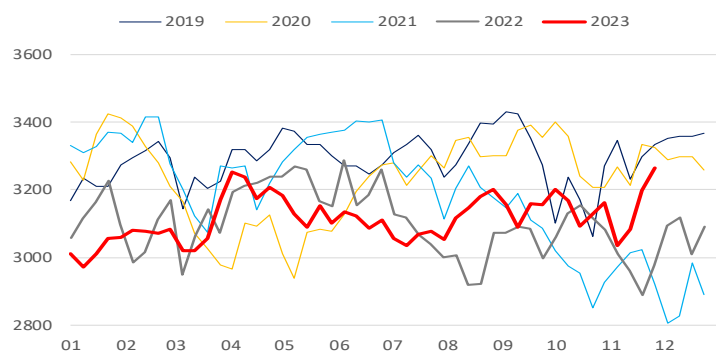
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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					
Dec 7th, 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%
Dec 7th, 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		

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

Visit www.mmiprices.com for full index price histories and archive of daily reports

This information has been prepared by Metals Market Index ("MMI"). Use of the information presented here is at your sole risk, and any content, material and/or data presented or otherwise obtained through your use of the information in this document is at your own discretion and risk and you will be solely responsible for any damage to you personally or your company or organisation or business associates whatsoever which in anyway results from the use, reliance or application of such content material and/or information. Certain data has been obtained from various sources and any copyright existing in such data shall remain the property of the source. Except for the foregoing, MMi retains all copyright within this document. The copying or redistribution of any part of this document without the express written authority of MMi is forbidden.