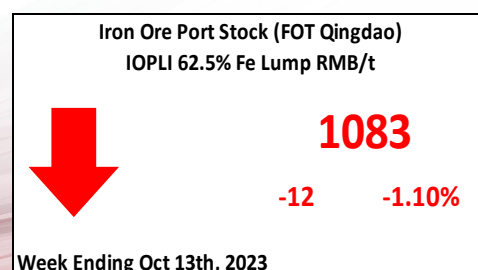
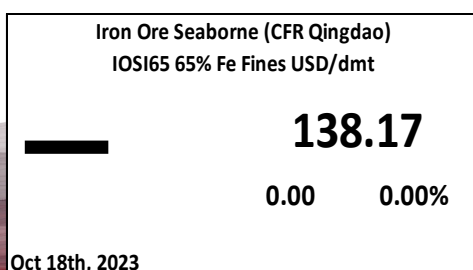
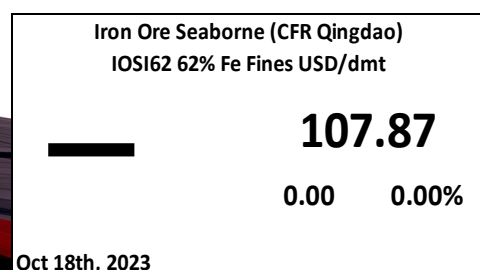
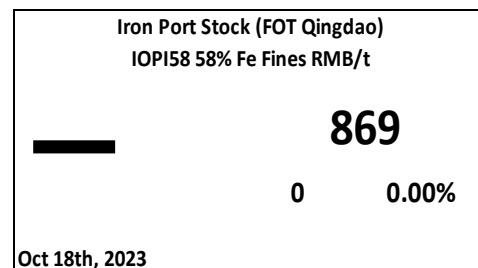
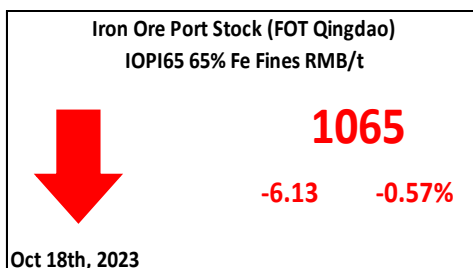
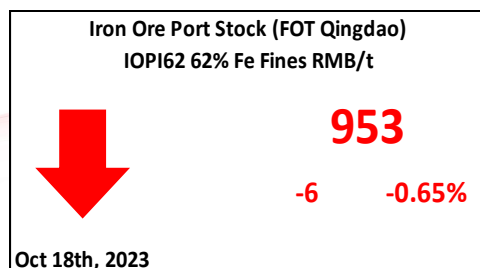


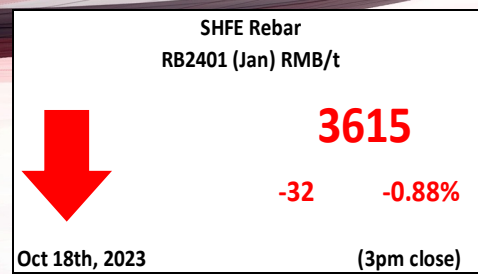
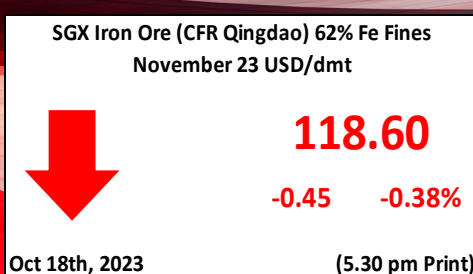
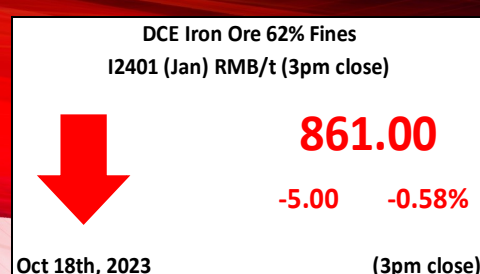


MMi Dashboard

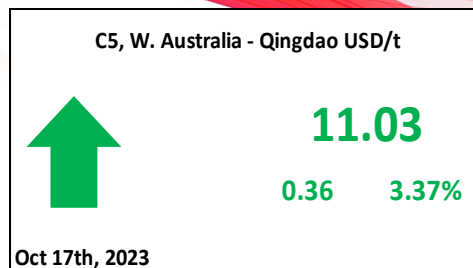
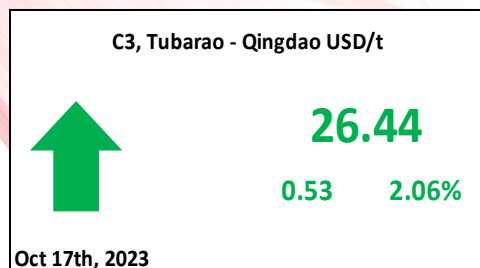
Iron Ore Price Indices



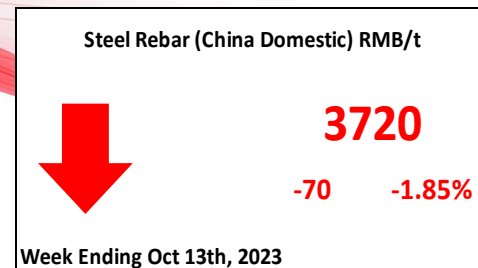
Exchange Traded Contracts



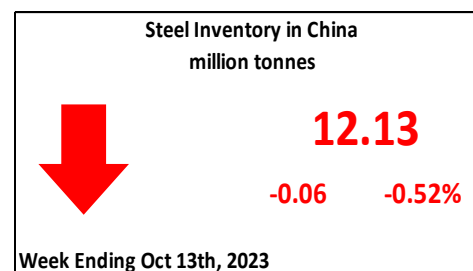
Freight Rates



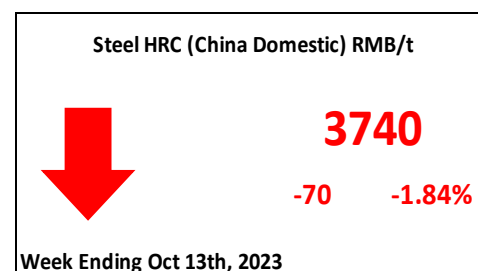
Steel Price



Inventory Levels



Steel Price



IRON ORE PORT STOCK INDEX (IOPI)

Oct 18th, 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	953	-6.2	-0.65%	869	880	858	892	123.92	-0.83	-0.7%	120.06	120.58	117.93	122.93
IOPI58	58% Fe Fines	869	0.0	0.00%	813	798	761	793	113.90	0.00	0.0%	113.29	110.17	105.29	110.04
IOPI65	65% Fe Fines	1065	-6.1	-0.57%	981	992	970	1003	138.89	-0.82	-0.6%	136.05	136.43	133.84	138.73

IRON ORE SEABORNE INDEX (IOSI)

MARKET COMMENTARY

Oct 18th, 2023		CFR Qingdao, USD/dry tonne							DCE iron ore futures market falling trends by 0.4%. the main contract I2401 closed 861, some traders were negative to sell, Some steel mills tended to be wait-and-see, total transactions remained insipid. PBF at Shandong port dealt 929-940 yuan/mt; decreased 5-15 yuan/mt over yesterday. PBF at Shandong port dealt 950-960 yuan/mt; decreased 0-10 yuan/mt over yesterday. The real estate data released today remains weak, with poor demand for finished products and a weakening of market sentiment. But fundamentally speaking, the shipping volume of mainstream mines in the third quarter is relatively stable, and although there has been an increase in blast furnace maintenance, the production of molten iron is still at a high level. With low port inventory, ore prices have been supported, with a lower decline than finished products. Considering the deepening losses caused by raw material compression in steel mills, the increasing willingness to maintain blast furnaces, and the weak willingness to purchase iron ore in stock, the ore prices are operating under pressure and fluctuating.
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²	
IOSI62	62% Fe Fines	107.87	0.00	0.00%	113.30	113.30	83.90	146.75	
IOSI65	65% Fe Fines	138.17	0.00	0.00%	124.54	124.54	94.45	147.55	
IRON ORE PORT LUMP INDEX (IOPLI)									

IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending Oct 13th, 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	1083	-12	-1.1%	943	1019	770	1095	135.49	-1.63	-1.19%	120.35	134.85	95.00	137.00

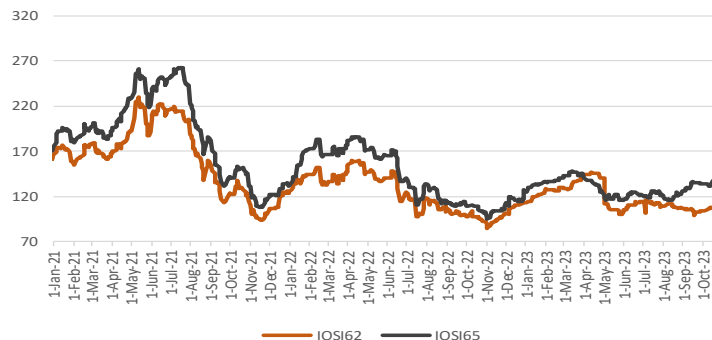
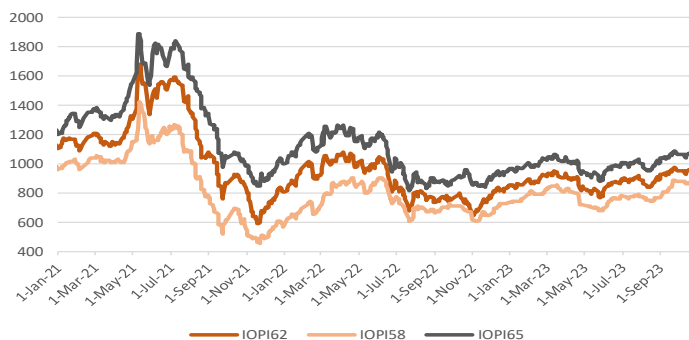
IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending Oct 13th, 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	1073	-2.4%	779	1645	149.48	-2.43%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	1090	-2.7%	780	1630	151.85	-2.74%	110.51	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	815	0.0%	620	1310	113.54	-0.07%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	1154	-4.4%	800	1752	160.77	-4.45%	117.19	272.32
Week Ending Oct 13th, 2023				This week	Change %	Low ²	High ²				
China Mines Concentrate Composite Index RMB/WT				991.48	-1.76%	706.36	1511.22				

¹ Exchange rate applied: RMB/USD = 6.7522 ² Last 12 months
³ Weekly exchange rate applied: RMB/USD = 6.87528

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

Oct 18th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	June	July	August	September	MTD	QTD	YTD	June	July	August	September	MTD	QTD	YTD
IOPI62	62% Fe Fines	863	896	873	945	869	881	880	112.38	116.58	113.28	122.79	120.06	120.90	120.58
IOPI58	58% Fe Fines	748	777	759	838	813	792	798	97.98	101.68	99.13	109.67	113.29	109.35	110.17
IOPI65	65% Fe Fines	975	1008	985	1057	981	993	992	127.41	131.57	128.31	137.74	136.05	136.72	136.43

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

FREIGHT RATES

Oct 18th, 2023		CFR Qingdao, USD/dry tonne							Oct 17th, 2023		FREIGHT RATES - DRY BULK US\$/wet tonne				
Index	Fe Content	June	July	August	September	MTD	QTD	YTD	Route	Designation	Change	Change %	Low ²	High ²	
IOSI62	62% Fe Fines	110.54	108.57	109.02	104.25	112.14	112.35	113.30	W. Australia - Qingdao	C5	11.03	0.36	3.37%	3.57	16.77
IOSI65	65% Fe Fines	135.30	147.39	119.61	132.40	122.86	123.73	124.54	Tubarao - Qingdao	C3	26.44	0.53	2.06%	6.70	36.40

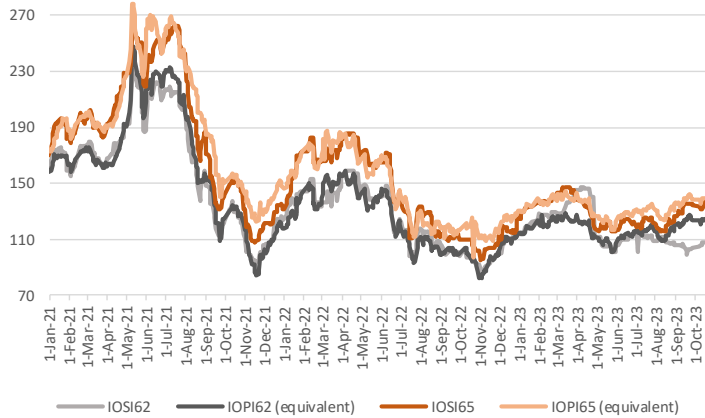
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending Oct 13th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne ¹						
Index	Fe Content	June	July	August	September	MTD	QTD	YTD	June	July	August	September	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	969	980	951	1043	933	940	1017	121.33	122.51	118.96	130.25	119.96	120.35	134.98

IRON ORE INDEX PREMIUMS/DISCOUNTS

Oct 18th, 2023		PORT STOCK INDEX (RMB/WT)		Oct 18th, 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	-84	-8.81%	IOSI65	65% Fe Fines	30.30	28.09%
IOPI65	65% Fe Fines	112	11.73%				

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

Oct 18th, 2023				Oct 18th, 2023			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	896	-6	-57	Roy Hill	103.40	0.00	-4.47
SIMEC Fines	827	-6	-126	SIMEC Fines	99.90	0.00	-7.97
PB Fines	920	-6	-33	PB Fines	104.15	0.00	-3.72
Newman Fines	922	-6	-31	Newman Fines	107.00	0.00	-0.87
MAC Fines	903	-6	-50	MAC Fines	104.15	0.00	-3.72
Jimblebar Blended Fines	819	-6	-134	Jimblebar Blended Fines	96.53	0.00	-11.35
Carajas Fines	1134	-6	181	Carajas Fines	137.45	0.00	29.58
Brazilian SSF	919	-6	-34	Brazilian SSF	111.65	0.00	3.78
Brazilian Blend Fines	934	-6	-19	Brazilian Blend Fines	113.30	0.00	5.43
RTX Fines	837	-6	-116	RTX Fines	97.80	0.00	-10.07
West Pilbara Fines	864	-6	-89	West Pilbara Fines	102.15	0.00	-5.72
Oct 18th, 2023							
PORT STOCK INDEX (RMB/WT)							
	Price	Change	Diff to IOPI58				
SSF	869	0	0				
FMG Blended Fines	880	0	11				
Robe River	881	0	12				
Western Fines	884	0	15				
Atlas Fines	877	0	8				
Yandi	861	0	-8				

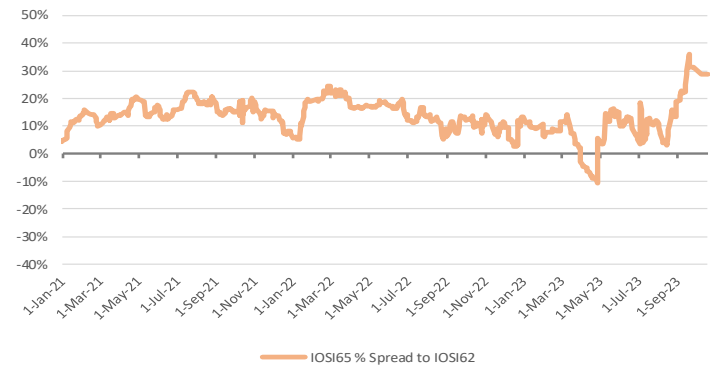
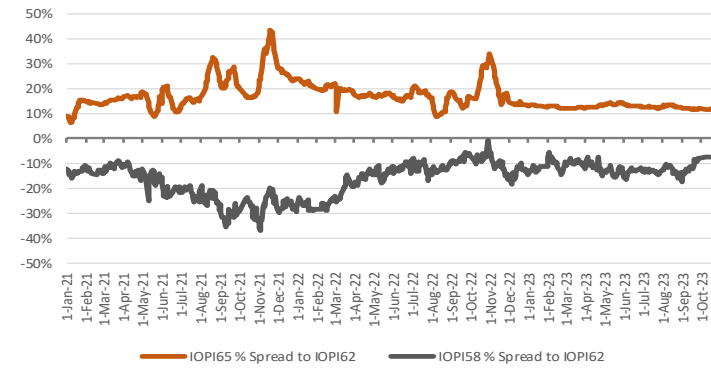
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	5.00	0.00
	High Grade Fe 63 - 64%	5.00	0.00		High Grade Fe 63 - 64%	2.75	0.00
	High Grade Fe 64 - 65%	5.00	0.00		High Grade Fe 64 - 65%	2.75	0.00
	High Grade Fe 65 - 65.5%	5.00	0.00		High Grade Fe 65 - 65.5%	2.75	0.00
1% Alumina	Low Grade Fe	14.00	2.00	1% Alumina	High Fe Grade Al <2.25%	2.00	0.75
	High Fe Grade Al <2.25%	25.00	-6.00		High Fe Grade Al 2.25-4%	0.75	0.00
	High Fe Grade Al 2.25-4%	5.00	0.00				
	Low Fe Grade Al <2.25%	5.00	-4.00				
1% Silica	Low Fe Grade Al 2.25-4%	30.00	-4.00	1% Silica	High Fe Grade Si <4%	0.25	0.00
	High Fe Grade Si <4%	11.00	-2.00		High Fe Grade Si 4 - 6.5%	3.75	0.00
	High Fe Grade Si 4 - 6.5%	11.00	-2.00				
	Low Fe Grade	7.00	2.00				
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	5.00	0.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	2.25	-0.50
	High Fe Grade 0.115%<P<0.15%	5.00	0.00		High Fe Grade 0.115%<P<0.15%	4.00	0.00
	Low Fe Grade 0.09%<P<0.1%	5.00	0.00				

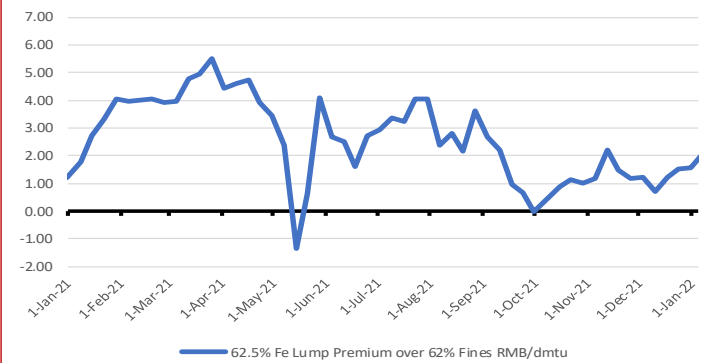
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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	-15.00	0.00	Jingtang	-5.00	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

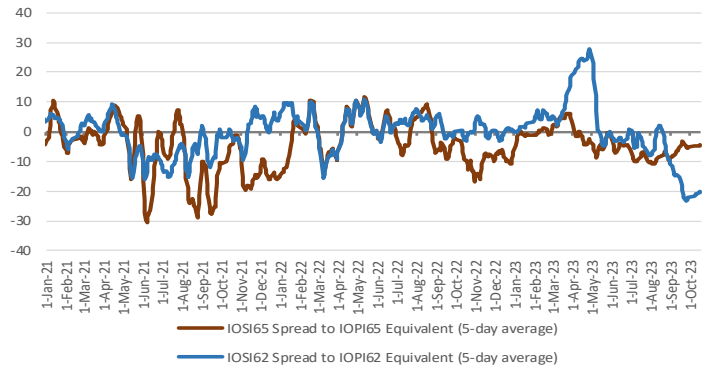
IRON ORE INDEX PREMIUMS/DISCOUNTS



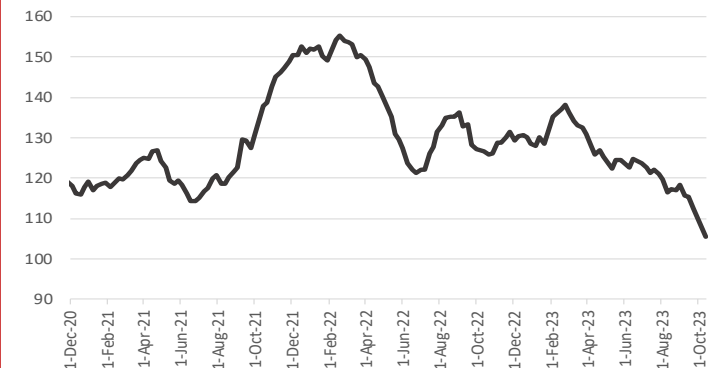
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



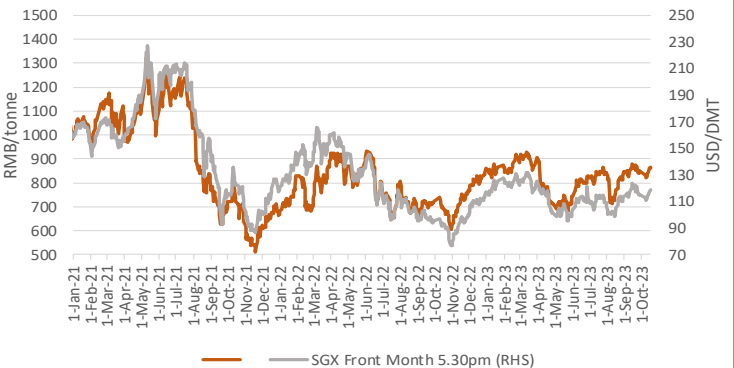
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

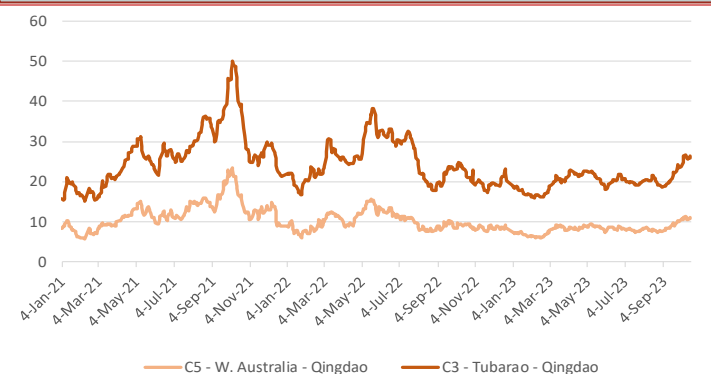
Week Ending Oct 13th, 2023

Province	This week	Change %	Low ²	High ²
Jingtang	9.70	-12.22%	9.70	19.20
Qingdao	23.66	-0.42%	9.41	26.24
Caofeidian	8.42	-19.35%	8.42	16.29
Tianjin	6.64	-11.35%	6.64	12.97
Rizhao	11.52	-8.50%	9.44	19.26
Total (35 Ports)	105.56	-6.21%	98.80	155.39

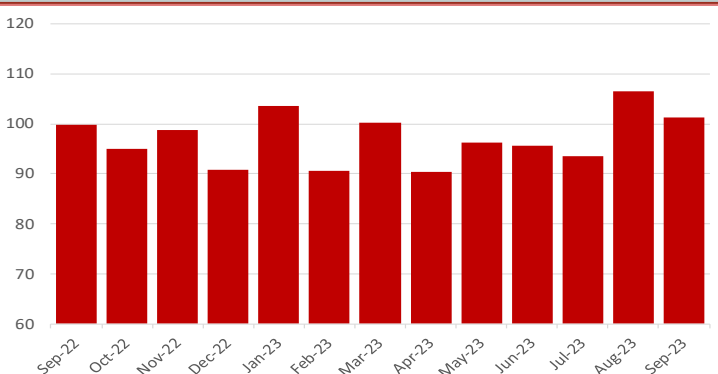
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Oct 18th, 3pm close			Oct 18th, 5:30pm		
Contract	I2401	Change	Change %	Nov. 23	Change	Change %
Closing Price	861.00	-5.00	-0.58%	118.60	-0.45	-0.38%
Vol traded ('000 lots)	54.08	6.19	12.92%	10.52	2.15	25.69%
Open positions ('000 lots)	87.14	1.54	1.80%	36.67	0.17	0.47%
Day Low	860.0	3.00	0.35%	115.00	-1.15	-0.99%
Day High	876.5	3.00	0.34%	119.00	0.90	0.76%

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	2023/10/13	Change	Change %
ReBar HRB400 ϕ 18mm	3,720	-70	-1.85%
Wirerod Q300 ϕ 6.5mm	3,920	-60	-1.51%
HRC Q235/SS400 5.5mm*1500*C	3,740	-70	-1.84%
CRC SPCC/ST12 1.0mm*1250*2500	4,850	-30	-0.61%
Medium & Heavy Plate Q235B 20mm	3,760	-70	-1.83%
GI ST02Z 1.0mm*1000*C	5,090	-10	-0.20%
Colour Coated Plate	6,950	-50	-0.71%

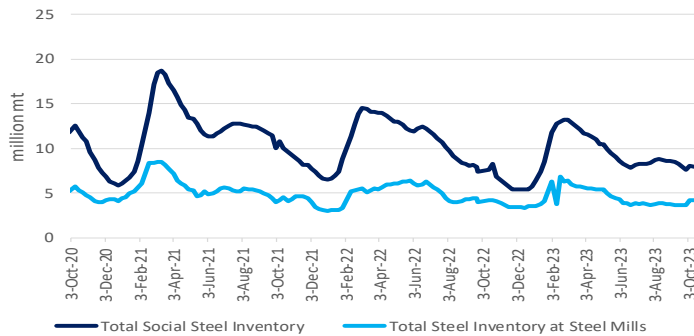
CHINESE STEEL MILL PROFITABILITY

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

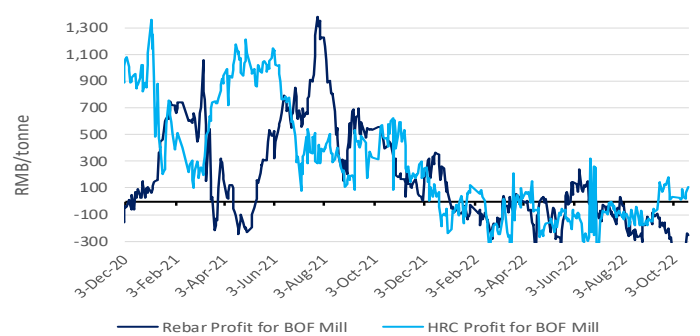
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	103.20	0	Mmi CFR Equivalent index for 1st Feb
Coke	2,450	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,970	0	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,256	0	Q234, incl. tax
Rebar cost - Blast furnace	3,905	0	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	-185	0	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,954	0	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	-84	0	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

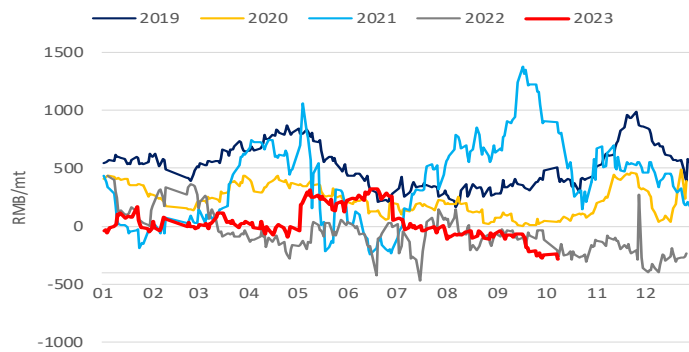
CHINESE STEEL INVENTORIES



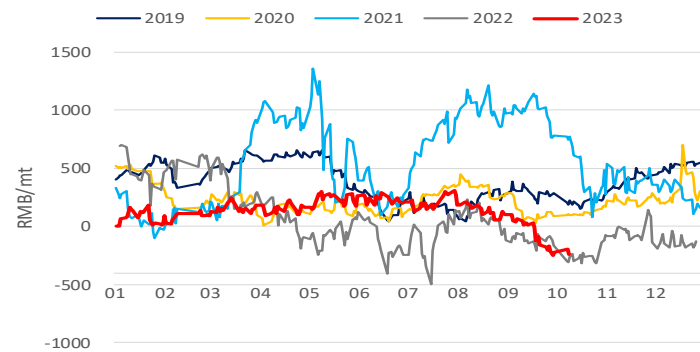
CHINESE STEEL MILL PROFITABILITY



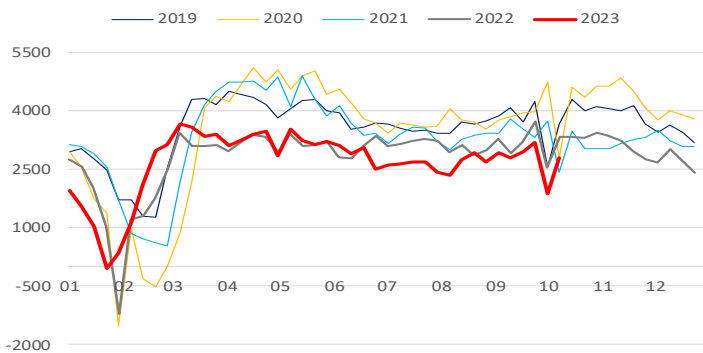
CHINESE STEEL MILL PROFITABILITY—Rebar



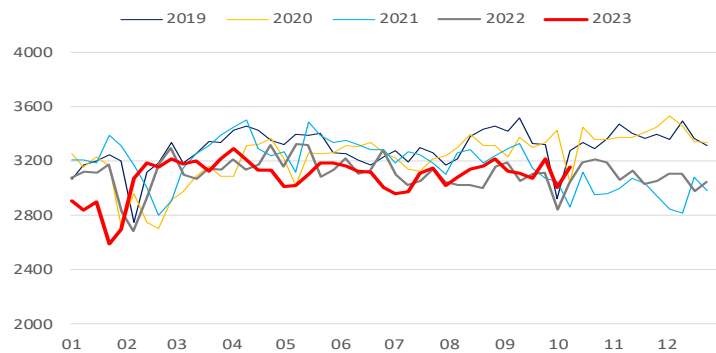
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



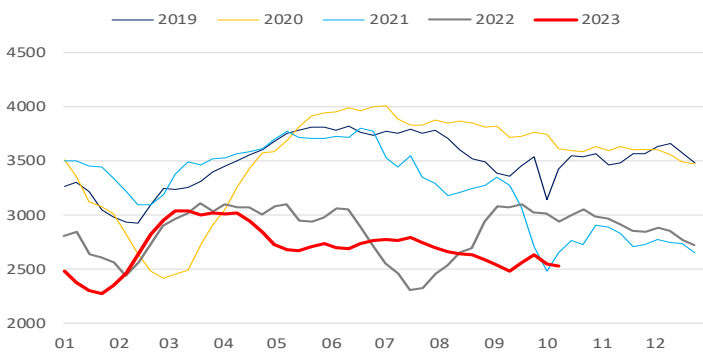
CHINESE STEEL CONSUMPTION—Rebar



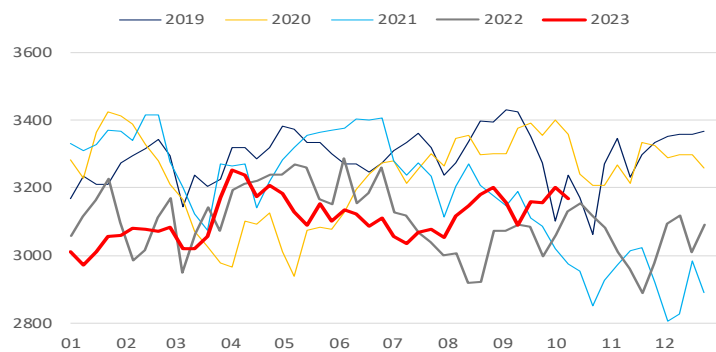
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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	

Data Exclusions*			
Port Index	62%	58%	65%
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					
Oct 18th, 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%
Oct 18th, 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.