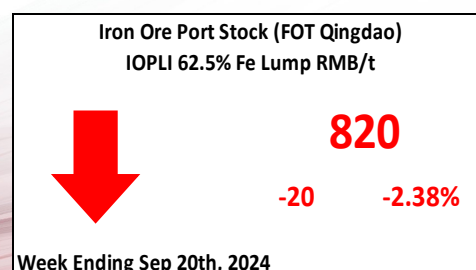
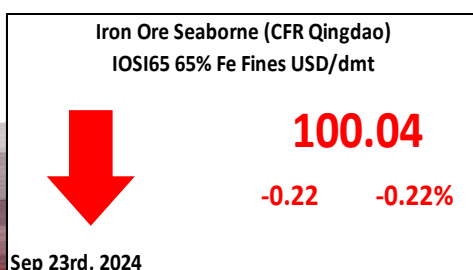
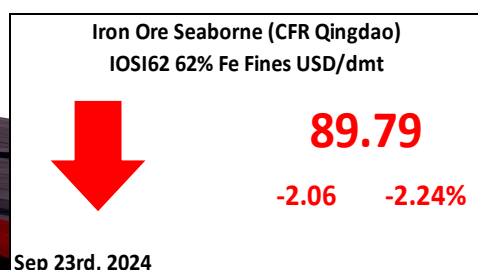
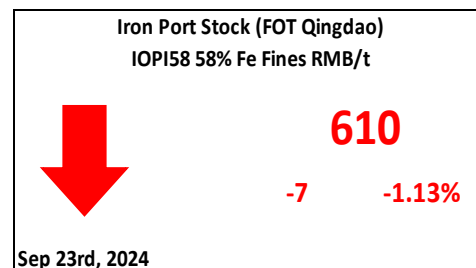
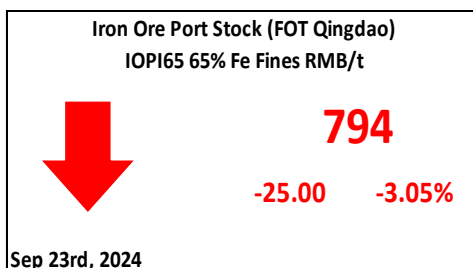
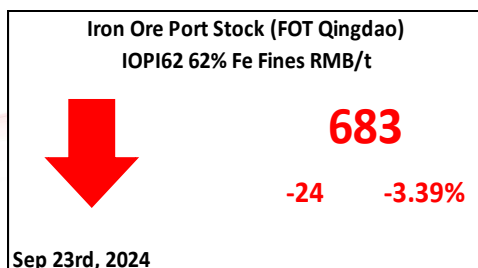


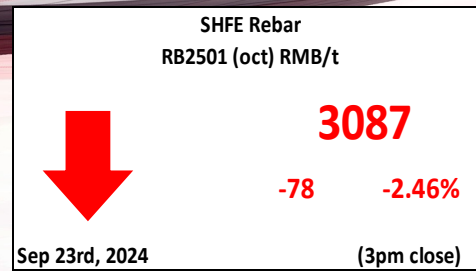
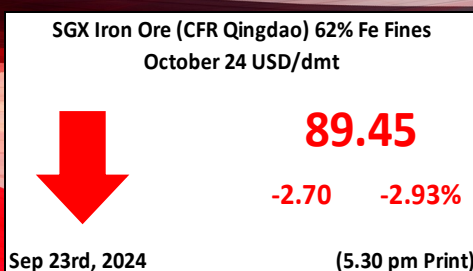
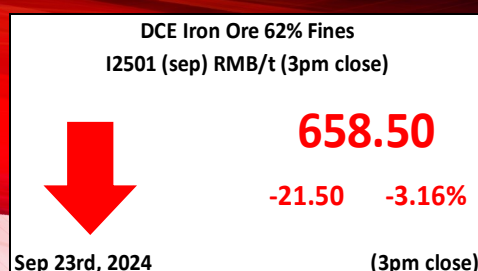


MMi Dashboard

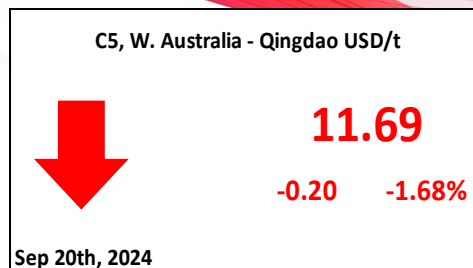
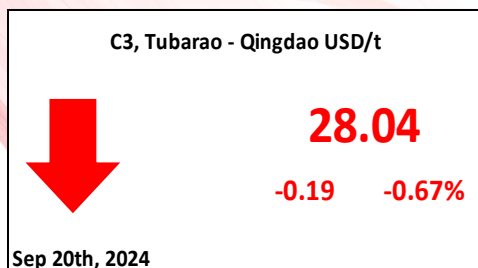
Iron Ore Price Indices



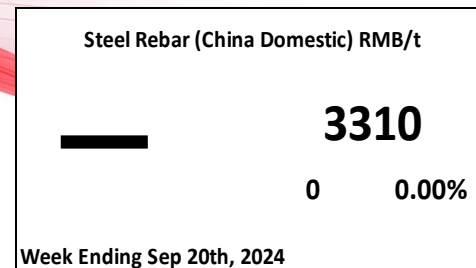
Exchange Traded Contracts



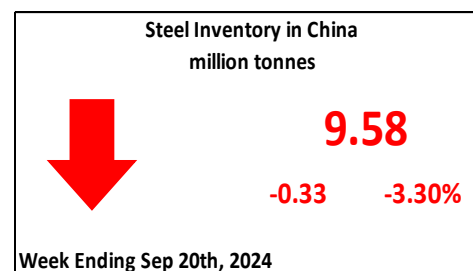
Freight Rates



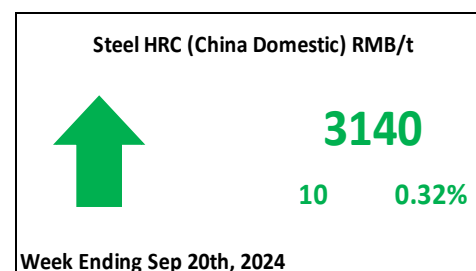
Steel Price



Inventory Levels



Steel Price



IRON ORE PORT STOCK INDEX (IOPI)

Sep 23rd, 2024		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	683	-24.0	-3.39%	880	895	770	1063	89.33	-3.13	-3.4%	116.38	121.03	101.00	140.00
IOPI58	58% Fe Fines	610	-7.0	-1.13%	785	781	665	963	80.25	-0.84	-1.0%	104.50	106.10	86.00	128.00
IOPI65	65% Fe Fines	794	-25.0	-3.05%	996	1026	881	1175	104.47	-3.24	-3.0%	132.21	139.47	116.00	155.00

IRON ORE SEABORNE INDEX (IOSI)

MARKET COMMENTARY

Sep 23rd, 2024		CFR Qingdao, USD/dry tonne							The iron ore market continued its downward trend, with the most-traded contract I2501 closing at 658.5, down 4.5% for the day. Traders showed a low willingness to sell; steel mills had more inquiries, mainly restocking as needed. The market atmosphere was average today. In Shandong, PB fines traded at around 665-670 yuan/mt, down 25-30 yuan/mt WoW from last Friday; in Tangshan, PB fines traded at 685-690 yuan/mt, down 15-30 yuan/mt WoW from last Friday. SMM reported global iron ore total shipments at 35.53 million mt, up 14.4% WoW. Shipments from Australia and Brazil increased, as did those from non-mainstream mines. However, due to low ore prices, the shipment increase from non-mainstream mines was relatively small. The significant supply increase negatively impacted ore prices, combined with inventory at high levels at ports, putting further pressure on prices. Considering pig iron is in a recovery phase and pre-holiday restocking is boosting overall iron ore demand, there is some support for ore prices, and the short-term downside is expected to be limited.							
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²								
IOSI62	62% Fe Fines	89.79	-2.06	-2.24%	116.42	116.42	99.20	146.75								
IOSI65	65% Fe Fines	100.04	-0.22	-0.22%	130.60	130.60	115.45	171.65								

IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending Sep 20th, 2024		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	820	-20	-2.4%	994	1041	900	1210	103.07	-2.37	-2.25%	126.95	136.27	113.28	153.57

IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

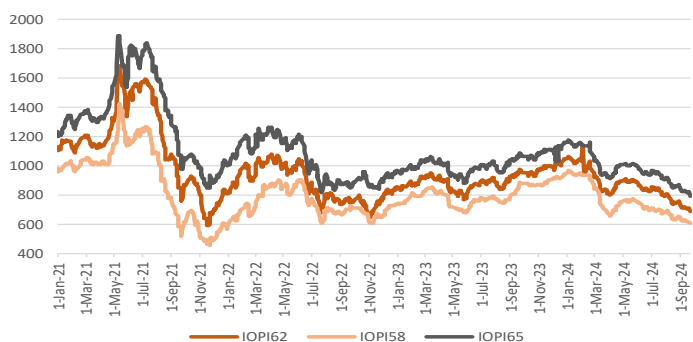
Week Ending Sep 20th, 2024		RMB/tonne (excluding tax) ³						USD/tonne (excluding tax) ³			
Province	Region	Product	Basis	This week	Change %	Low ²	High ²	This week	Change %	Low ²	High ²
Hebei	Hanxing	66% Fe Concentrate	Dry	870	-0.3%	779	1645	122.83	0.05%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	965	-1.0%	780	1630	136.24	-0.64%	108.71	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	770	-1.3%	620	1310	108.71	-0.89%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	915	-0.4%	800	1752	129.18	-0.04%	0.00	272.32

Week Ending Sep 20th, 2024

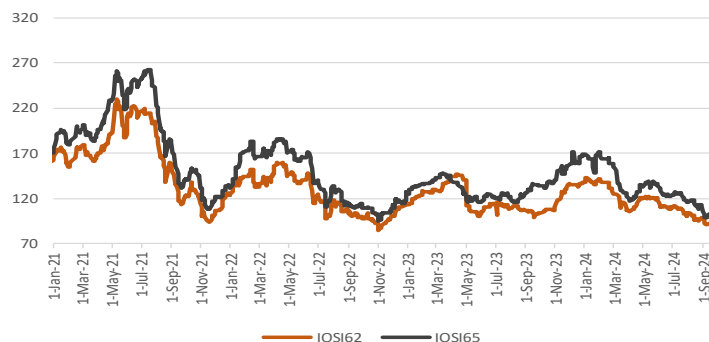
	This week	Change %	Low ²	High ²
China Mines Concentrate Composite Index RMB/WT	854.57	-0.53%	706.36	1511.22

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

Sep 23rd, 2024		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	May	June	July	August	MTD	QTD	YTD	May	June	July	August	MTD	QTD	YTD
IOPI62	62% Fe Fines	894	842	829	765	880	874	895	117.28	110.03	107.99	99.33	115.32	115.83	120.56
IOPI58	58% Fe Fines	762	719	692	656	785	779	781	100.47	94.46	90.48	85.58	103.33	103.96	105.35
IOPI65	65% Fe Fines	1006	954	940	876	996	992	1026	132.42	125.13	123.05	114.39	131.20	131.91	139.19

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

FREIGHT RATES

Sep 23rd, 2024		CFR Qingdao, USD/dry tonne							Sep 20th, 2024						
Index	Fe Content	May	June	July	August	MTD	QTD	YTD	FREIGHT RATES - DRY BULK US\$/wet tonne						
									Route	Designation	Change	Change %	Low ²	High ²	
IOSI62	62% Fe Fines	120.10	110.42	107.58	99.33	112.14	115.18	116.42	W. Australia - Qingdao	C5	11.69	-0.20	-1.68%	3.57	16.77
IOSI65	65% Fe Fines	136.06	125.14	123.01	114.06	122.86	129.04	130.60	Tubarao - Qingdao	C3	28.04	-0.19	-0.67%	6.70	36.40

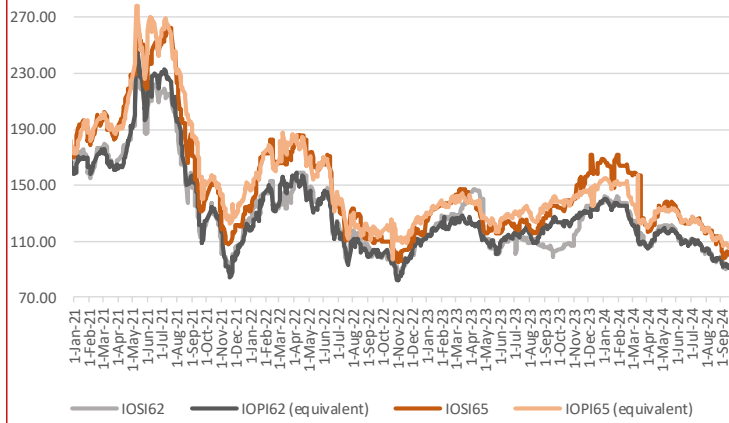
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending Sep 20th, 2024		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne ¹						
Index	Fe Content	May	June	July	August	MTD	QTD	YTD	May	June	July	August	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	1024	1011	1001	911	933	989	1017	129.18	127.27	125.75	114.10	119.96	126.47	134.98

IRON ORE INDEX PREMIUMS/DISCOUNTS

Sep 23rd, 2024		PORT STOCK INDEX (RMB/WT)				Sep 23rd, 2024		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	-73		-10.69%		IOSI65	65% Fe Fines	10.25		11.42%	
IOPI65	65% Fe Fines	111		16.25%							

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

Sep 23rd, 2024	PORT STOCK INDEX (RMB/WT)			Sep 23rd, 2024	SEABORNE INDEX (USD/DMT)		
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	626	-24	-57	Roy Hill	85.30	-2.05	-4.49
SIMEC Fines	551	-25	-132	SIMEC Fines	81.80	-2.05	-7.99
PB Fines	653	-24	-30	PB Fines	86.05	-2.05	-3.74
Newman Fines	650	-24	-33	Newman Fines	88.95	-2.02	-0.84
MAC Fines	632	-24	-51	MAC Fines	86.05	-2.05	-3.74
Jimblebar Blended Fines	546	-24	-137	Jimblebar Blended Fines	78.45	-2.02	-11.34
Carajas Fines	863	-24	180	Carajas Fines	119.35	-2.05	29.56
Brazilian SSF	642	-25	-41	Brazilian SSF	93.55	-2.05	3.76
Brazilian Blend Fines	666	-24	-17	Brazilian Blend Fines	95.15	-2.07	5.36
RTX Fines	565	-24	-118	RTX Fines	79.65	-2.07	-10.14
West Pilbara Fines	595	-24	-88	West Pilbara Fines	84.05	-2.05	-5.74

Sep 23rd, 2024	PORT STOCK INDEX (RMB/WT)		
	Price	Change	Diff to IOPI58
SSF	610	-7	0
FMG Blended Fines	618	-7	8
Robe River	618	-7	8
Western Fines	621	-7	11
Atlas Fines	616	-7	6
Yandi	604	-7	-6

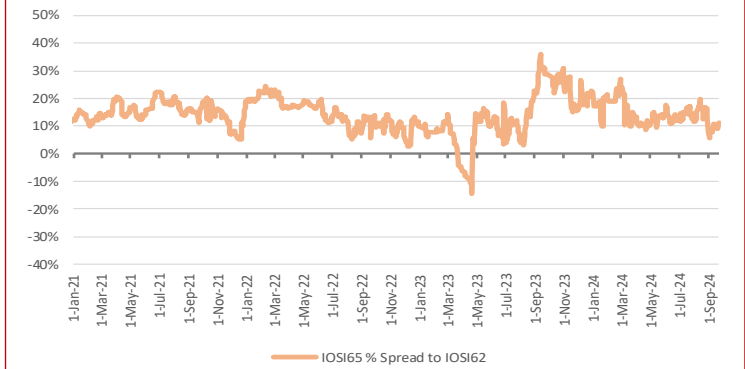
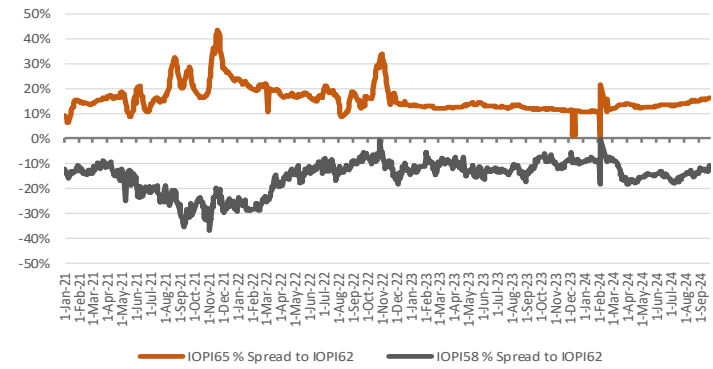
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	3.50	0.00
	High Grade Fe 63 - 64%	5.00	0.00		High Grade Fe 63 - 64%	0.25	-0.75
	High Grade Fe 64 - 65%	5.00	0.00		High Grade Fe 64 - 65%	0.25	-0.75
	High Grade Fe 65 - 65.5%	5.00	0.00		High Grade Fe 65 - 65.5%	0.25	-0.75
1% Alumina	Low Grade Fe	26.00	0.00	1% Alumina	High Fe Grade Al <2.25%	0.25	0.00
	High Fe Grade Al <2.25%	60.00	0.00		High Fe Grade Al 2.25-4%	1.75	0.75
	High Fe Grade Al 2.25-4%	5.00	0.00				
	Low Fe Grade Al <2.25%	40.00	0.00				
1% Silica	Low Fe Grade Al 2.25-4%	25.00	-4.00	1% Silica	High Fe Grade Si <4%	0.50	0.25
	High Fe Grade Si <4%	37.00	1.00		High Fe Grade Si 4 - 6.5%	0.50	0.25
0.01% Phosphorus	High Fe Grade Si 4-6.5%	9.00	0.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	2.00	0.25
	Low Fe Grade	37.00	0.00		High Fe Grade 0.115%<P<0.15%	2.75	0.25
	High Fe Grade 0.09%<P<0.115%	8.00	1.00				
	High Fe Grade 0.115%<P<0.15%	8.00	1.00				
	Low Fe Grade 0.09%<P<0.1%	5.00	0.00				

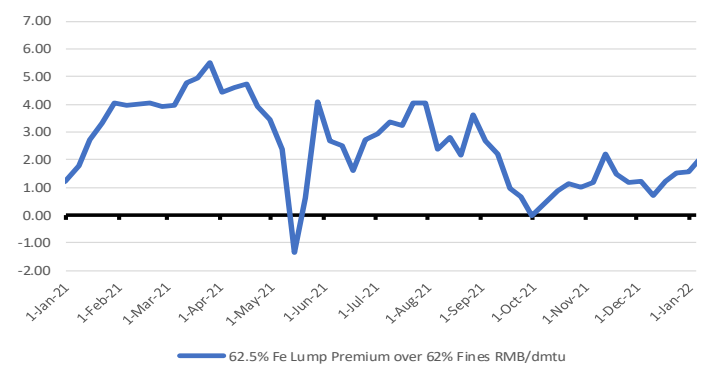
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-50.00	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	-15.00	0.00	Majishan	0.00	0.00	Taicang	-20.00	0.00
Dalian	0.00	0.00	Lanqiao	0.00	0.00	Qingdao	0.00	0.00	Tianjin	-10.00	0.00

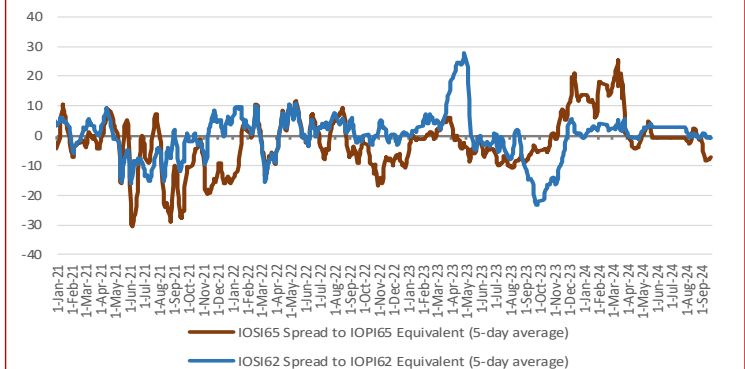
IRON ORE INDEX PREMIUMS/DISCOUNTS



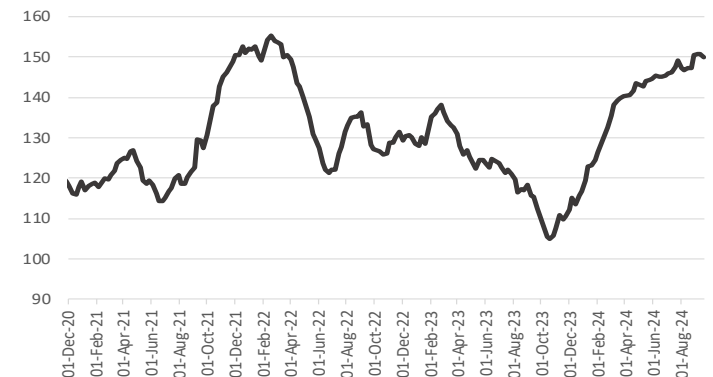
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



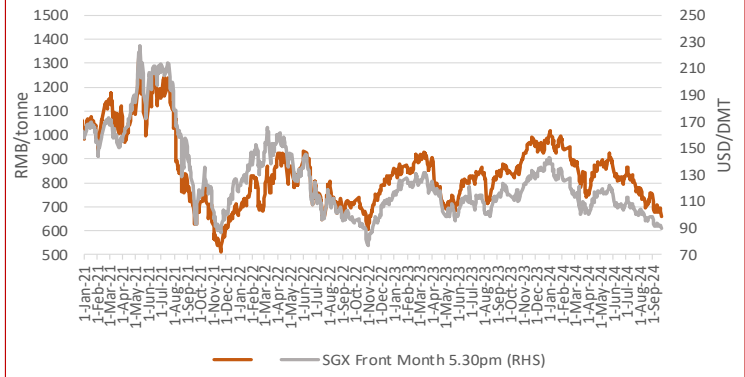
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



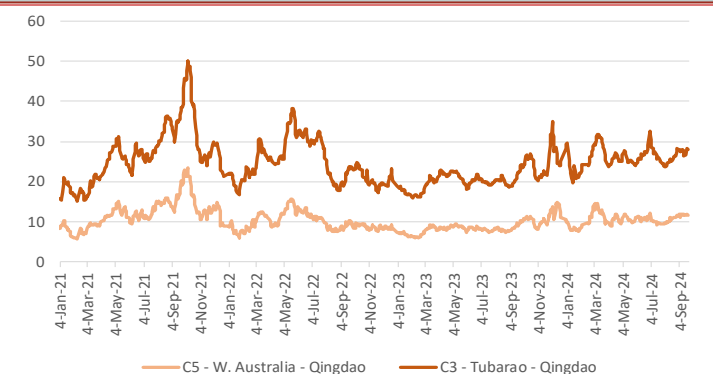
IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending Sep 20th, 2024				
Province	This week	Change %	Low ²	High ²
Jingtang	14.27	-2.19%	8.41	19.20
Qingdao	24.75	-1.59%	9.41	26.24
Caofeidian	17.74	-2.58%	7.56	18.47
Tianjin	11.96	-0.83%	6.49	12.97
Rizhao	20.99	1.30%	9.44	20.99
Total (35 Ports)	150.00	-0.48%	98.80	155.39

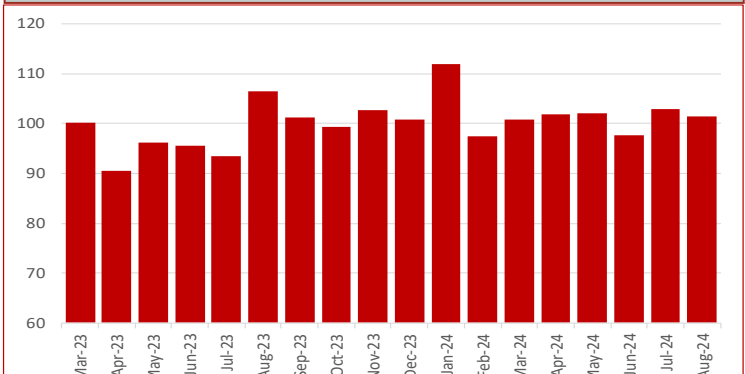
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Contract	Change	Change %	Contract	Change	Change %
Sep 23rd, 3pm close	12501			89.45		
Sep 23rd, 5:30pm				89.45	-2.70	-2.93%
Closing Price	658.50	-21.50	-3.16%	89.45	-2.70	-2.93%
Vol traded ('000 lots)	60.20	-2.98	-4.71%	12.03	2.43	25.34%
Open positions ('000 lots)	62.50	4.95	8.60%	38.67	0.51	1.33%
Day Low	658.0	-18.50	-2.73%	89.20	-2.05	-2.25%
Day High	681.5	-21.50	-3.06%	92.10	-2.15	-2.28%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

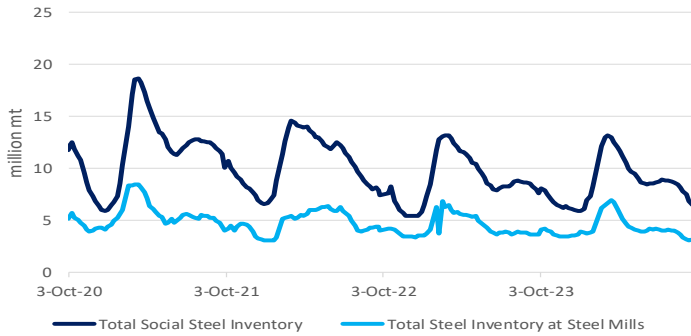
Steel Spot Market RMB/tonne			
Product	2024/9/20	Change	Change %
ReBar HRB400 φ18mm	3,310	0	0.00%
Wirerod Q300 φ6.5mm	3,550	-10	-0.28%
HRC Q235/SS400 5.5mm*1500*C	3,140	10	0.32%
CRC SPCC/ST12 1.0mm*1250*2500	3,560	10	0.28%
Medium & Heavy Plate Q235B 20mm	3,270	30	0.93%
GI ST02Z 1.0mm*1000*C	3,720	10	0.27%
Colour Coated Plate	6,050	0	0.00%

CHINESE STEEL MILL PROFITABILITY

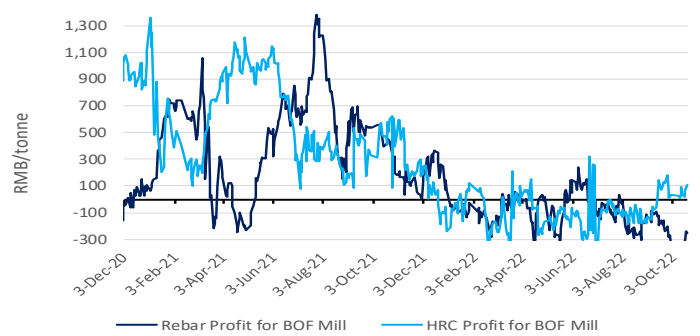
SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)			
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	91.85	-0	Mmi CFR Equivalent index for 1st Feb
Coke	1,845	55	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,360	0	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	2,513	10	Q234, incl. tax
Rebar cost - Blast furnace	3,065	11	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	165	-11	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,145	10	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	-15	-10	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

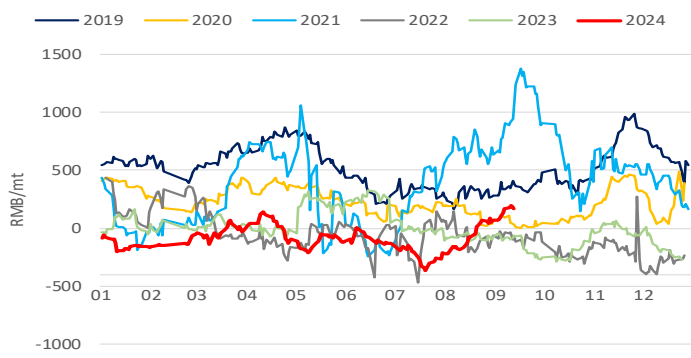
CHINESE STEEL INVENTORIES



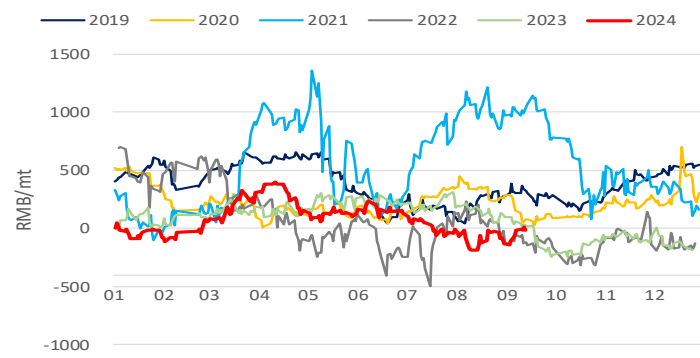
CHINESE STEEL MILL PROFITABILITY



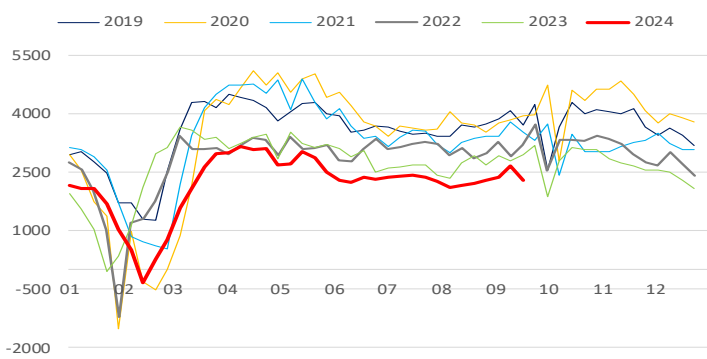
CHINESE STEEL MILL PROFITABILITY—Rebar



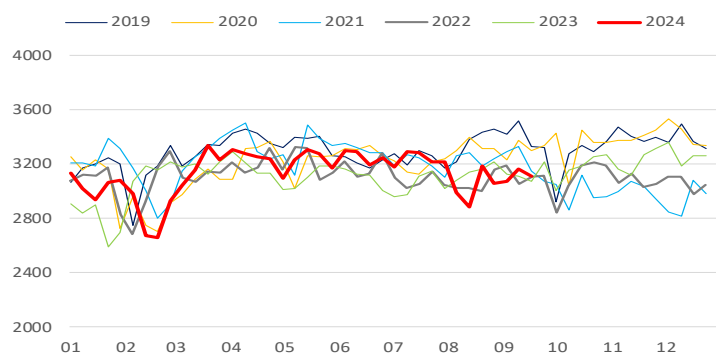
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



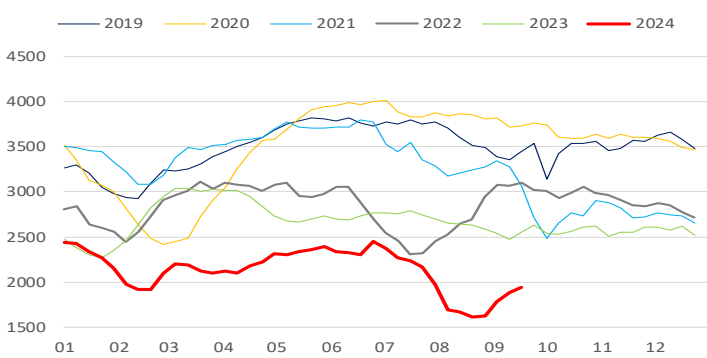
CHINESE STEEL CONSUMPTION—Rebar



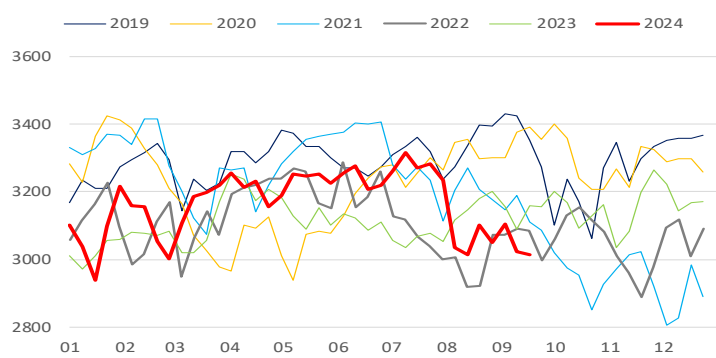
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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	<p>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.</p> <p>For more details on MMi's iron ore methodology please download the guide published on our website at: www.mmiprices.com</p> <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> <p>* Number of price submissions for iron ore indices that were excluded from index calculations today as they were anomalous and could not be verified</p>	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																								
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																					

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					
Sep 23rd, 2024	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%
Sep 23rd, 2024	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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