Metals Market Index MMi

MMi Dashboard

Iron Ore Price Indices

Iron Ore Port Stock (FOT Qingdao) IOPI62 62% Fe Fines RMB/t	1003	6	0.57%	Nov 22nd, 2023
Iron Ore Port Stock (FOT Qingdao) IOPI65 65% Fe Fines RMB/t	1114	5.34	0.48%	Nov 22nd, 2023
Iron Port Stock (FOT Qingdao) IOPI58 58% Fe Fines RMB/t	905	5	0.51%	Nov 22nd, 2023
Iron Ore Seaborne (CFR Qingdao) IOSI62 62% Fe Fines USD/dmt	130.50	0.70	0.54%	Nov 22nd, 2023
Iron Ore Seaborne (CFR Qingdao) IOSI65 65% Fe Fines USD/dmt	151.45	2.00	1.34%	Nov 22nd, 2023
Iron Ore Port Stock (FOT Qingdao) IOPLI 62.5% Fe Lump RMB/t	995	-153	-13.33%	Week Ending Nov 17th, 2023

Exchange Traded Contracts

DCE Iron Ore 62% Fines I2401 (Jan) RMB/t (3pm close)	993.50	15.00	1.53%	Nov 22nd, 2023 (3pm close)
SGX Iron Ore (CFR Qingdao) 62% Fe Fines December 23 USD/dmt	133.40	1.60	1.21%	Nov 22nd, 2023 (5.30 pm Print)
SHFE Rebar RB2401 (Jan) RMB/t	4002	19	0.48%	Nov 22nd, 2023 (3pm close)

Freight Rates

C3, Tubarao - Qingdao USD/t	21.79	-0.49	-2.19%	Nov 21st, 2023
C5, W. Australia - Qingdao USD/t	9.67	-0.29	-2.91%	Nov 21st, 2023

Steel Price

Steel Rebar (China Domestic) RMB/t	4080	80	2.00%	Week Ending Nov 17th, 2023

Inventory Levels

Iron Ore Inventory at Chinese Ports (35) million tonnes	109.85	-0.90	-0.81%	Week Ending Nov 17th, 2023
Steel Inventory in China million tonnes	9.80	-0.22	-2.18%	Week Ending Nov 17th, 2023

Steel Price

Steel HRC (China Domestic) RMB/t	3960	30	0.76%	Week Ending Nov 17th, 2023

IRON ORE PORT STOCK INDEX (IOPI)

Nov 22nd, 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	1003	5.6	0.57%	869	880	858	892	131.57	1.04	0.8%	120.06	120.58	117.93	122.93
IOPI58	58% Fe Fines	905	4.6	0.51%	813	798	761	793	119.63	0.83	0.7%	113.29	110.17	105.29	110.04
IOPI65	65% Fe Fines	1114	5.3	0.48%	981	992	970	1003	146.65	1.07	0.7%	136.05	136.43	133.84	138.73

IRON ORE SEABORNE INDEX (IOSI)

Nov 22nd, 2023		CFR Qingdao, USD/dry tonne						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low [2]	High [2]
IOSI62	62% Fe Fines	130.50	0.70	0.54%	113.54	113.54	96.50	146.75
IOSI65	65% Fe Fines	151.45	2.00	1.34%	126.24	126.24	103.60	155.80

MARKET COMMENTARY

DCE iron ore futures tight by 1.53%. The main contract I2401 rose to 995 in late trading and eventually closed at 993.5. The speculative demand of traders has decreased; The fear of heights in steel mills has increased, and the overall wait-and-see sentiment in the market is relatively high, resulting in poor market transactions. PBF at Shandong port dealt 1003 yuan/mt; increased 5 yuan/mt over yesterday. PBF at Tangshan port dealt 1018 yuan/mt; increased 8 yuan/mt over yesterday. SMM's latest blast furnace operating rate has increased by 0.15% to 90.78%. The production of molten iron from 190 sample steel mills increased by 0.02 million tons to 2.201 million tons compared to the previous month. Although demand has rebounded, there has been little change, and the fundamentals of iron ore are still stable. However, macro expectations are relatively warm, and steel mills' profits are still acceptable. In the short term, ore prices may continue to fluctuate strongly.

IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending Nov 17th, 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	995	-153	-13.3%	955	1023	842	1148	124.24	-19.61	-13.63%	122.20	134.77	105.00	144.00

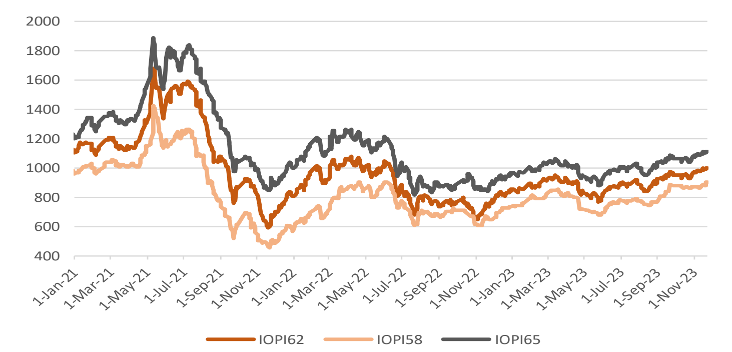
IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending Nov 17th, 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	1131	1.8%	779	1645	157.63	925.29%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	1150	1.8%	780	1630	160.28	940.63%	110.51	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	850	3.7%	620	1310	118.47	872.54%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	1204	1.7%	800	1752	167.81	927.41%	117.19	272.32

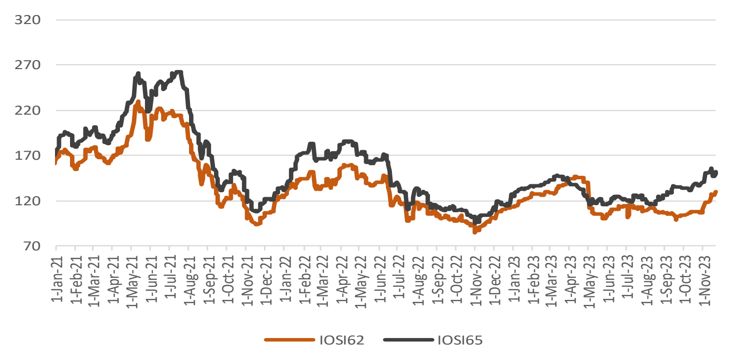
Week Ending Nov 17th, 2023	This week	Change %	Low [2]	High [2]
China Mines Concentrate Composite Index RMB/WT	1161.00	14.87%	706.36	1511.22

[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

Nov 22nd, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	July	August	September	October	MTD	QTD	YTD	July	August	September	October	MTD	QTD	YTD
IOPI62	62% Fe Fines	896	873	945	947	869	881	880	116.58	113.28	122.79	123.14	120.06	120.90	120.58
IOPI58	58% Fe Fines	777	759	838	869	813	792	798	101.68	99.13	109.67	113.94	113.29	109.35	110.17
IOPI65	65% Fe Fines	1008	985	1057	1059	981	993	992	131.57	128.31	137.74	138.13	136.05	136.72	136.43

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

Nov 22nd, 2023		CFR Qingdao, USD/dry tonne						
Index	Fe Content	July	August	September	October	MTD	QTD	YTD
IOSI62	62% Fe Fines	108.57	109.02	104.25	106.44	112.14	112.62	113.54
IOSI65	65% Fe Fines	147.39	119.61	132.40	135.69	122.86	125.21	126.24

FREIGHT RATES

Nov 21st, 2023		FREIGHT RATES - DRY BULK US$/wet tonne				
Route	Designation		Change	Change %	Low [2]	High [2]
W. Australia - Qingdao	C5	9.67	-0.29	-2.91%	3.57	16.77
Tubarao - Qingdao	C3	21.79	-0.49	-2.19%	6.70	36.40

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

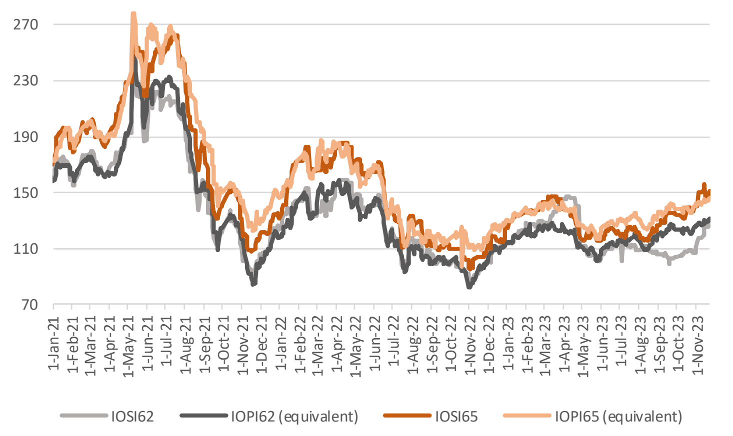
Week Ending Nov 17th, 2023		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne [1]						
Index	Fe Content	July	August	September	October	MTD	QTD	YTD	July	August	September	October	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	980	951	1043	1113	933	952	1017	122.51	118.96	130.25	139.38	119.96	122.05	134.98

IRON ORE INDEX PREMIUMS/DISCOUNTS

Nov 22nd, 2023		PORT STOCK INDEX (RMB/WT)	
Index	Fe Content	Spread to IOPI62	% Spread to IOPI62
IOPI58	58% Fe Fines	-98	-9.78%
IOPI65	65% Fe Fines	112	11.14%

Nov 22nd, 2023		SEABORNE INDEX (USD/DMT)	
Index	Fe Content	Spread to IOSI62	% Spread to IOSI62
IOSI65	65% Fe Fines	20.95	16.05%

IRON ORE INDEX COMPARISONS (USD/DMT)	CHINA DOMESTIC COMPOSITE MINES INDEX (RMB/Wet Tonne, including VAT)



IRON ORE BRAND SPOT PRICE ASSESMENTS

Nov 22nd, 2023	PORT STOCK INDEX (RMB/WT)		
	Price	Change	Diff to IOPI62
Roy Hill	946	6	-57
SIMEC Fines	878	6	-125
PB Fines	969	6	-34
Newman Fines	973	6	-30
MAC Fines	953	6	-50
Jimblebar Blended Fines	869	6	-134
Carajas Fines	1184	6	181
Brazilian SSF	970	6	-33
Brazilian Blend Fines	983	6	-20
RTX Fines	887	6	-116
West Pilbara Fines	914	6	-89

Nov 22nd, 2023	SEABORNE INDEX (USD/DMT)		
	Price	Change	Diff to IOSI62
Roy Hill	126.00	0.60	-4.50
SIMEC Fines	122.50	0.60	-8.00
PB Fines	126.75	0.60	-3.75
Newman Fines	129.65	0.60	-0.85
MAC Fines	126.75	0.60	-3.75
Jimblebar Blended Fines	119.15	0.60	-11.35
Carajas Fines	160.05	0.60	29.55
Brazilian SSF	134.25	0.60	3.75
Brazilian Blend Fines	135.90	0.60	5.40
RTX Fines	120.35	0.55	-10.15
West Pilbara Fines	124.75	0.60	-5.75

Nov 22nd, 2023	PORT STOCK INDEX (RMB/WT)		
	Price	Change	Diff to IOPI58
SSF	905	5	0
FMG Blended Fines	916	5	11
Robe River	917	5	12
Western Fines	920	5	15
Atlas Fines	913	5	8
Yandi	897	5	-8

IRON ORE INDEX NORMALISATION DIFFERENTIALS

Port Stock Index Product Differentials (RMB/wet tonne)

	Applicable range	Value	Change
1% Fe	High Grade Fe 60 - 63%	13.00	-2.00
	High Grade Fe 63 - 64%	5.00	0.00
	High Grade Fe 64 - 65%	5.00	0.00
	High Grade Fe 65 - 65.5%	5.00	0.00
	Low Grade Fe	36.00	-2.00
1% Alumina	High Fe Grade Al <2.25%	15.00	1.00
	High Fe Grade Al 2.25-4%	18.00	0.00
	Low Fe Grade Al <2.25%	50.00	5.00
	Low Fe Grade Al 2.25-4%	46.00	1.00
1% Silica	High Fe Grade Si <4%	5.00	0.00
	High Fe Grade Si 4-6.5%	22.00	-3.00
	Low Fe Grade	20.00	4.00
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	5.00	0.00
	High Fe Grade 0.115%<P<0.15%	5.00	0.00
	Low Fe Grade 0.09<P<0.1%	5.00	0.00

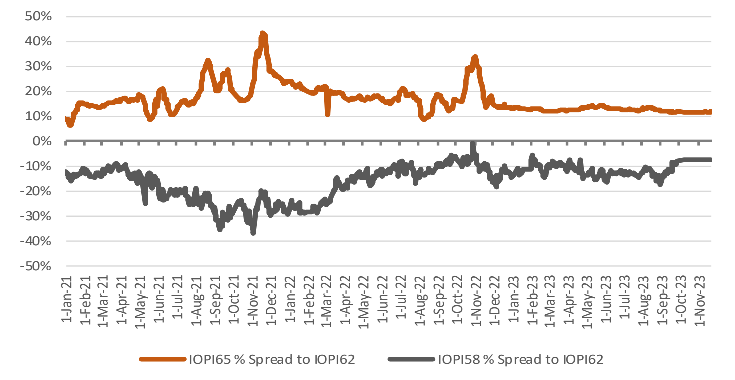
Seaborne Index Product Differentials (USD/dry tonne)

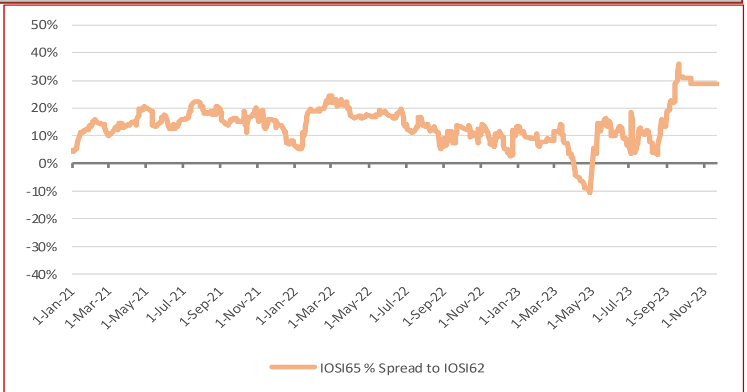
	Applicable range	Value	Change
1% Fe	High Grade Fe 60 - 63%	8.00	-2.00
	High Grade Fe 63 - 64%	2.75	0.00
	High Grade Fe 64 - 65%	2.75	0.00
	High Grade Fe 65 - 65.5%	2.75	0.00
1% Alumina	High Fe Grade Al <2.25%	8.00	-6.00
	High Fe Grade Al 2.25-4%	0.25	0.00
1% Silica	High Fe Grade Si <4%	0.25	0.00
	High Fe Grade Si 4 - 6.5%	5.00	0.00
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.25	0.00
	High Fe Grade 0.115%<P<0.15%	0.25	0.00

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

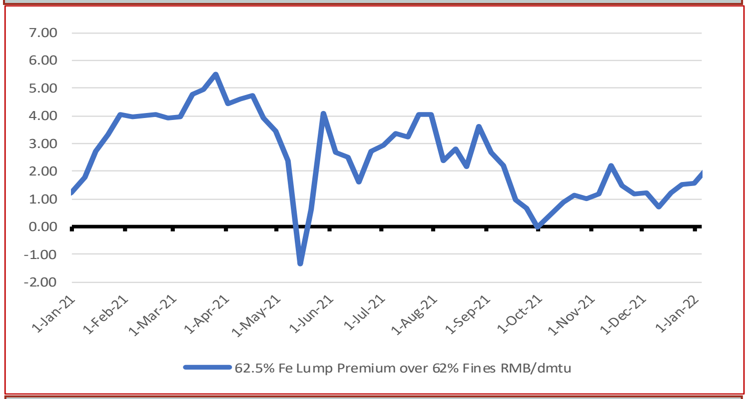
Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-100.00	0.00	Fangcheng	-25.00	0.00	Lanshan	0.00	0.00	Rizhao	0.00	0.00
Beilun	0.00	0.00	Jiangyin	-20.00	0.00	Lianyungang	0.00	0.00	Shekou	0.00	0.00
Caofeidian	-10.00	0.00	Jingtang	-10.00	0.00	Majishan	0.00	0.00	Taicang	-30.00	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

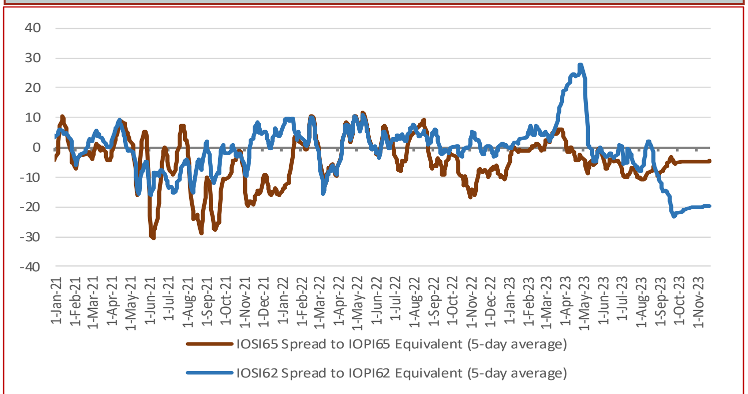




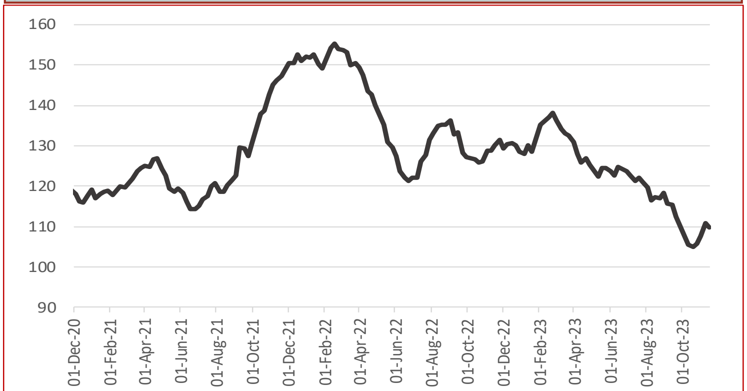
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



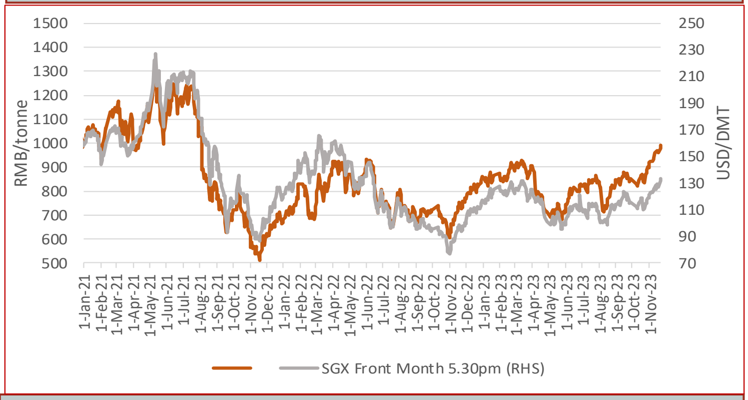
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

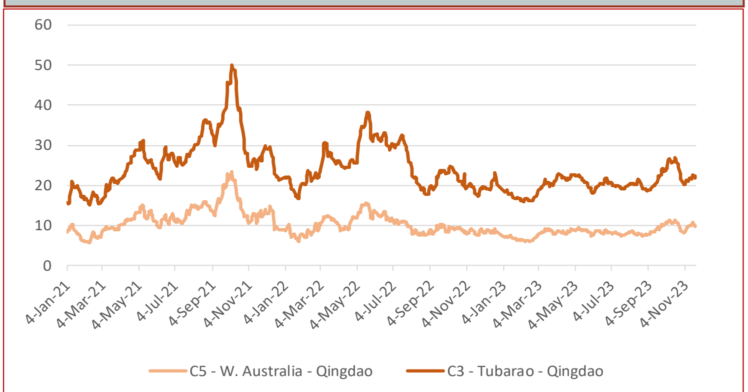
Week Ending Nov 17th, 2023

Province	This week	Change %	Low [2]	High [2]
Jingtang	8.62	2.50%	8.41	19.20
Qingdao	19.93	-12.47%	9.41	26.24
Caofeidian	9.14	12.15%	7.56	16.29
Tianjin	6.59	-13.06%	6.49	12.97
Rizhao	12.22	-6.86%	9.44	19.26
Total (35 Ports)	109.85	-0.81%	98.80	155.39

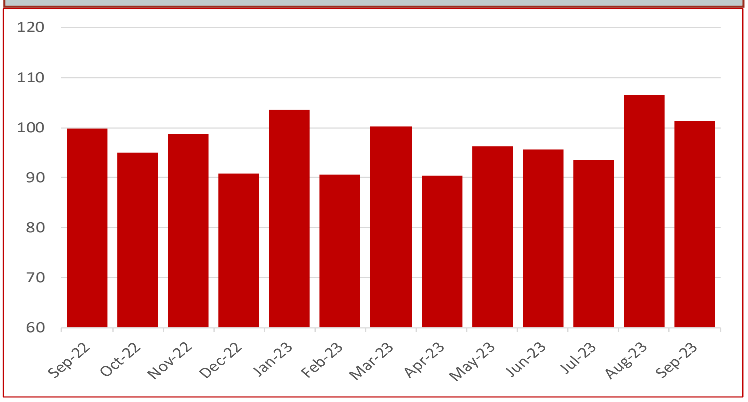
IRON ORE FUTURES CONTRACTS

	DCE (RMB/WMT)			SGX (USD/DMT)		
Closing Date	Nov 22nd, 3pm close			Nov 22nd, 5:30pm		
Contract	I2401	Change	Change %	Dec. 23	Change	Change %
Closing Price	993.50	15.00	1.53%	133.40	1.60	1.21%
Vol traded ('000 lots)	30.39	-1.12	-3.55%	11.38	-0.41	-3.48%
Open positions ('000 lots)	72.56	-0.83	-1.13%	37.13	0.37	1.01%
Day Low	975.0	5.00	0.52%	132.80	2.00	1.53%
Day High	995.0	7.00	0.71%	135.05	0.95	0.71%

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	2023/11/17	Change	Change %
ReBar HRB400 ϕ18mm	4,080	80	2.00%
Wirerod Q300 ϕ6.5mm	4,300	80	1.90%
HRC Q235/SS400 5.5mm*1500*C	3,960	30	0.76%
CRC SPCC/ST12 1.0mm*1250*2500	4,790	20	0.42%
Medium & Heavy Plate Q235B 20mm	3,980	100	2.58%
GI ST02Z 1.0mm*1000*C	5,060	20	0.40%
Colour Coated Plate	6,950	50	0.72%

CHINESE STEEL MILL PROFITABILITY

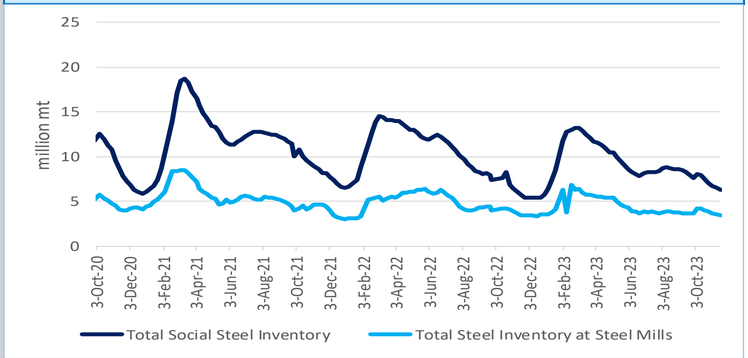
SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)

Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt exluding tax	118.10	0	Mmi CFR Equivalent index for 1st Feb
Coke	2,450	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,910	0	steel scrap (6mm) in Zhangjiagang, exl. tax
Billet Cost	3,270	9	Q234, incl. tax
Rebar cost - Blast furnace	3,922	-0	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	58	49	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,978	13	based on actual weight, incl. tax
Hot-rolled coil proft - Blast furnace	-18	27	based on Shanghai prices, incl. tax

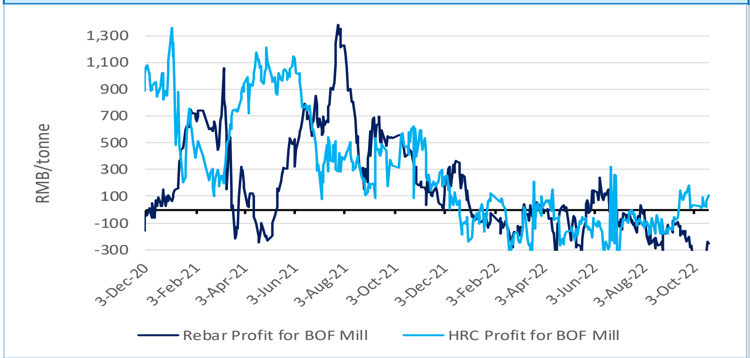
Note: 1. Costs in the table are caluclated based on todays market prices and facout our management, sales, financial and depreciations fe

2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

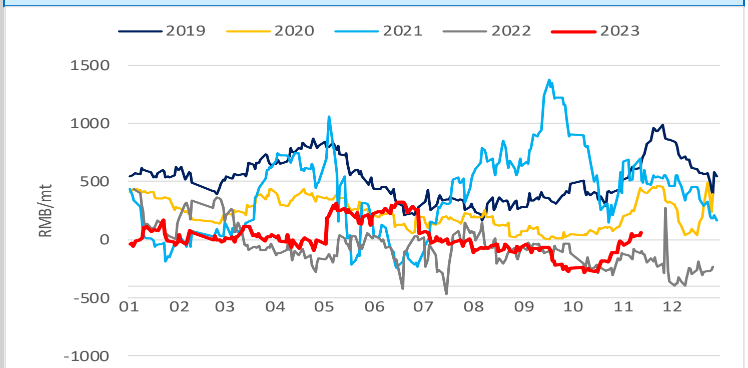
CHINESE STEEL INVENTORIES



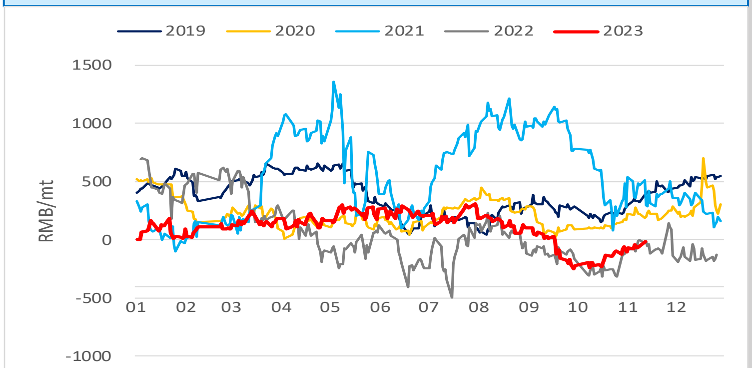
CHINESE STEEL MILL PROFITABILITY



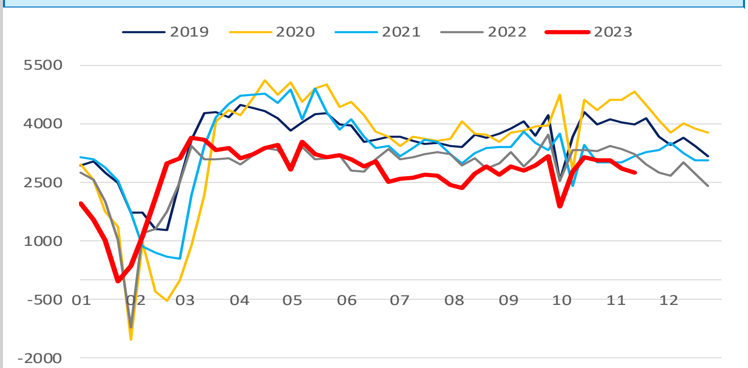
CHINESE STEEL MILL PROFITABILITY—Rebar



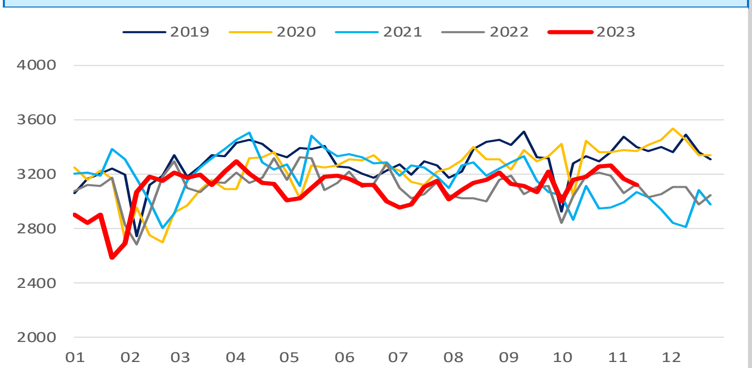
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



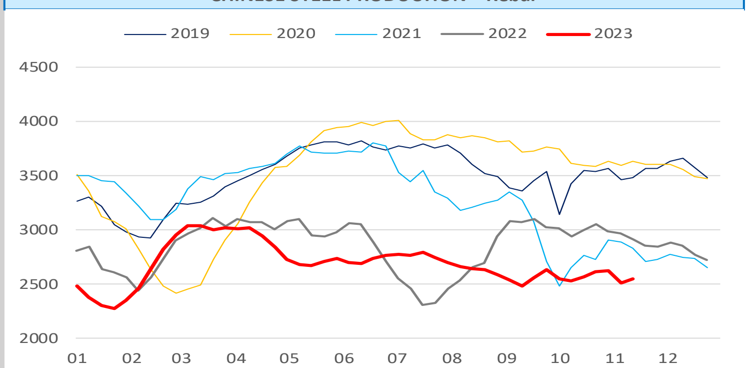
CHINESE STEEL CONSUMPTION—Rebar



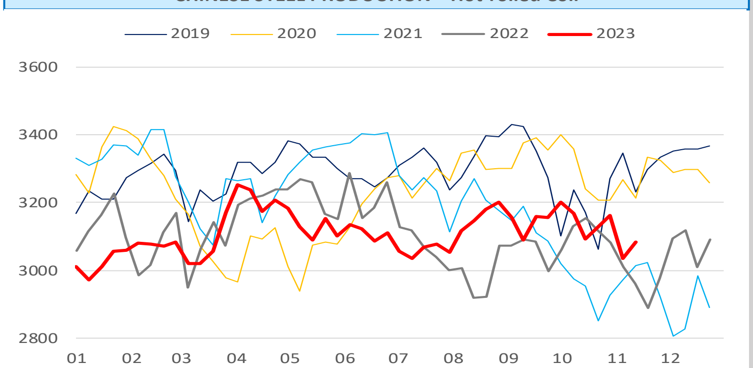
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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)

	65% Fe Fines	62% Fe Fines	58% Fe Fines	62.5% Fe Lump
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 Index Compilation Rationale and Data Exclusions

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

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

Nov 22nd, 2023	Specifications applied for 62% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture
Roy Hill	60.88%	2.35%	4.45%	0.055%	9.26%
SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%
PB Fines	61.64%	2.31%	3.87%	0.099%	9.45%
Newman Fines	62.49%	2.31%	3.98%	0.090%	7.72%
MAC Fines	60.43%	2.38%	4.64%	0.078%	7.57%
Jimblebar Blended Fines	60.87%	2.95%	4.53%	0.111%	7.32%
Carajas Fines	64.90%	1.39%	1.82%	0.080%	7.78%
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%
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%

Nov 22nd, 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%

SEABORNE BRANDS

	Specifications applied for 62% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture
Roy Hill	60.70%	2.30%	4.90%	0.055%	8.00%
SIMEC Fines	60.00%	2.30%	6.30%	0.060%	6.00%
PB Fines 62%	62.00%	2.60%	4.30%	0.090%	9.50%
Newman Fines	62.30%	2.40%	4.30%	0.095%	8.00%
MAC Fines	60.80%	2.35%	4.40%	0.075%	7.80%
Jimblebar Blended Fines	60.50%	3.10%	4.80%	0.120%	7.80%
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 Blend Fines	63.00%	1.50%	5.00%	0.070%	7.00%
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%

BLOOMBERG TICKERS

	PORT STOCK INDICES	
	FOT Qingdao (RMB/wet tonne)	CFR Qingdao Equivalent (USD/dry tonne)
IOPI62	IRCNQ001	IRCNQ004
IOPI58	IRCNQ002	IRCNQ005
IOPI65	IRCNQ003	IRCNQ006
IOPLI62	IRCN0036	IRCN0037

	SEABORNE INDICES
	CFR Qingdao (USD/DMT)
IOSI62	IRCN0034
IOSI65	IRCN0035

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