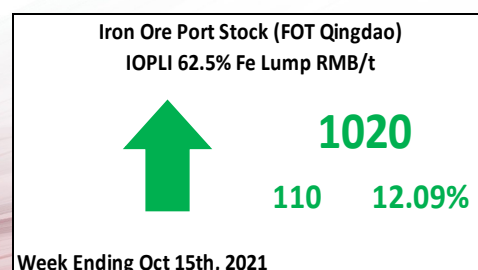
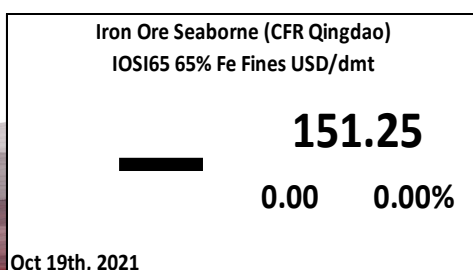
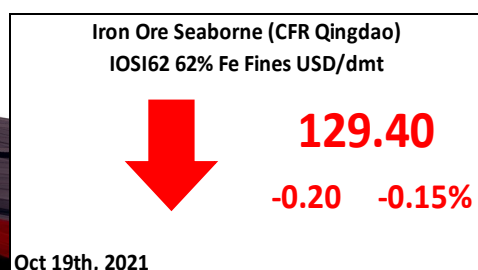
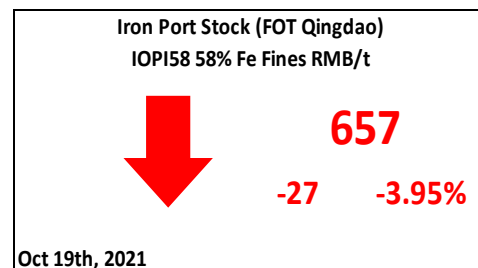
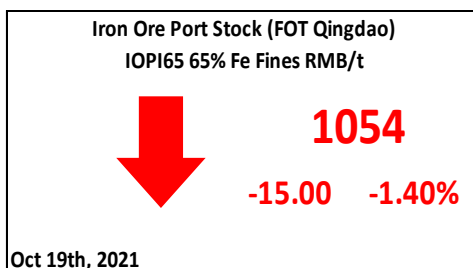
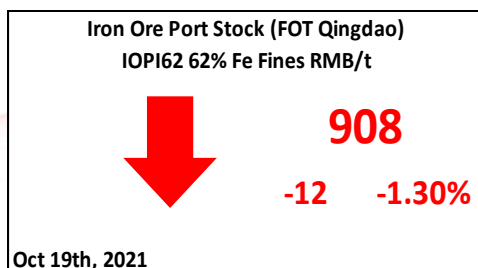


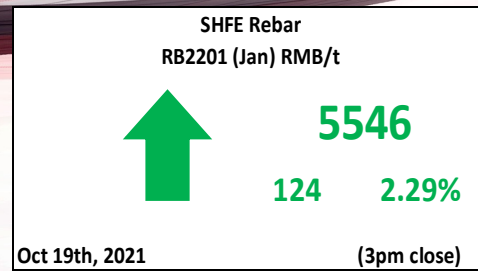
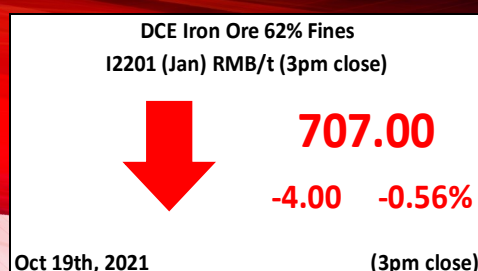


MMi Dashboard

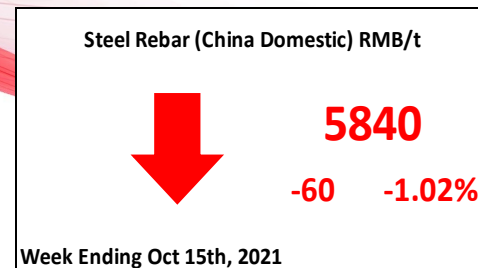
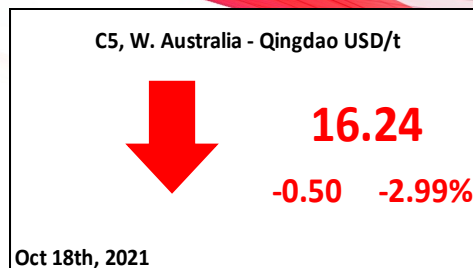
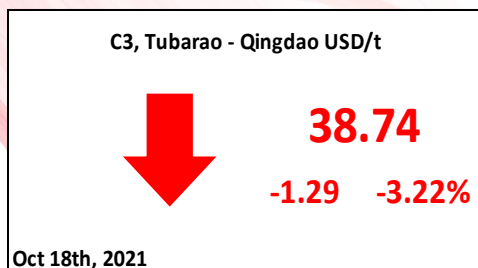
Iron Ore Price Indices



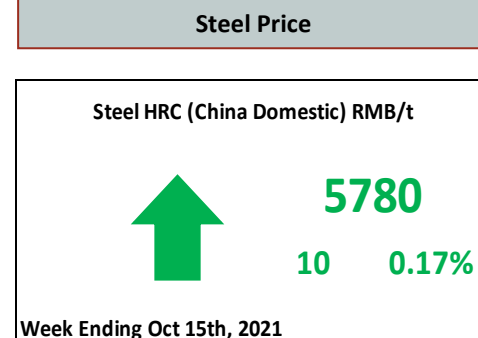
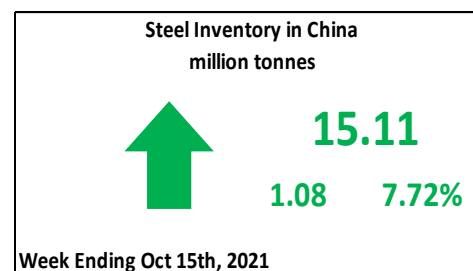
Exchange Traded Contracts



Freight Rates



Inventory Levels



IRON ORE PORT STOCK INDEX (IOPI)

Oct 19th, 2021		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	908	-12	-1.3%	915	1247	762	1680	131.63	-1.81	-1.4%	132.43	181.30	109.14	247.30
IOPI58	58% Fe Fines	657	-27	-3.9%	685	1016	518	1421	95.12	-4.09	-4.1%	99.14	148.46	73.66	210.83
IOPI65	65% Fe Fines	1054	-15	-1.4%	1068	1451	952	1894	153.47	-2.26	-1.5%	155.22	211.58	133.20	278.61

IRON ORE SEABORNE INDEX (IOSI)

MARKET COMMENTARY

Oct 19th, 2021		CFR Qingdao, USD/dry tonne							DCE iron ore futures continued to fluctuate in a day, main contract closed 707. The spot quotation in the morning quoted varied. Some steel procurement more cautious, the continuation of a small number of multi-frequency procurement strategy; but some traders quotation is still stronger. The overall deal atmosphere was general today. PBF at Shandong port dealt 865 yuan/mt, increased 15-25 yuan/mt over yesterday; PBF at Tangshan port dealt 870-890 yuan/ton, prices are mixed today over yesterday. According to data tracked by SMM, 82 ships arrived at domestic main ports from October 11-17. Arrivals of cargoes are estimated to stand at 12.13 million mt, down 1.73 million mt from the previous week and 3.02 million mt year on year. Shipments that departed Australian ports were estimated to increase 0.79 million mt week on week to 19.0 million mt, up 1.44 million mt on the year; and that from Brazilian ports decreased 0.6 million mt to 3.7 million mt on a weekly basis, down 3.79 million mt on the year. The arrivals of iron ore at ports decreased from the prior week, while those from Australia and Brazil increased slightly as a whole. The near-term output of molten iron is likely to drop amid the power rationing, pressing iron ore prices.							
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²								
IOSI62	62% Fe Fines	129.40	-0.20	-0.15%	127.90	175.31	112.75	230.50								
IOSI65	65% Fe Fines	151.25	0.00	0.00%	147.00	202.53	131.15	262.95								

IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending Oct 15th, 2021		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	1020	110	12.1%	1020	1493	886	1868	141.85	16.19	12.89%	141.85	207.70	118.00	262.00

IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending Oct 15th, 2021				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	995	11.8%	779	1645	154.34	12.03%	110.31	255.69
Hebei	Qian'an	65% Fe Concentrate	Dry	1140	6.5%	780	1630	176.83	6.77%	110.51	251.57
Liaoning	Anshan	65% Fe Concentrate	Wet	850	-3.4%	620	1310	131.85	-3.21%	87.40	202.32
Shandong	Zibo	65% Fe Concentrate	Dry	1005	12.9%	865	1752	155.89	13.16%	122.55	272.32

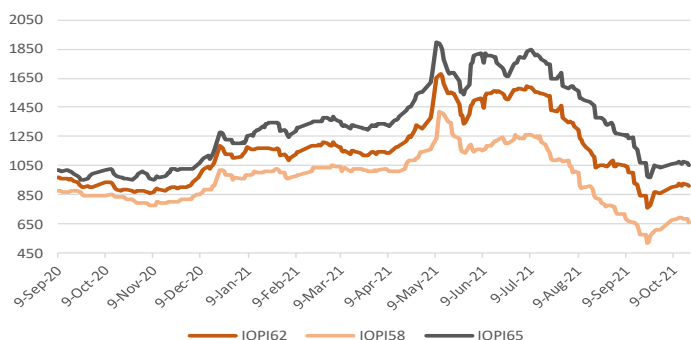
Week Ending Oct 15th, 2021

This week	Change %	Low ²	High ²
969.66	0.14%	706.36	1511.22

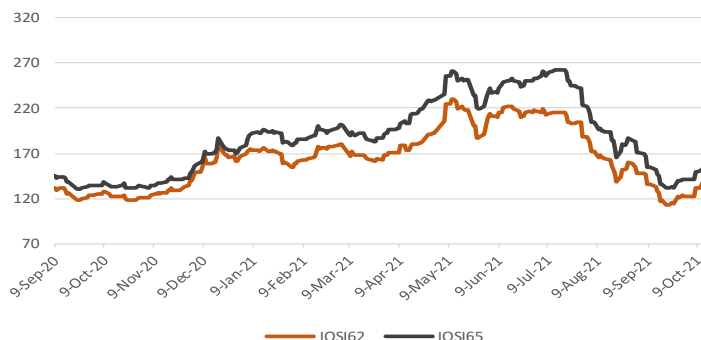
China Mines Concentrate Composite Index RMB/WT

¹ Exchange rate applied: RMB/USD = 6.4934 ² Last 12 months
³ Weekly exchange rate applied: RMB/USD 6.5044

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 19th, 2021		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	1524	1519	1174	937	915	915	1247	221.54	170.18	135.90	135.31	132.43	132.43	181.30
IOPI58	58% Fe Fines	1199	1186	894	648	685	685	1016	173.94	130.00	93.62	93.31	99.14	99.14	148.46
IOPI65	65% Fe Fines	1756	1750	1466	1152	1068	1068	1451	255.79	213.59	214.41	214.06	211.58	155.22	211.58

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

FREIGHT RATES

Oct 19th, 2021		CFR Qingdao, USD/dry tonne							Oct 18th, 2021						
Index	Fe Content	June	July	August	September	MTD	QTD	YTD	FREIGHT RATES - DRY BULK US\$/wet tonne						
									Route	Designation	Change	Change %	Low ²	High ²	
IOSI62	62% Fe Fines	213.90	211.65	162.80	128.43	127.90	127.90	175.31	W. Australia - Qingdao	C5	16.24	-0.50	-2.99%	3.57	16.77
IOSI65	65% Fe Fines	244.31	254.36	192.73	148.09	147.00	147.00	202.53	Tubarao - Qingdao	C3	38.74	-1.29	-3.22%	6.70	36.40

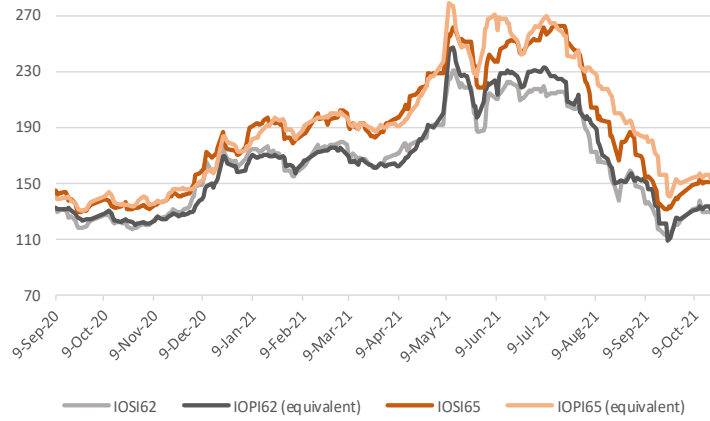
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending Oct 15th, 2021		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	1735	1816	1409	1065	1020	1020	1493	245.23	254.64	196.49	147.90	141.85	141.85	207.70

IRON ORE INDEX PREMIUMS/DISCOUNTS

Oct 19th, 2021		PORT STOCK INDEX (RMB/WT)				Oct 19th, 2021		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	-251		-27.64%		IOSI65	65% Fe Fines	21.85		16.89%	
IOPI65	65% Fe Fines	146		16.08%							

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

Oct 19th, 2021				PORT STOCK INDEX (RMB/WT)			Oct 19th, 2021				SEABORNE INDEX (USD/DMT)		
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62		Price	Change	Diff to IOSI62		
Roy Hill	854	-8	-54	Roy Hill	124.90	-0.20	-4.50						
SIMEC Fines	840	-6	-68	SIMEC Fines	121.40	-0.20	-8.00						
PB Fines	876	-11	-32	PB Fines	128.15	-0.20	-1.25						
Newman Fines	922	-13	14	Newman Fines	129.30	-0.20	-0.10						
MAC Fines	854	-6	-54	MAC Fines	125.30	-0.20	-4.10						
Jimblebar Blended Fines	802	-5	-106	Jimblebar Blended Fines	118.65	-0.20	-10.75						
Carajas Fines	1045	-15	137	Carajas Fines	158.95	-0.20	29.55						
Brazilian SSF	904	-12	-4	Brazilian SSF	133.15	-0.20	3.75						
Brazilian Blend Fines	910	-13	2	Brazilian Blend Fines	134.80	-0.20	5.40						
RTX Fines	795	-5	-113	RTX Fines	119.30	-0.20	-10.10						
West Pilbara Fines	839	-6	-69	West Pilbara Fines	123.65	-0.20	-5.75						

Oct 19th, 2021				PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58		Price	Change	Diff to IOPI58
SSF	656	-27	-1				
FMG Blended Fines	662	-27	5				
Robe River	661	-27	4				
Western Fines	668	-28	11				
Atlas Fines	657	-27	0				
Yandi	653	-27	-4				

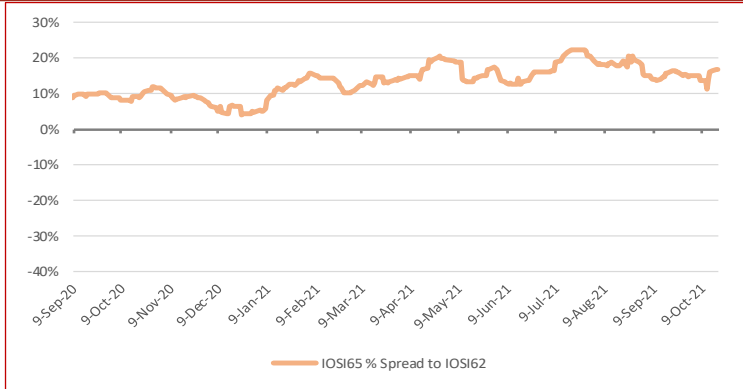
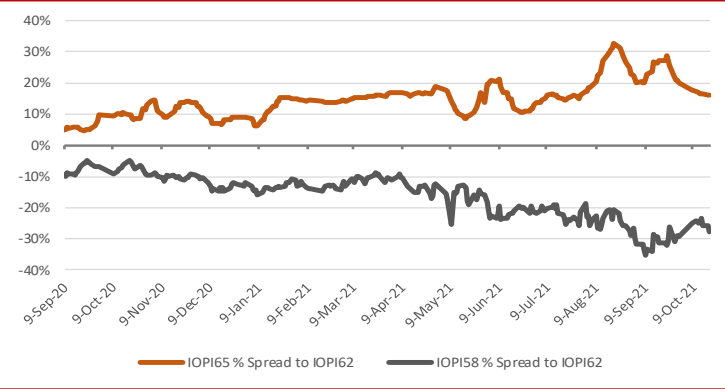
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	28.00	-3.00	1% Fe	High Grade Fe 60 - 63%	4.00	0.00
	High Grade Fe 63 - 64%	23.00	0.00		High Grade Fe 63 - 64%	3.50	0.00
	High Grade Fe 64 - 65%	23.00	0.00		High Grade Fe 64 - 65%	3.50	0.00
	High Grade Fe 65 - 65.5%	23.00	0.00		High Grade Fe 65 - 65.5%	3.50	0.00
1% Alumina	Low Grade Fe	26.00	0.00	1% Alumina	High Fe Grade Al <2.25%	2.00	0.00
	High Fe Grade Al <2.25%	5.00	0.00		High Fe Grade Al 2.25-4%	1.50	0.00
	High Fe Grade Al 2.25-4%	50.00	-5.00				
	Low Fe Grade Al <2.25%	45.00	-5.00				
1% Silica	Low Fe Grade Al 2.25-4%	56.00	-2.00	1% Silica	High Fe Grade Si <4%	4.00	0.00
	High Fe Grade Si <4%	27.00	0.00		High Fe Grade Si 4 - 6.5%	8.25	0.00
0.01% Phosphorus	High Fe Grade Si <4%	27.00	0.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.25	0.00
	High Fe Grade Si 4-6.5%	12.00	0.00		High Fe Grade 0.115%<P<0.15%	0.25	0.00
	High Fe Grade 0.09%<P<0.115%	9.00	0.00				
	High Fe Grade 0.115%<P<0.15%	9.00	0.00				
	Low Fe Grade 0.09%<P<0.1%	5.00	0.00				

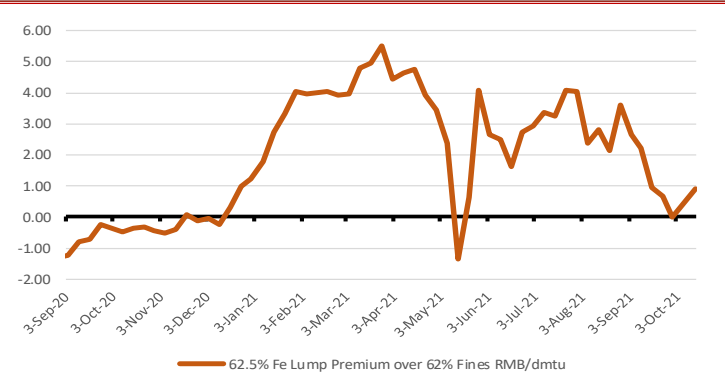
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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	-95.00	0.00	Lianyungang	0.00	0.00	Shekou	0.00	0.00
Caofeidian	-20.00	0.00	Jingtang	-20.00	0.00	Majishan	0.00	0.00	Taicang	-95.00	0.00
Dalian	0.00	0.00	Lanqiao	0.00	0.00	Qingdao	0.00	0.00	Tianjin	-40.00	0.00

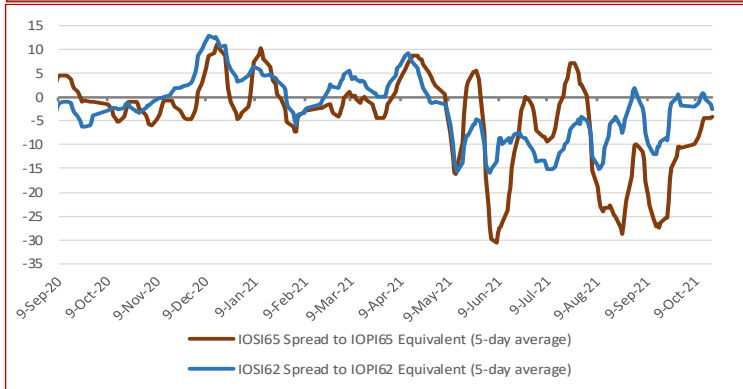
IRON ORE INDEX PREMIUMS/DISCOUNTS



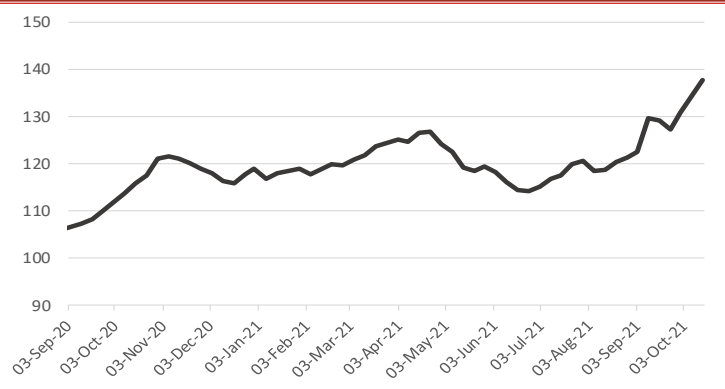
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



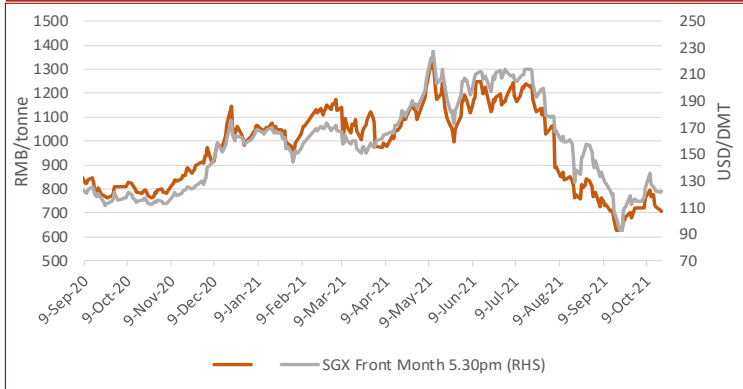
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

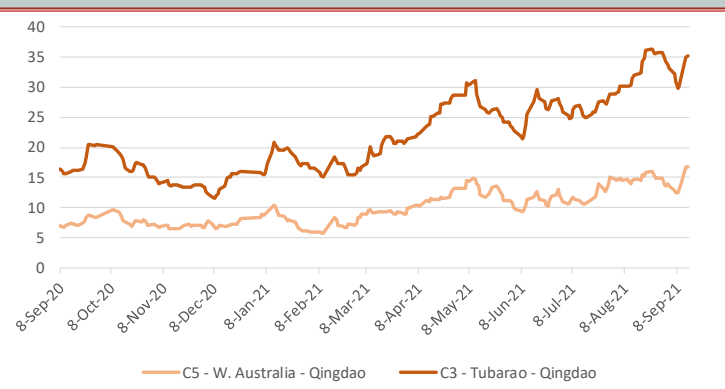
Week Ending Oct 15th, 2021

Province	This week	Change %	Low ²	High ²
Jingtang	17.09	1.73%	12.26	19.20
Qingdao	22.77	5.03%	9.41	22.77
Caofeidian	13.41	10.64%	11.25	16.25
Tianjin	10.41	3.27%	7.14	11.28
Rizhao	14.01	6.06%	9.44	14.22
Total (35 Ports)	137.82	5.38%	98.80	137.82

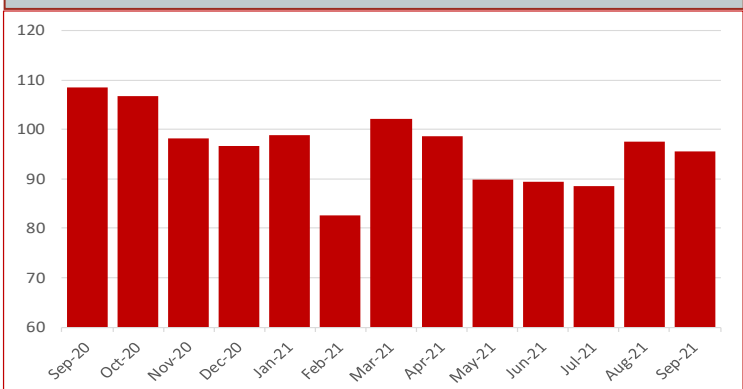
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Oct 19th, 3pm close			Oct 19th, 5:30pm		
Contract	I2201	Change	Change %	Nov. 21	Change	Change %
Closing Price	707.00	-4.00	-0.56%	122.05	0.30	0.25%
Vol traded ('000 lots)	60.36	-19.09	-24.02%	1.87	-0.02	-1.19%
Open positions ('000 lots)	47.12	0.89	1.93%	17.93	-0.13	-0.74%
Day Low	693.5	7.50	1.09%	120.15	0.60	0.50%
Day High	718.0	-14.00	-1.91%	123.20	-4.30	-3.37%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

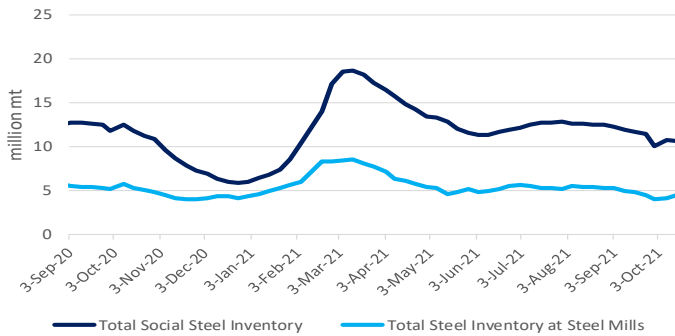
Steel Spot Market RMB/tonne			
Product	2021/10/15	Change	Change %
ReBar HRB400 φ18mm	5,840	-60	-1.02%
Wirerod Q300 φ6.5mm	6,190	-60	-0.96%
HRC Q235/SS400 5.5mm*1500*C	5,780	10	0.17%
CRC SPCC/ST12 1.0mm*1250*2500	6,500	0	0.00%
Medium & Heavy Plate Q235B 20mm	5,790	80	1.40%
GI ST02Z 1.0mm*1000*C	6,740	0	0.00%
Colour Coated Plate	8,900	0	0.00%

CHINESE STEEL MILL PROFITABILITY

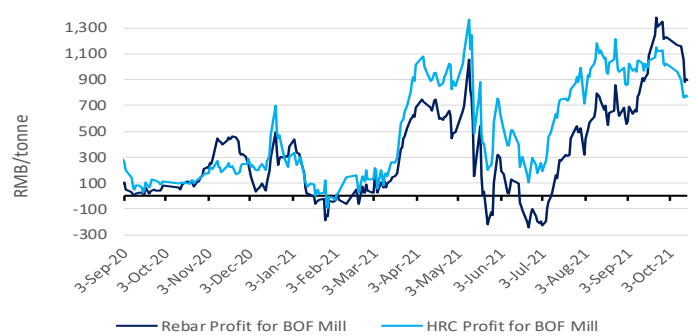
SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)			
Category	Price	Change (WoW)	Note
MMi (Fe 62%), USD/mt excluding tax	123.70	2	Mmi CFR Equivalent index for 1st Feb
Coke	4,210	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	3,700	80	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	4,708	252	Q234, incl. tax
Rebar cost - Blast furnace	5,016	259	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	906	-321	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	4,988	252	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	782	-241	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

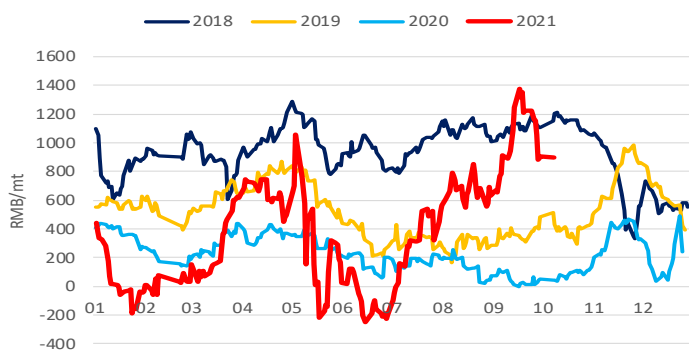
CHINESE STEEL INVENTORIES



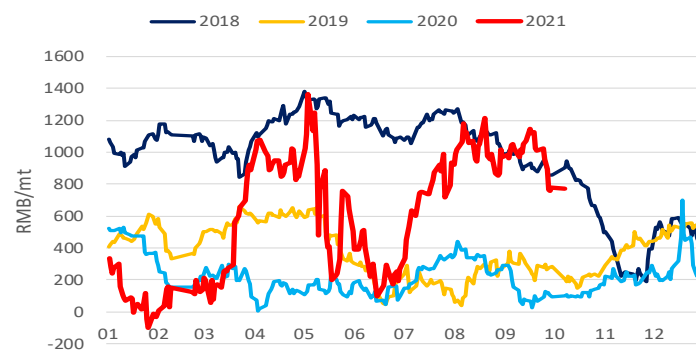
CHINESE STEEL MILL PROFITABILITY



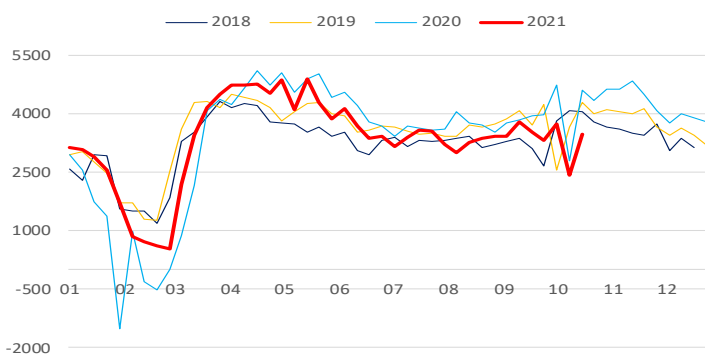
CHINESE STEEL MILL PROFITABILITY—Rebar



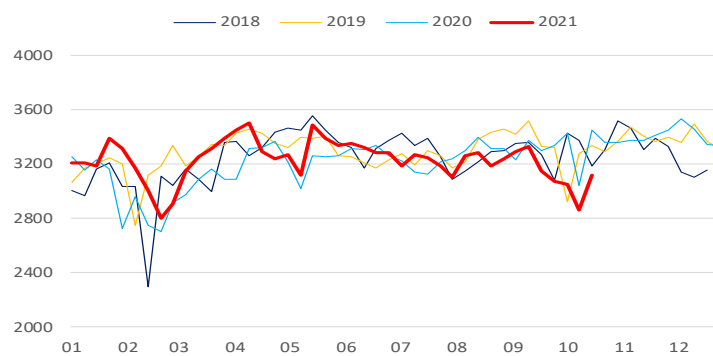
CHINESE STEEL MILL PROFITABILITY—Hot-rolled Coil



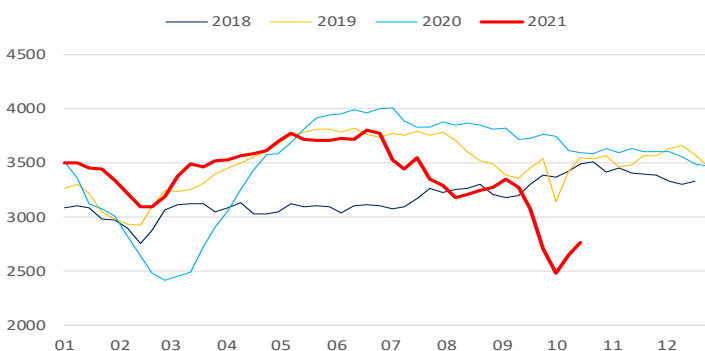
CHINESE STEEL CONSUMPTION—Rebar



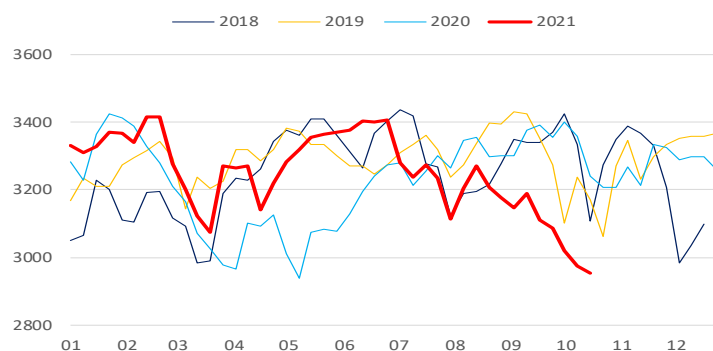
CHINESE STEEL CONSUMPTION—Hot-rolled Coil



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	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
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		

Data Exclusions*			
Port Index	62%	58%	65%
Seaborne index	0	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 19th, 2021	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%	4.40%	0.090%	8.00%
MAC Fines	60.43%	2.38%	4.64%	0.078%	7.57%	MAC Fines	60.80%	2.35%	4.70%	0.080%	7.80%
Jimblebar Blended Fines	60.87%	2.95%	4.53%	0.111%	7.32%	Jimblebar Blended Fines	60.50%	3.00%	4.50%	0.120%	8.00%
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 19th, 2021	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.