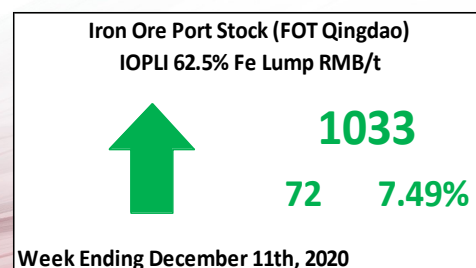
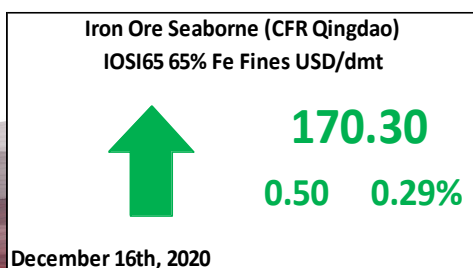
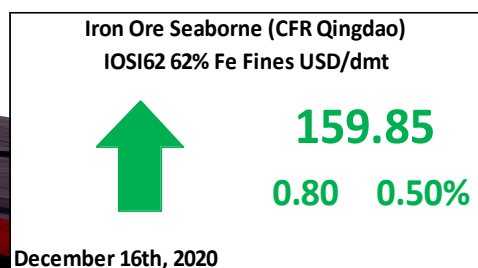
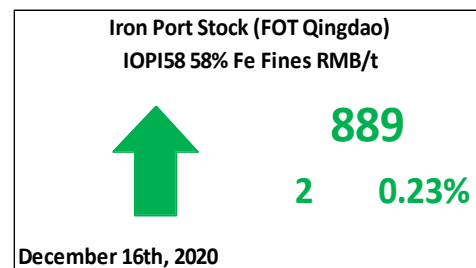
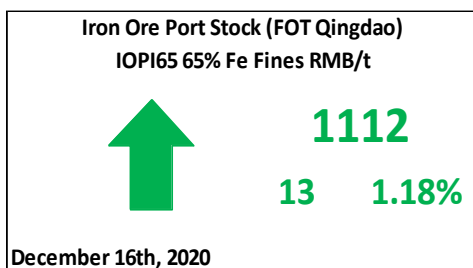
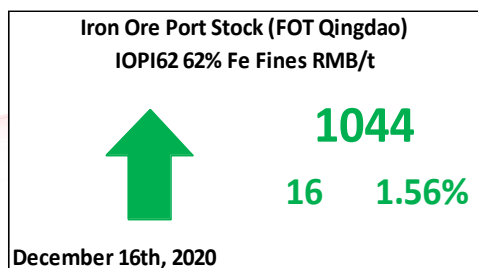


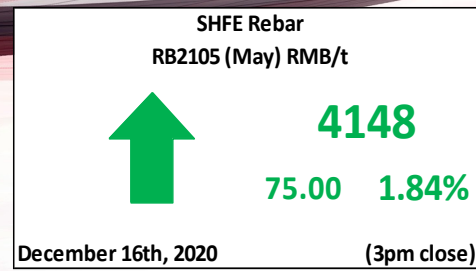
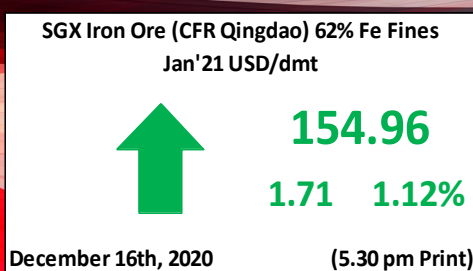
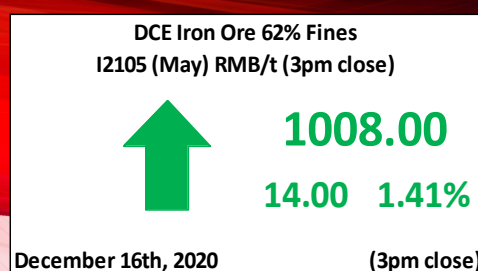


MMi Dashboard

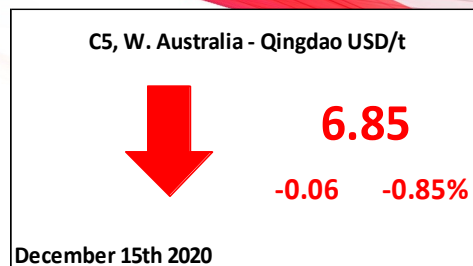
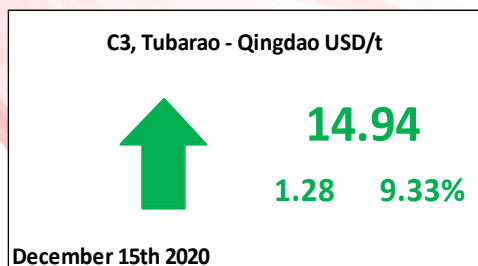
Iron Ore Price Indices



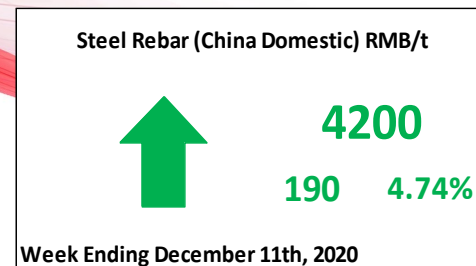
Exchange Traded Contracts



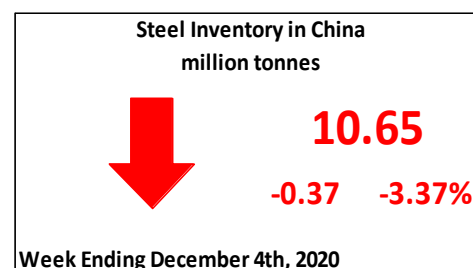
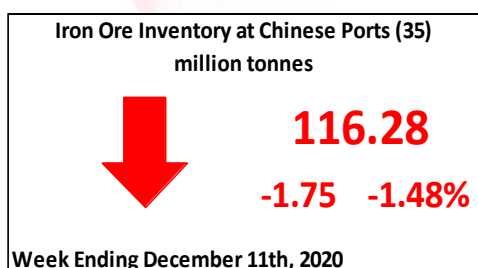
Freight Rates



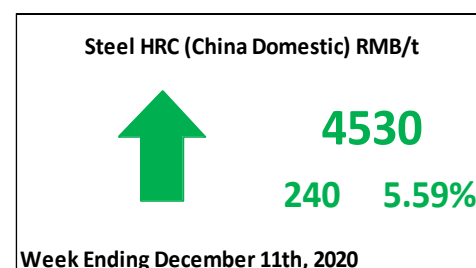
Steel Price



Inventory Levels



Steel Price



IRON ORE PORT STOCK INDEX (IOPI)

December 16th, 2020		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	1044	16	1.6%	981	806	619	1044	149.54	2.54	1.7%	139.98	108.58	81.37	149.54
IOPI58	58% Fe Fines	889	2	0.2%	857	717	531	892	128.12	0.46	0.4%	123.20	97.21	70.02	128.25
IOPI65	65% Fe Fines	1112	13	1.2%	1068	911	759	1116	159.55	2.11	1.3%	152.83	123.19	99.04	160.12

IRON ORE SEABORNE INDEX (IOSI)

MARKET COMMENTARY

December 16th, 2020		CFR Qingdao, USD/dry tonne							DCE iron ore futures market flew higher and physical PBF in Shandong and Tangshan increased by 5-15yuan/mt to 1025-1030yuan/mt. CISA recently announced the average daily output of pig iron from the key steel enterprises in the first ten days, with YoY growth of 10.94%, increasing by 5.77% over last ten days in November. Iron ore demand remains strong. Most traders are bullish on the physical market, and meanwhile, according to SMM, though profits margins for rebar declined, margins for HRC hovered around 250yuan/mt, based on an iron ore price of 158.8USD/mt, which still boost mill demand. Considering cost performance, mill appetite for high grade fines and lump products has increased. One mill from North China states, as they have new blast furnace to be put into operation in December, they preferred to purchase from port stock market given the higher seaborne prices as well as the uncertain of shipping date.							
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²	Price	Change	Change %	MTD	YTD	Low ²	High ²	
IOSI62	62% Fe Fines	159.85	0.80	0.50%	151.19	107.67	80.65	165.00								
IOSI65	65% Fe Fines	170.30	0.50	0.29%	159.92	121.15	97.05	172.35								

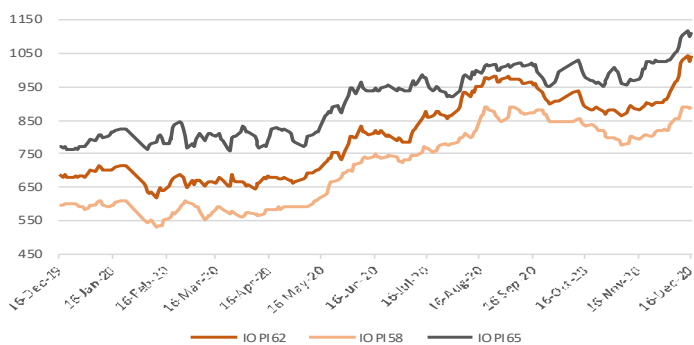
IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending December 11th, 2020		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	1033	72	7.5%	997	888	804	1033	141.71	10.77	8.23%	136.33	114.38	101.03	141.71

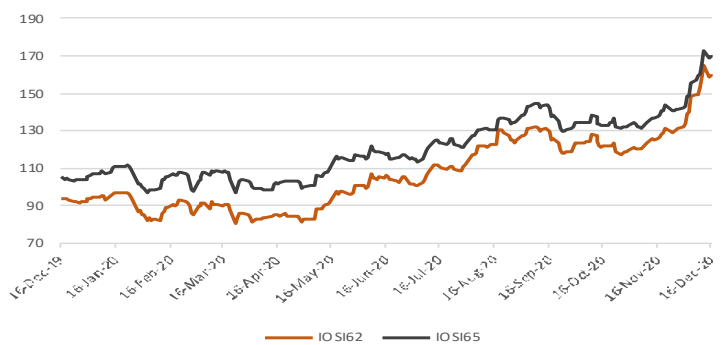
IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending December 11th, 2020				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	1094	5.2%	763	1094	167.34	5.69%	109.28	167.34
Hebei	Qian'an	65% Fe Concentrate	Dry	1059	2.6%	780	1059	161.99	3.10%	110.51	161.99
Liaoning	Anshan	65% Fe Concentrate	Wet	830	1.8%	620	830	126.96	2.32%	87.40	126.96
Shandong	Zibo	65% Fe Concentrate	Dry	1130	3.7%	810	1130	172.85	4.16%	115.13	172.85
Week Ending December 11th, 2020				This week	Change %	Low ²	High ²	¹ Exchange rate applied: RMB/USD = 6.5355 ² Last 12 months ³ Weekly exchange rate applied: RMB/USD 6.5683			
China Mines Concentrate Composite Index RMB/WT				923.51	0.00%	702.47	947.97				

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

December 16th, 2020		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	948	946	892	888	981	912	806	127.65	129.64	123.88	125.18	139.98	125.22	108.58
IOPI58	58% Fe Fines	838	870	828	799	857	823	717	113.63	120.14	115.94	113.43	123.20	113.69	97.21
IOPI65	65% Fe Fines	992	998	982	996	1068	1009	911	133.70	136.85	136.68	140.93	152.83	136.54	123.19

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

FREIGHT RATES

December 16th, 2020		CFR Qingdao, USD/dry tonne							December 15th 2020						
Index	Fe Content	August	September	October	November	MTD	QTD	YTD	Route	Designation	Change	Change %	Low ²	High ²	
IOSI62	62% Fe Fines	124.02	126.26	122.16	126.25	151.19	130.05	107.67	W. Australia - Qingdao	C5	6.85	-0.06	-0.85%	3.57	10.80
IOSI65	65% Fe Fines	132.95	138.39	133.94	137.65	159.92	141.02	121.15	Tubarao - Qingdao	C3	14.94	1.28	9.33%	6.70	22.78

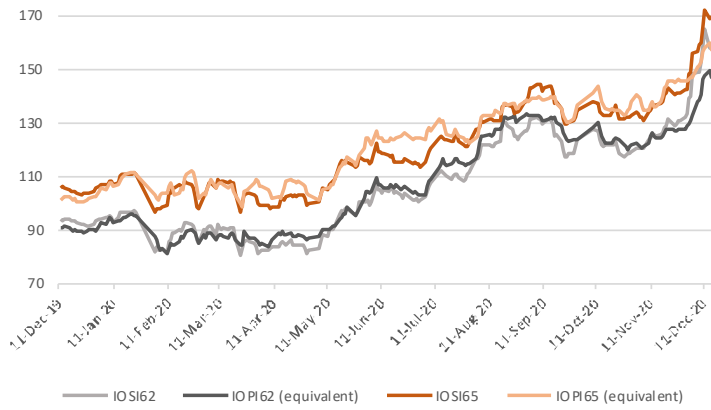
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending December 11th, 2020		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	932	959	919	919	997	934	888	120.08	125.87	121.91	124.21	136.33	121.65	114.38

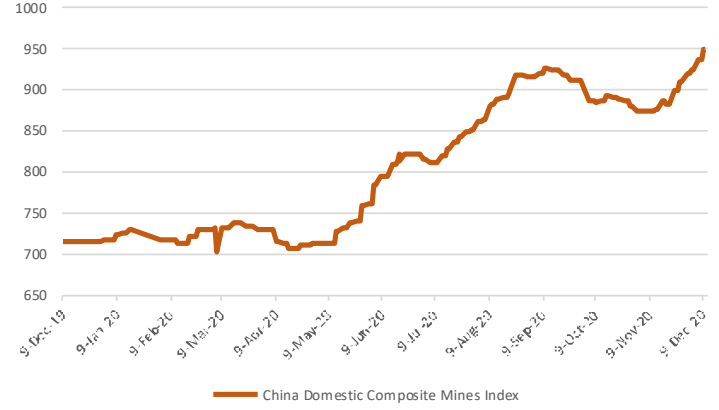
IRON ORE INDEX PREMIUMS/DISCOUNTS

December 16th, 2020				PORT STOCK INDEX (RMB/WT)				December 16th, 2020				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	-155		-14.85%		IOSI65	65% Fe Fines	10.45		6.54%					
IOPI65	65% Fe Fines	68		6.51%											

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

December 16th, 2020				December 16th, 2020			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	1010	18	-34	Roy Hill	151.13	0.80	-8.72
SIMEC Fines	986	28	-58	SIMEC Fines	141.54	0.80	-18.31
PB Fines	1024	17	-20	PB Fines	156.36	0.80	-3.49
Newman Fines	1046	15	2	Newman Fines	157.67	0.80	-2.18
MAC Fines	1019	20	-25	MAC Fines	152.23	0.80	-7.62
Jimblebar Blended Fines	1000	18	-44	Jimblebar Blended Fines	146.74	0.68	-13.11
Carajas Fines	1111	13	67	Carajas Fines	166.84	0.80	6.99
Brazilian SSF	1003	24	-41	Brazilian SSF	147.66	0.80	-12.19
Brazilian Blend Fines	1031	17	-13	Brazilian Blend Fines	157.99	0.80	-1.86
RTX Fines	1017	17	-27	RTX Fines	146.06	0.67	-13.79
West Pilbara Fines	1006	21	-38	West Pilbara Fines	150.61	0.80	-9.24

December 16th, 2020			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	856	-9	-33
FMG Blended Fines	891	1	2
Robe River	867	-8	-22
Western Fines	873	-8	-16
Atlas Fines	901	3	12
Yandi	908	-2	19

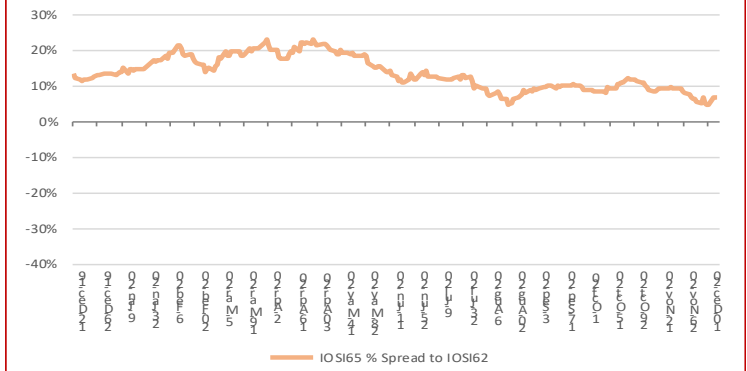
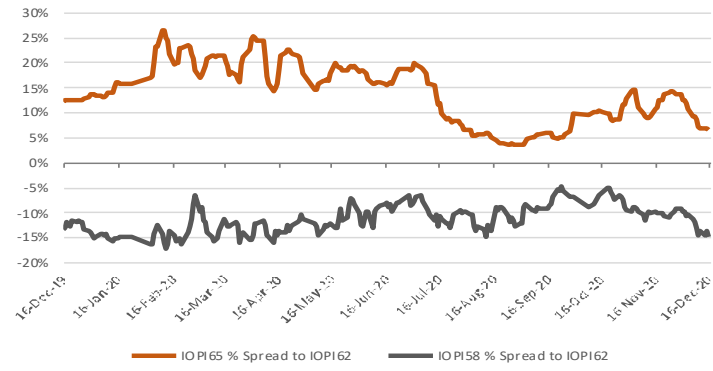
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	6.00	-2.00	1% Fe	High Grade Fe 60 - 63%	2.70	0.00
	High Grade Fe 63 - 64%	19.00	0.00		High Grade Fe 63 - 64%	0.50	0.00
	High Grade Fe 64 - 65%	19.00	0.00		High Grade Fe 64 - 65%	0.50	0.00
	High Grade Fe 65 - 65.5%	19.00	0.00		High Grade Fe 65 - 65.5%	0.50	0.00
1% Alumina	Low Grade Fe	2.00	2.00	1% Alumina	High Fe Grade Al <2.25%	1.25	0.00
	High Fe Grade Al <2.25%	8.00	0.00		High Fe Grade Al 2.25-4%	5.25	0.00
	High Fe Grade Al 2.25-4%	9.00	3.00				
	Low Fe Grade Al <2.25%	50.00	2.00				
1% Silica	Low Fe Grade Al 2.25-4%	23.00	6.00	1% Silica	High Fe Grade Si <4%	1.00	0.00
	High Fe Grade Si <4%	7.00	0.00		High Fe Grade Si 4 - 6.5%	5.50	0.00
0.01% Phosphorus	High Fe Grade Si 4-6.5%	29.00	-3.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.75	0.00
	Low Fe Grade	8.00	3.00		High Fe Grade 0.115%<P<0.15%	1.00	0.00
	High Fe Grade 0.09%<P<0.115%	1.00	0.00				

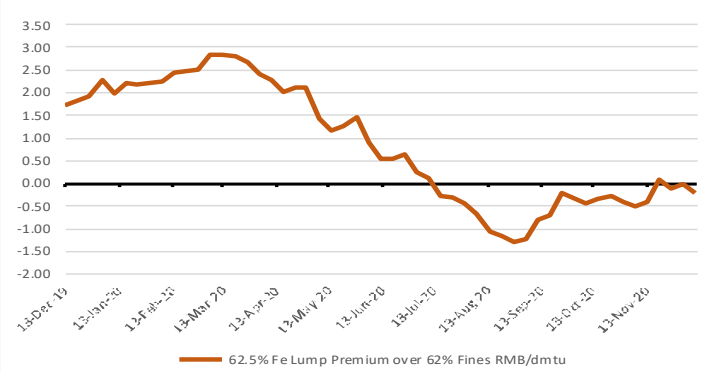
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-35.00	0.00	Fangcheng	-5.00	0.00	Lanshan	0.00	0.00	Rizhao	0.00	0.00
Beilun	-5.00	0.00	Jiangyin	-30.00	0.00	Lianyungang	0.00	0.00	Shekou	0.00	0.00
Caofeidian	-5.00	0.00	Jingtang	-5.00	0.00	Majishan	0.00	0.00	Taicang	-30.00	0.00
Dalian	-35.00	0.00	Lanqiao	0.00	0.00	Qingdao	0.00	0.00	Tianjin	-10.00	0.00

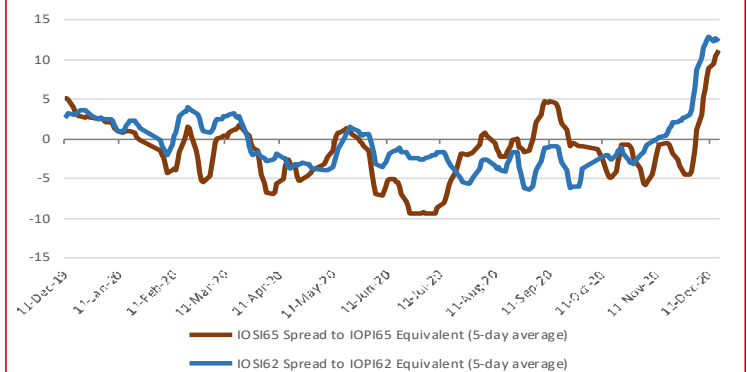
IRON ORE INDEX PREMIUMS/DISCOUNTS



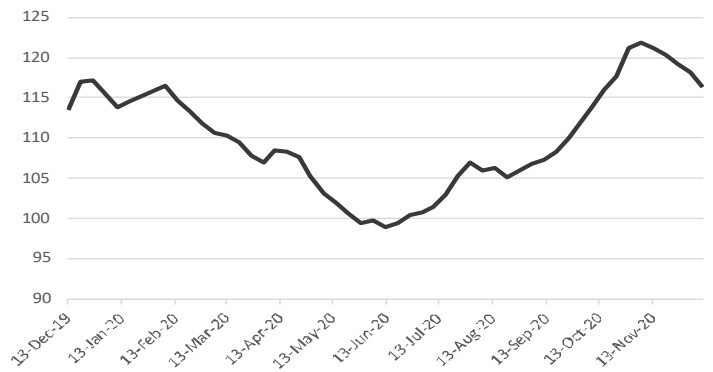
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



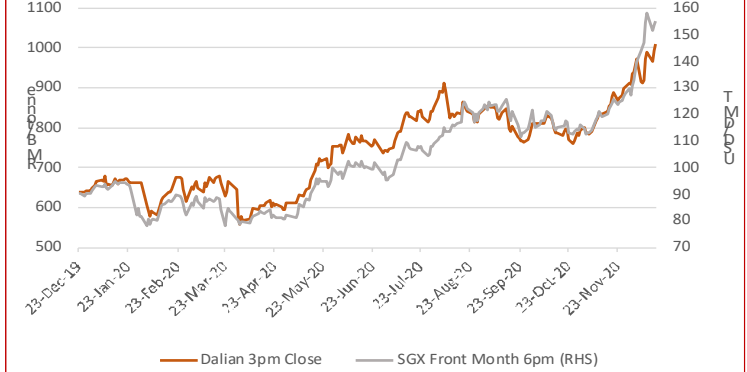
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



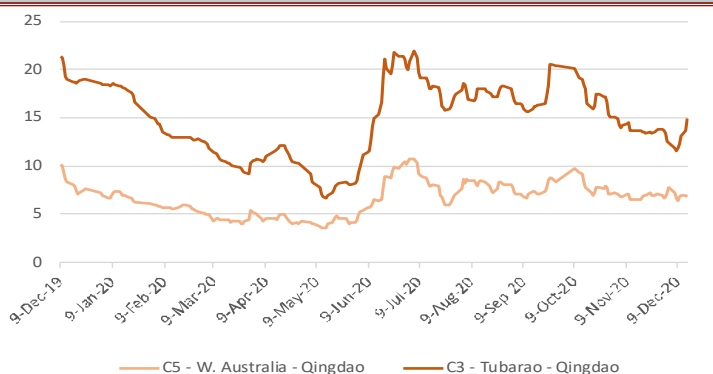
IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending December 11th, 2020				
Province	This week	Change %	Low ²	High ²
Jingtang	14.43	0.14%	12.26	16.08
Qingdao	14.55	-3.00%	9.41	15.30
Caofeidian	13.64	-4.01%	12.46	16.44
Tianjin	9.78	-2.98%	7.14	10.08
Rizhao	12.68	-4.73%	9.44	14.22
Total (35 Ports)	116.28	-1.48%	98.80	121.69

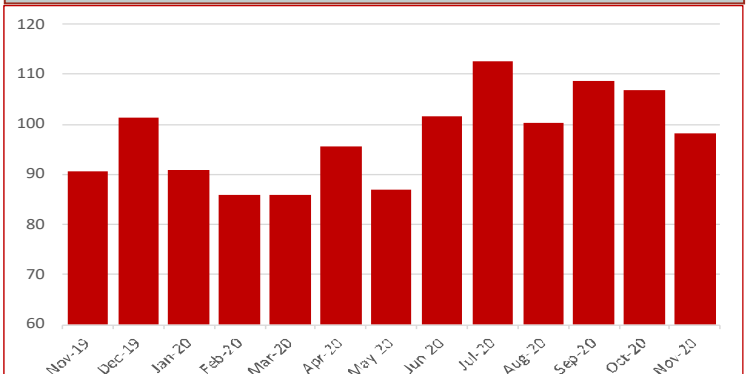
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Dec 16th, 3.00 pm dose			Dec 16th, 5.30 pm		
Contract	I2105	Change	Change %	Jan '21	Change	Change %
Closing Price	1008.00	14.0	1.41%	154.96	1.71	1.12%
Vol traded ('000 lots)	60.86	3.16	5.49%	13.64	-13.96	-50.58%
Open positions ('000 lots)	52.21	0.59	1.14%	181.26	-0.70	-0.38%
Day Low	985.5	27.5	2.87%	152.90	3.82	2.56%
Day High	1017.0	15.5	1.55%	155.16	1.76	1.15%

DRY BULK FREIGHT RATES (USD/MT)



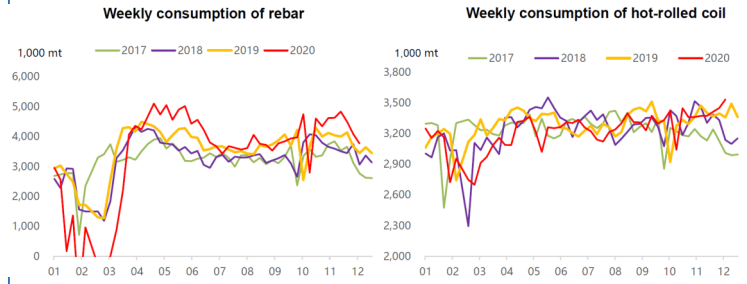
TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne			
Product	11/12/2020	Change	Change %
ReBar HRB400 ?18mm	4,200.0	190	4.74%
Wirerod Q300 ?6.5mm	4,570.0	130	2.93%
HRC Q235/SS400 5.5mm*1500*C	4,530.0	240	5.59%
CRC SPPC/ST12 1.0mm*1250*2500	5,640.0	310	5.82%
Medium & Heavy Plate Q235B 20mm	4,370.0	280	6.85%
GI ST02Z 1.0mm*1000*C	5,750.0	260	4.74%
Colour Coated Plate	8,000.0	300	3.90%

CHINESE STEEL CONSUMPTION



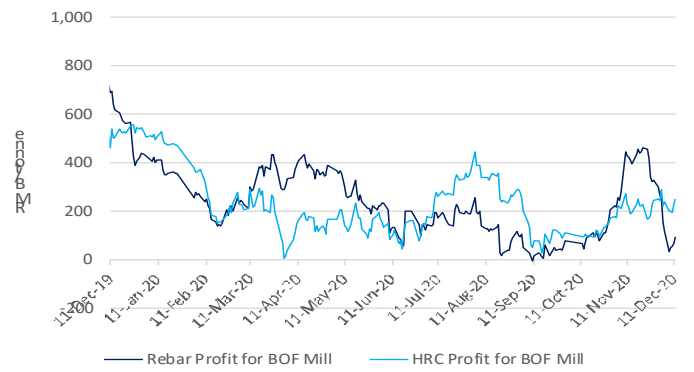
CHINESE STEEL MILL PROFITABILITY

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	158.80	18.55	Mmi CFR Equivalent index for 1st Feb
Coke	2,260	50	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,580	20	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,964	220	Q234, incl. tax
Rebar cost - Blast furnace	4,192	222	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	93	-26	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	4,280	219	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	250	11	based on Shanghai prices, incl. tax

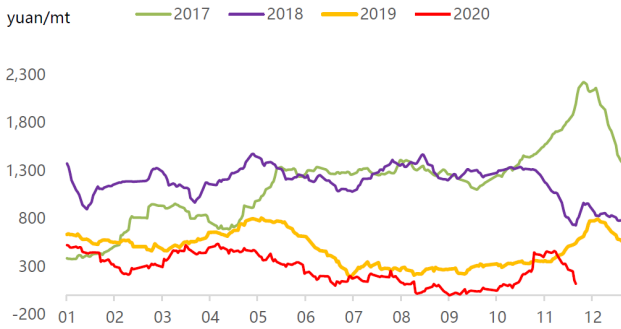
Note: 1. Costs in the table are calculated based on today's market prices and factored our management, sales, financial and depreciations fees.
2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

CHINESE STEEL MILL PROFITABILITY

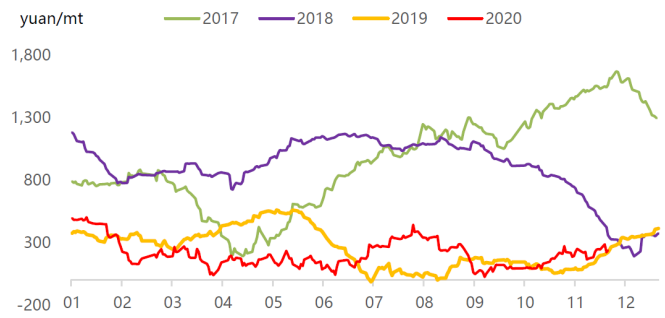


CHINESE STEEL MILL PROFITABILITY

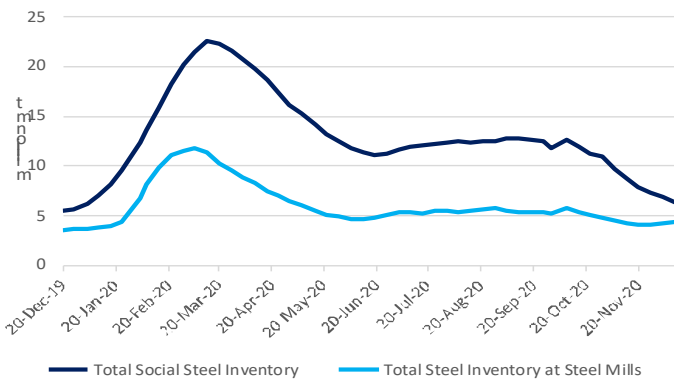
Rebar profits



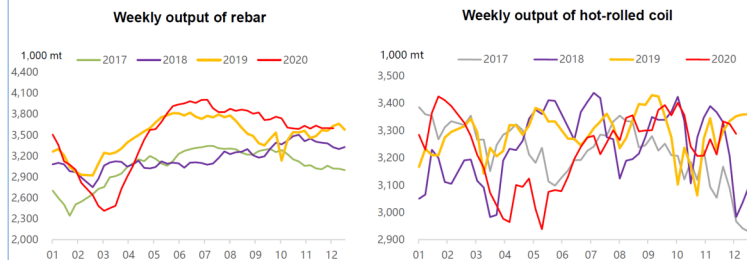
Hot-rolled coil profits



CHINESE STEEL INVENTORIES



CHINESE STEEL PRODUCTION



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					
December 16th, 2020	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%	2.41%	4.32%	0.057%	9.48%	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%	9.55%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	9.50%
Newman Fines	62.45%	2.32%	4.06%	0.090%	7.83%	Newman Fines	62.30%	2.40%	4.40%	0.090%	8.00%
MAC Fines	60.46%	2.39%	4.62%	0.079%	7.67%	MAC Fines	60.80%	2.35%	4.70%	0.080%	7.80%
Jimblebar Blended Fines	60.88%	2.98%	4.50%	0.112%	7.44%	Jimblebar Blended Fines	60.50%	3.00%	4.50%	0.120%	8.00%
Carajas Fines	64.92%	1.31%	1.83%	0.074%	7.86%	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	62.77%	1.38%	4.79%	0.086%	8.19%	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%

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: jarek@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.