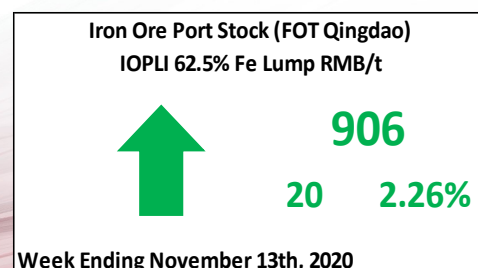
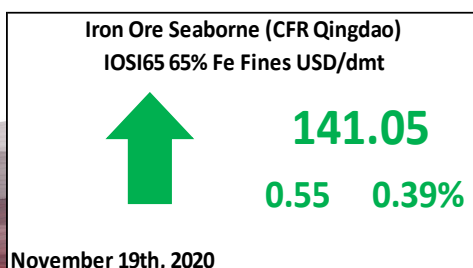
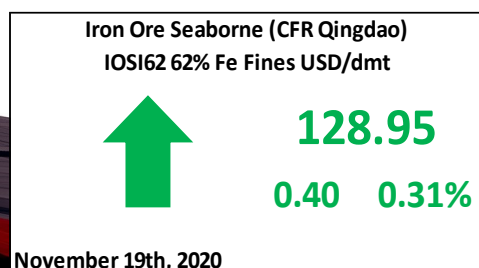
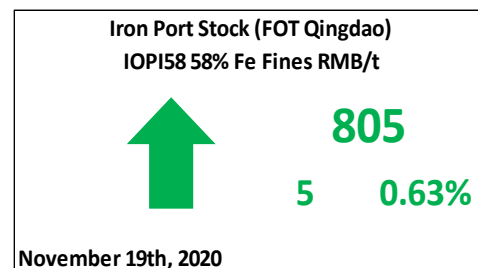
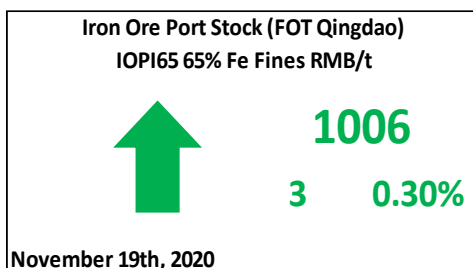
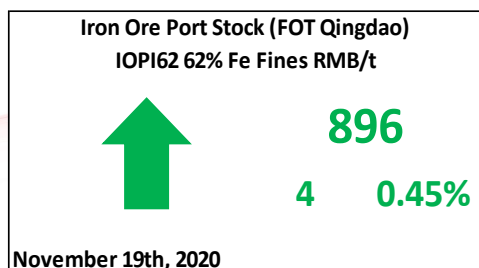


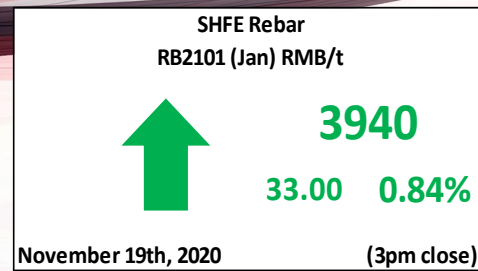
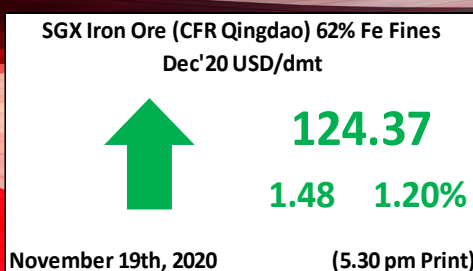
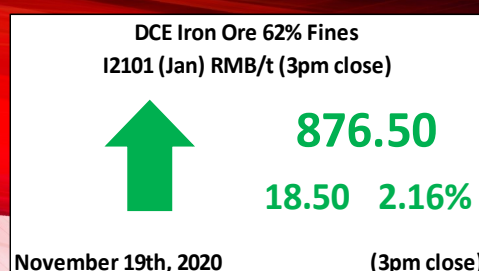


MMi Dashboard

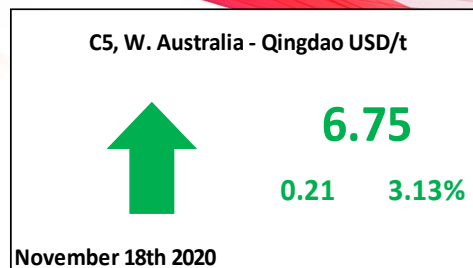
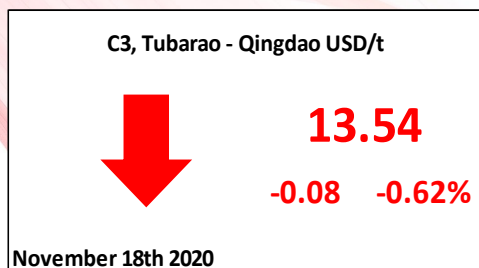
Iron Ore Price Indices



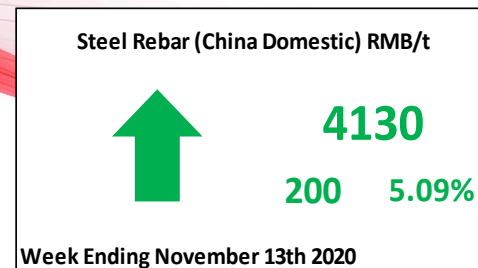
Exchange Traded Contracts



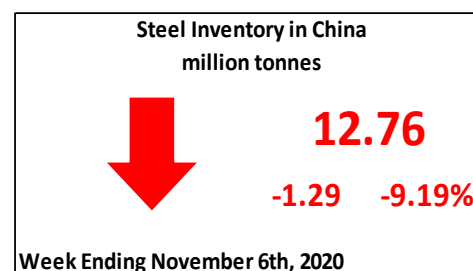
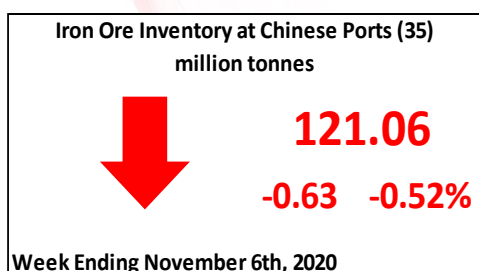
Freight Rates



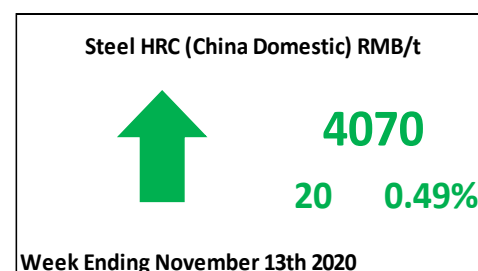
Steel Price



Inventory Levels



Steel Price



IRON ORE PORT STOCK INDEX (IOPI)

November 19th, 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	896	4	0.4%	882	793	619	983	127.50	0.80	0.6%	123.96	106.19	81.37	133.69
IOPI58	58% Fe Fines	805	5	0.6%	793	706	531	892	115.39	0.93	0.8%	112.37	95.14	70.02	122.73
IOPI65	65% Fe Fines	1006	3	0.3%	981	899	719	1031	143.66	0.68	0.5%	138.44	120.77	94.91	143.73

IRON ORE SEABORNE INDEX (IOSI)

MARKET COMMENTARY

November 19th, 2020		CFR Qingdao, USD/dry tonne						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²
IOSI62	62% Fe Fines	128.95	0.40	0.31%	124.12	104.61	80.65	132.25
IOSI65	65% Fe Fines	141.05	0.55	0.39%	135.64	118.42	97.05	144.85

DCE iron ore futures hit a 2020 high today main contract I2101 reaching 886rmb. The physical iron ore port stock prices rose 5-15yuan/mt during the morning trading session. PBF traded at 890yuan/mt in Shandong and Tangshan markets. According to SMM the total operating rate for blast furnaces this week reached 88.4%. Mill demands for iron ore are likely maintain the current high levels. However, according to some mills, steel product sales have slowed down.

IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending November 13th, 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	906	20	2.3%	896	880	785	969	122.40	3.98	3.36%	120.41	112.76	97.08	127.14

IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending November 13th 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	982	0.7%	763	1071	148.51	1.74%	109.21	157.74
Hebei	Qian'an	65% Fe Concentrate	Dry	975	1.6%	780	1040	147.45	2.59%	110.51	152.35
Liaoning	Anshan	65% Fe Concentrate	Wet	785	0.0%	620	805	118.72	1.01%	87.40	119.58
Shandong	Zibo	65% Fe Concentrate	Dry	1035	0.0%	795	1115	156.53	1.01%	113.34	163.06

Week Ending November 13th 2020

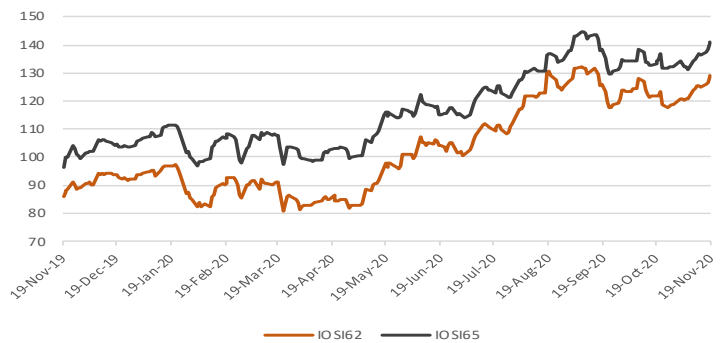
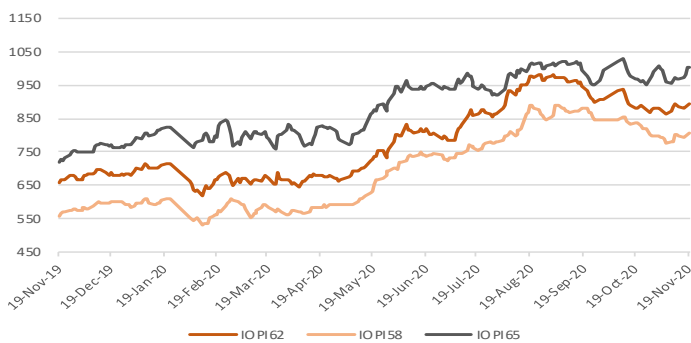
This week	Change %	Low ²	High ²
875.76	0.29%	702.47	924.68

China Mines Concentrate Composite Index RMB/WT

¹ Exchange rate applied: RMB/USD = 6.5484 ² Last 12 months
³ Weekly exchange rate applied: RMB/USD 6.6122

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

November 19th, 2020		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	844	948	946	892	882	887	793	105.69	127.65	129.64	123.88	123.96	123.20	106.19
IOPI58	58% Fe Fines	758	838	870	828	793	812	706	96.40	113.63	120.14	115.94	112.37	112.37	95.14
IOPI65	65% Fe Fines	948	992	998	982	981	982	899	124.25	133.70	136.85	136.68	138.44	133.82	120.77

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

FREIGHT RATES

November 19th, 2020		CFR Qingdao, USD/dry tonne							November 18th 2020						
Index	Fe Content	July	August	September	October	MTD	QTD	YTD	Route	Designation	Change	Change %	Low ²	High ²	
IOSI62	62% Fe Fines	108.23	124.02	126.26	122.16	124.12	122.92	104.61	W. Australia - Qingdao	C5	6.75	0.21	3.13%	3.57	10.80
IOSI65	65% Fe Fines	121.21	132.95	138.39	133.94	135.64	134.60	118.42	Tubarao - Qingdao	C3	13.54	-0.08	-0.62%	6.70	22.78

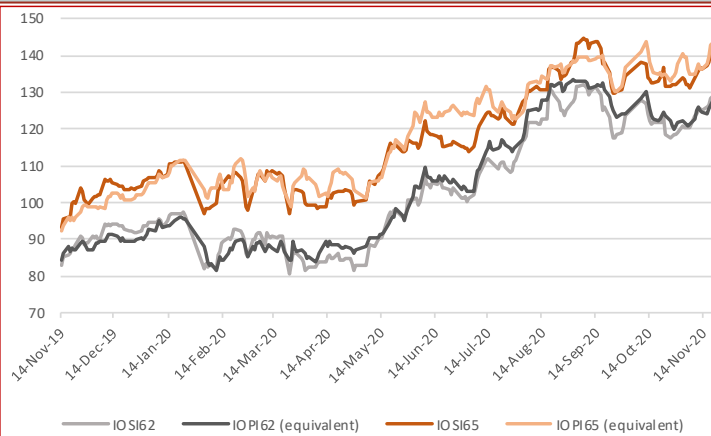
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending November 13th, 2020		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	875	932	959	919	896	911	880	111.35	120.08	125.87	121.91	120.41	119.43	112.76

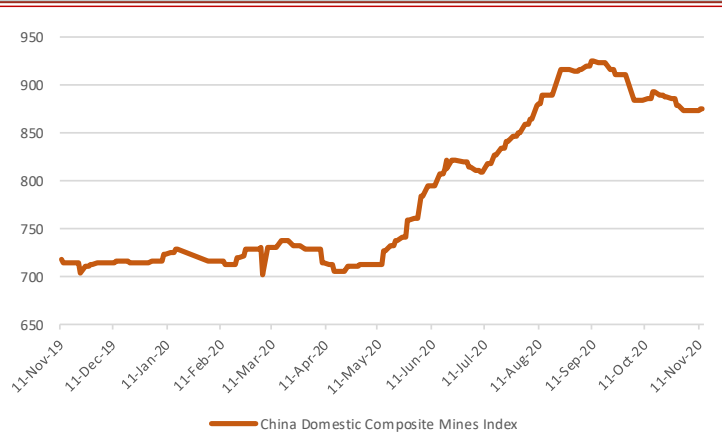
IRON ORE INDEX PREMIUMS/DISCOUNTS

November 19th, 2020				November 19th, 2020			
PORT STOCK INDEX (RMB/WT)		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	-91	-10.16%	IOSI65	65% Fe Fines	12.10	9.38%
IOPI65	65% Fe Fines	110	12.28%				

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

November 19th, 2020				November 19th, 2020			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	872	4	-24	Roy Hill	120.54	0.39	-8.41
SIMEC Fines	872	4	-24	SIMEC Fines	111.09	0.39	-17.86
PB Fines	879	4	-17	PB Fines	125.81	0.31	-3.14
Newman Fines	899	5	3	Newman Fines	126.86	0.36	-2.09
MAC Fines	880	4	-16	MAC Fines	121.67	0.37	-7.28
Jimblebar Blended Fines	864	4	-32	Jimblebar Blended Fines	119.14	0.22	-9.81
Carajas Fines	1006	4	110	Carajas Fines	140.55	0.40	11.60
Brazilian SSF	914	4	18	Brazilian SSF	118.32	0.40	-10.63
Brazilian Blend Fines	927	4	31	Brazilian Blend Fines	127.82	0.40	-1.13
RTX Fines	882	4	-14	RTX Fines	119.59	0.19	-9.36
West Pilbara Fines	871	4	-25	West Pilbara Fines	120.14	0.39	-8.81

November 19th, 2020			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	764	5	-41
FMG Blended Fines	803	5	-2
Robe River	776	5	-29
Western Fines	778	5	-27
Atlas Fines	810	5	5
Yandi	832	5	27

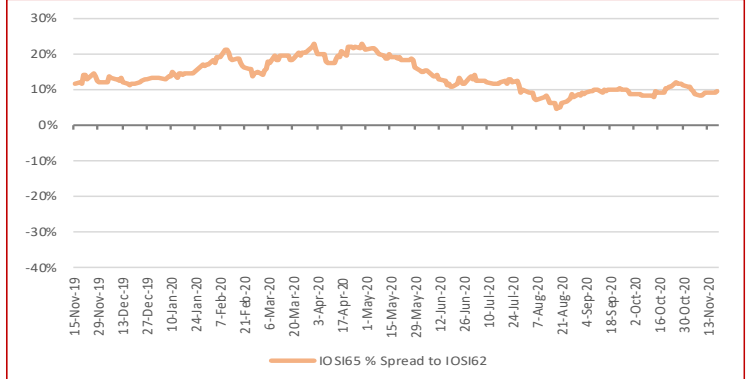
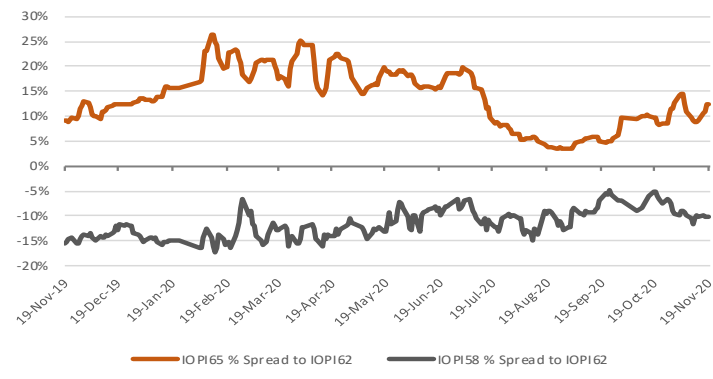
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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	0.00	1% Fe	High Grade Fe 60 - 63%	2.50	0.00
	High Grade Fe 63 - 64%	23.00	0.00		High Grade Fe 63 - 64%	1.25	0.00
	High Grade Fe 64 - 65%	23.00	0.00		High Grade Fe 64 - 65%	1.25	0.00
	High Grade Fe 65 - 65.5%	23.00	0.00		High Grade Fe 65 - 65.5%	1.25	0.00
	Low Grade Fe	1.00	0.00				
1% Alumina	High Fe Grade Al <2.25%	25.00	0.00	1% Alumina	High Fe Grade Al <2.25%	2.50	0.00
	High Fe Grade Al 2.25-4%	2.00	0.00		High Fe Grade Al 2.25-4%	4.25	0.25
	Low Fe Grade Al <2.25%	62.00	0.00				
	Low Fe Grade Al 2.25-4%	32.00	0.00				
1% Silica	High Fe Grade Si <4%	15.00	0.00	1% Silica	High Fe Grade Si <4%	2.00	0.00
	High Fe Grade Si 4-6.5%	13.00	0.00		High Fe Grade Si 4 - 6.5%	5.50	0.00
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	1.00	0.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.00	0.00
	High Fe Grade 0.115%<P<0.15%	1.00	0.00		High Fe Grade 0.115%<P<0.15%	0.25	0.00
	Low Fe Grade 0.09<P<0.1%	5.00	0.00				

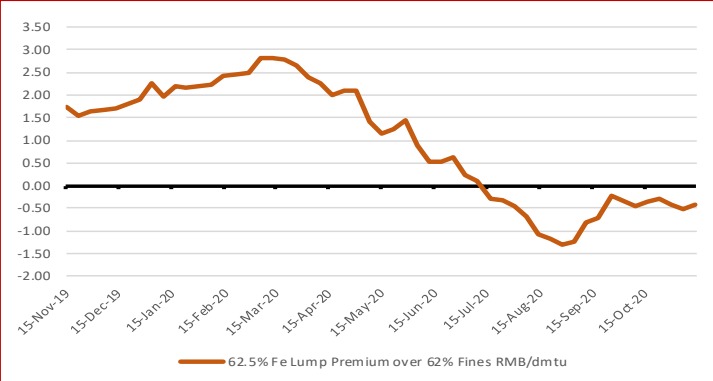
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-50.00	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	0.00	5.00	Jingtang	0.00	5.00	Majishan	0.00	0.00	Taichang	-30.00	0.00
Dalian	-50.00	0.00	Lanqiao	0.00	0.00	Qingdao	0.00	0.00	Tianjin	-10.00	0.00

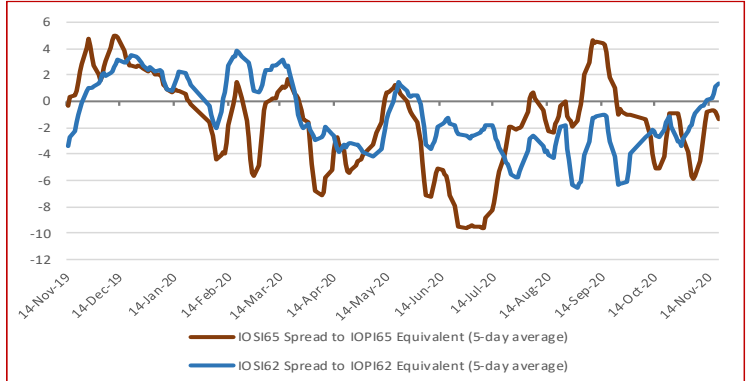
IRON ORE INDEX PREMIUMS/DISCOUNTS



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



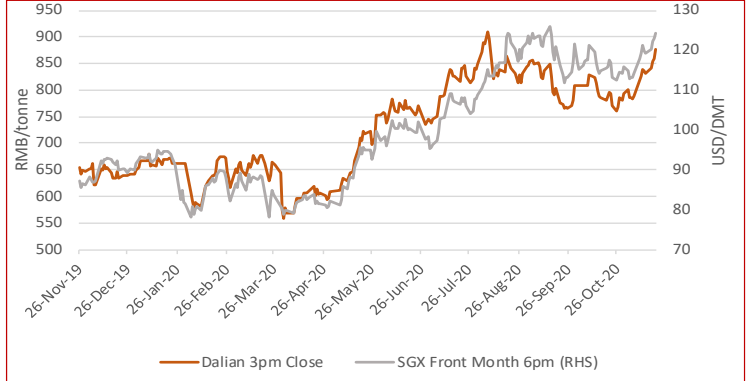
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



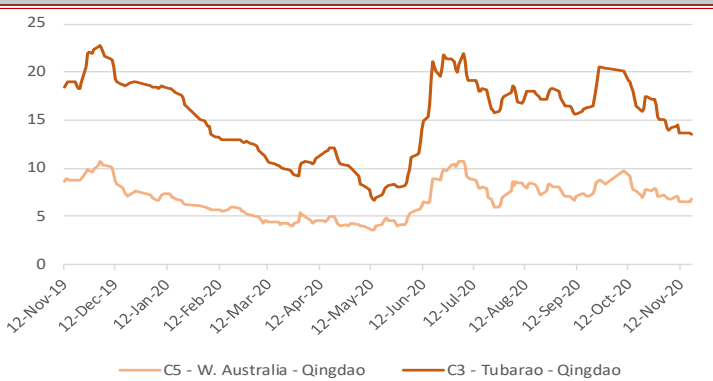
IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending November 13th, 2020				
Province	This week	Change %	Low ²	High ²
Jingtang	14.24	-2.80%	12.26	16.08
Qingdao	15.17	2.15%	9.41	15.17
Caofeidian	15.28	-5.97%	12.46	16.44
Tianjin	9.73	2.64%	7.04	9.73
Rizhao	14.22	1.14%	9.44	14.22
Total (35 Ports)	121.06	-0.52%	98.80	121.69

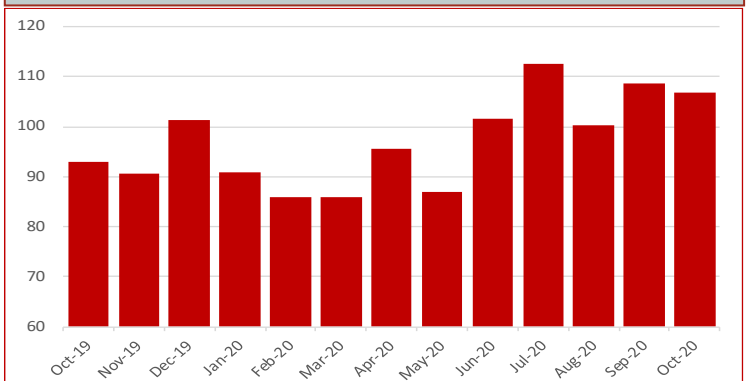
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Nov 19th, 3.00 pm close			Nov 19th, 5.30 pm		
Contract	I2101	Change	Change %	Dec '20	Change	Change %
Closing Price	876.50	18.5	2.16%	124.37	1.48	1.20%
Vol traded ('000 lots)	79.88	24.75	44.90%	19.42	5.61	40.61%
Open positions ('000 lots)	62.06	-0.78	-1.24%	176.51	0.25	0.14%
Day Low	860.0	10.0	1.18%	123.42	1.77	1.45%
Day High	886.0	24.5	2.84%	124.64	1.24	1.00%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)

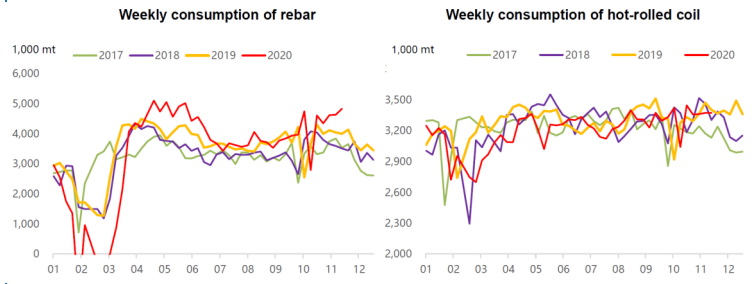


STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne

Product	13/11//2020	Change	Change %
ReBar HRB400 φ18mm	4,130.0	200	5.09%
Wirerod Q300 φ6.5mm	4,650.0	230	5.20%
HRC Q235/SS400 5.5mm*1500*C	4,070.0	20	0.49%
CRC SPCC/ST12 1.0mm*1250*2500	5,090.0	120	2.41%
Medium & Heavy Plate Q235B 20mm	4,020.0	50	1.26%
GI ST02Z 1.0mm*1000*C	5,280.0	-130	-2.40%
Colour Coated Plate	7,700.0	50	0.65%

CHINESE STEEL CONSUMPTION



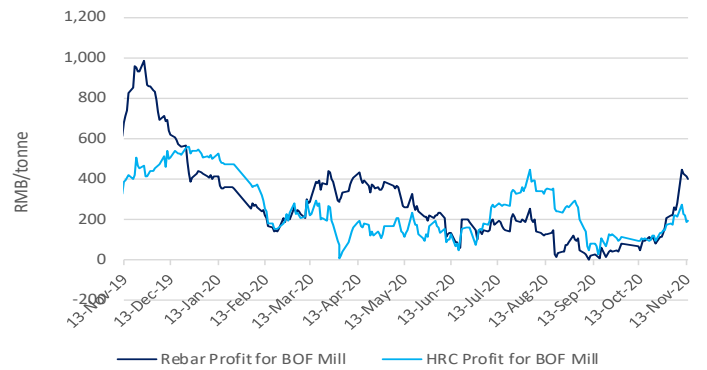
CHINESE STEEL MILL PROFITABILITY

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	125.60	4.95	Mmi CFR Equivalent index for 1st Feb
Coke	2,160	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,530	0	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,559	45	Q234, incl. tax
Rebar cost - Blast furnace	3,784	45	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	397	119	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,875	45	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	195	-15	based on Shanghai prices, incl. tax

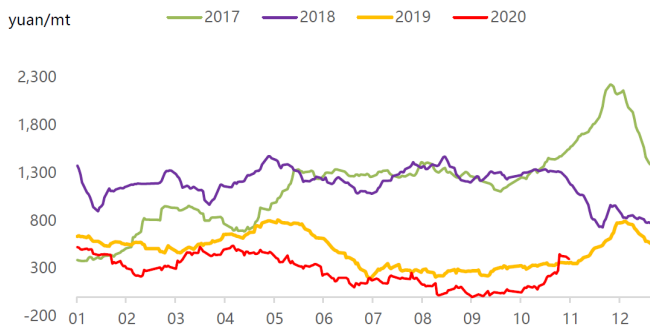
Note: 1. Costs in the table are calculated based on today's market prices and factored our management, sales, financial and depreciations fees.
2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

CHINESE STEEL MILL PROFITABILITY

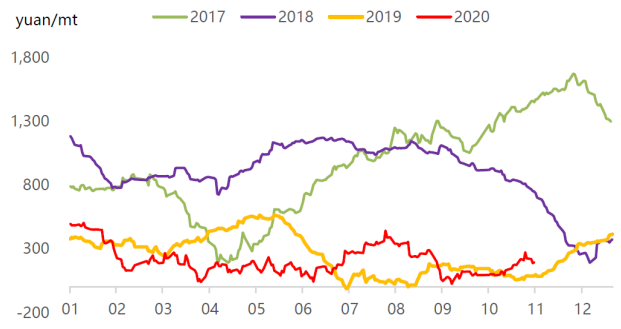


CHINESE STEEL MILL PROFITABILITY

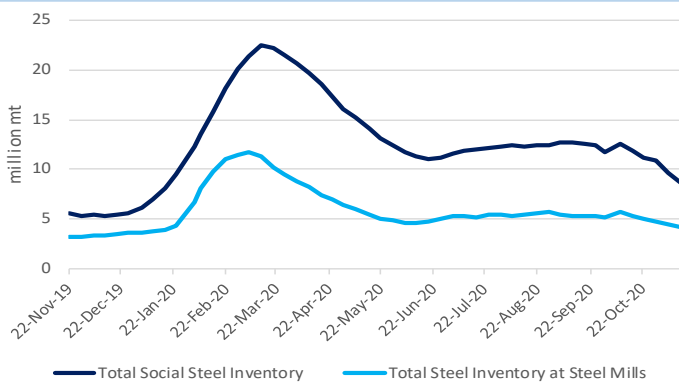
Rebar profits



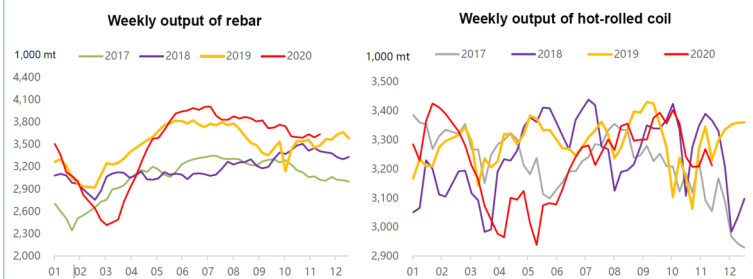
Hot-rolled coil profits



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	
Fe %	65.00	62.00	58.00	62.50	MMi iron ore indices are compiled from data provided by companies that are part of the iron ore supply chain and involved in spot market transactions. The indices are calculated using detailed transaction-level data submitted to MMi by these companies. This data is normalised to the appropriate specifications and screened to remove outliers before volume-weighted average prices are calculated from the remaining core set of data. For more details on MMi's iron ore methodology please download the guide published on our website at: www.mmiprices.com
Alumina %	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*			
	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						SEABORNE BRANDS					
November 19th, 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	60.95%	2.40%	4.36%	0.056%	9.34%	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	61.65%	2.31%	3.90%	0.100%	9.57%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	9.50%
Newman Fines	62.37%	2.34%	4.07%	0.092%	7.84%	Newman Fines	62.30%	2.40%	4.40%	0.090%	8.00%
MAC Fines	60.49%	2.39%	4.56%	0.079%	7.90%	MAC Fines	60.80%	2.35%	4.70%	0.080%	7.80%
Jimblebar Blended Fines	60.88%	2.98%	4.47%	0.113%	7.48%	Jimblebar Blended Fines	60.50%	3.00%	4.50%	0.120%	8.00%
Carajas Fines	65.04%	1.21%	1.85%	0.066%	8.12%	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	63.19%	1.17%	4.78%	0.082%	7.65%	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%
November 19th, 2020	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%	3.16%	6.26%	0.062%	9.37%						
FMG Blended Fines	58.21%	2.50%	5.64%	0.055%	8.23%						
Robe River	56.44%	3.18%	5.74%	0.041%	8.41%						
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	57.00%	1.59%	6.40%	0.041%	9.40%						

BLOOMBERG TICKERS

PORT STOCK INDICES				SEABORNE INDICES		
	FOT Qingdao (RMB/wet tonne)		CFR Qingdao Equivalent (USD/dry tonne)			
IOPI62	IRCNQ001		IRCNQ004		IOSI62	IRCN0034
IOPI58	IRCNQ002		IRCNQ005		IOSI65	IRCN0035
IOPI65	IRCNQ003		IRCNQ006			
IOPLI62	IRCN0036		IRCN0037			

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