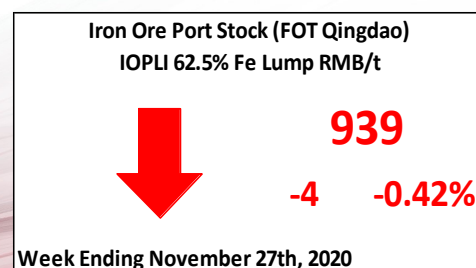
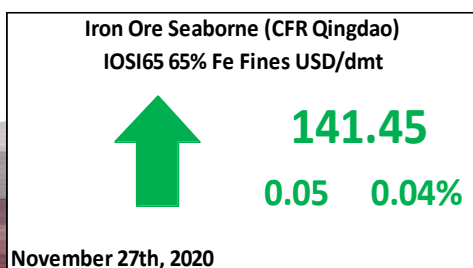
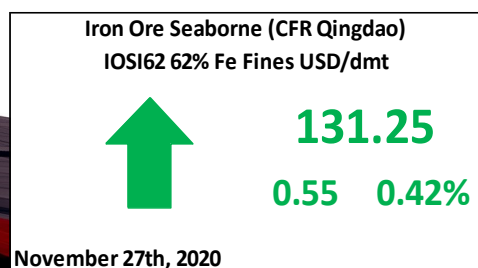
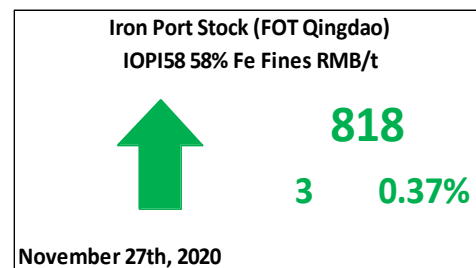
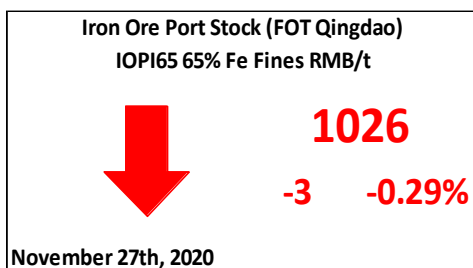
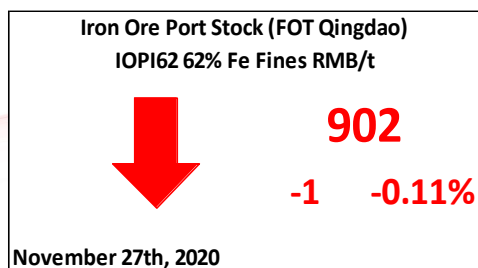


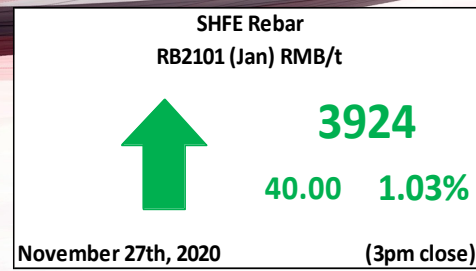
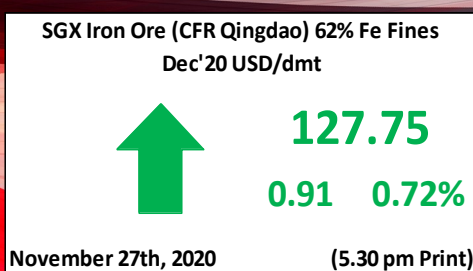
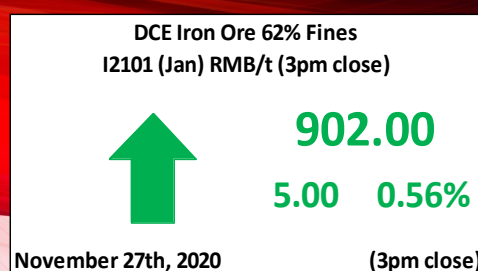


# MMi Dashboard

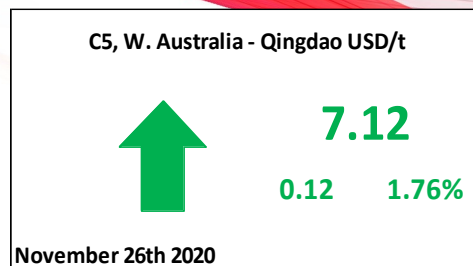
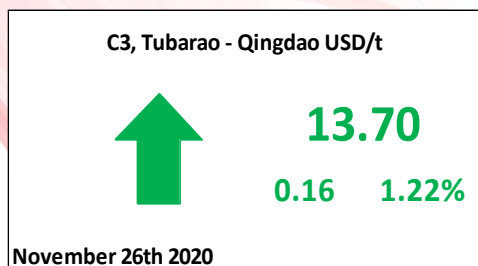
## Iron Ore Price Indices



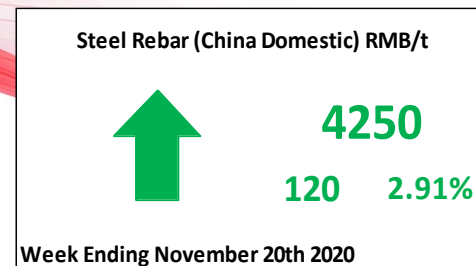
## Exchange Traded Contracts



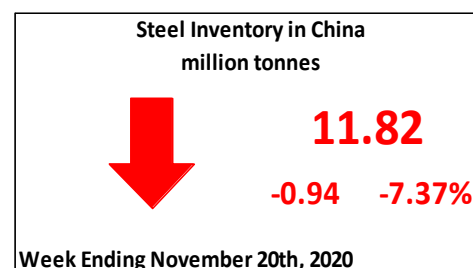
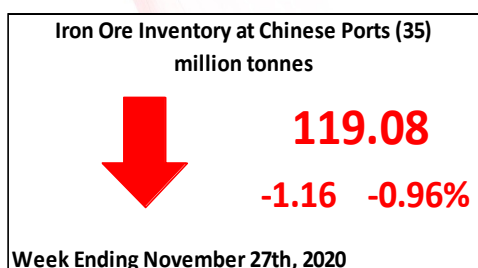
## Freight Rates



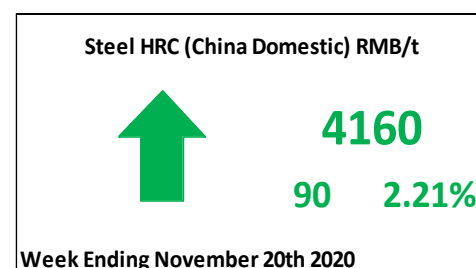
## Steel Price



## Inventory Levels



## Steel Price



## IRON ORE PORT STOCK INDEX (IOPI)

November 27th, 2020		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>
IOPI62	62% Fe Fines	902	-1	-0.1%	887	796	619	983	127.85	-0.10	-0.1%	125.04	106.77	81.37	133.69
IOPI58	58% Fe Fines	818	3	0.4%	798	709	531	892	116.84	0.49	0.4%	113.26	95.70	70.02	122.73
IOPI65	65% Fe Fines	1026	-3	-0.3%	995	902	730	1031	145.99	-0.39	-0.3%	140.67	121.46	96.05	143.73

## IRON ORE SEABORNE INDEX (IOSI)

## MARKET COMMENTARY

November 27th, 2020		CFR Qingdao, USD/dry tonne							As of November 27, iron ore inventories across 35 ports tracked by SMM totaled 119.08 million mt, a decrease of 1.16 million mt from the previous week and an increase of 4.92 million mt year-on-year. This marked three consecutive weeks of decline. Daily average deliveries from the 35 ports decreased 31,000 mt on a weekly basis to 2.93 million mt this week. Port stocks and daily average deliveries from ports both declined slightly in Shandong, where steel mills continued to restock as needed. Port arrivals and daily average deliveries from ports in Tangshan both decreased slightly, while port stocks did not increase. Steel mills in Tangshan slowed down purchases due to heavy pollution alert. Although end-user demand began to weaken due to rain and snow in parts of north China, demand for iron ore did not fall sharply as steel mills maintained high operating rates, which will prevent port stocks from increasing in the short term							
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>	
IOSI62	62% Fe Fines	131.25	0.55	0.42%	125.95	105.28	80.65	132.25								
IOSI65	65% Fe Fines	141.45	0.05	0.04%	137.42	119.02	97.05	144.85								

## IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending November 27th, 2020		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>3</sup>						
Index	Fe Content	Price	W-o-W	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>	Price	W-o-W	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>
IOPLI62	62.5% Fe Lump	939	-4	-0.4%	919	883	792	969	127.70	-0.61	-0.48%	124.21	113.43	97.81	128.31

## IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

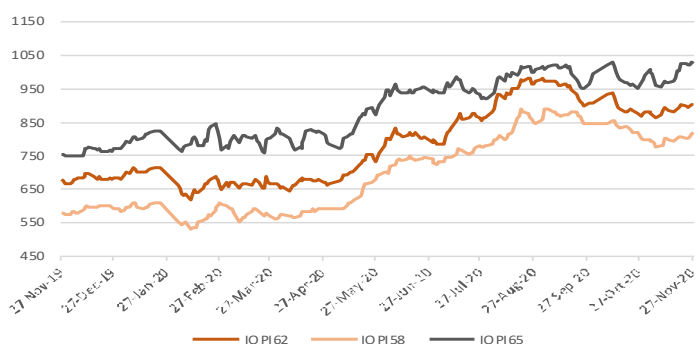
Week Ending November 20th 2020				RMB/tonne (excluding tax) <sup>3</sup>				USD/tonne (excluding tax) <sup>3</sup>			
Province	Region	Product	Basis	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Hebei	Hanxing	66% Fe Concentrate	Dry	1009	2.7%	763	1071	153.50	3.35%	109.21	157.74
Hebei	Qian'an	65% Fe Concentrate	Dry	985	1.0%	780	1040	149.84	1.62%	110.51	152.35
Liaoning	Anshan	65% Fe Concentrate	Wet	785	0.0%	620	805	119.42	0.59%	87.40	119.58
Shandong	Zibo	65% Fe Concentrate	Dry	1050	1.4%	795	1115	159.73	2.05%	113.34	163.06

Week Ending November 20th 2020

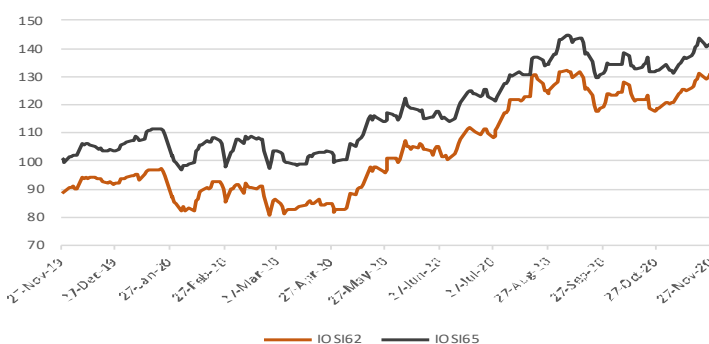
This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	
China Mines Concentrate Composite Index RMB/WT	880.89	0.59%	702.47	924.68

<sup>1</sup> Exchange rate applied: RMB/USD = 6.5755    <sup>2</sup> Last 12 months  
<sup>3</sup> Weekly exchange rate applied: RMB/USD 6.562

## 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 27th, 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	887	889	796	105.69	127.65	129.64	123.88	125.04	123.46	106.77
IOPI58	58% Fe Fines	758	838	870	828	798	811	709	96.40	113.63	120.14	115.94	113.26	112.54	95.70
IOPI65	65% Fe Fines	948	992	998	982	995	989	902	124.25	133.70	136.85	136.68	140.67	134.53	121.46

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

## FREIGHT RATES

November 27th, 2020		CFR Qingdao, USD/dry tonne							November 26th 2020							
Index	Fe Content	July	August	September	October	MTD	QTD	YTD	Route		Designation	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>	
IOSI62	62% Fe Fines	108.23	124.02	126.26	122.16	125.95	123.96	105.28	W. Australia - Qingdao		C5	7.12	0.12	1.76%	3.57	10.80
IOSI65	65% Fe Fines	121.21	132.95	138.39	133.94	137.42	135.59	119.02	Tubarao - Qingdao		C3	13.70	0.16	1.22%	6.70	22.78

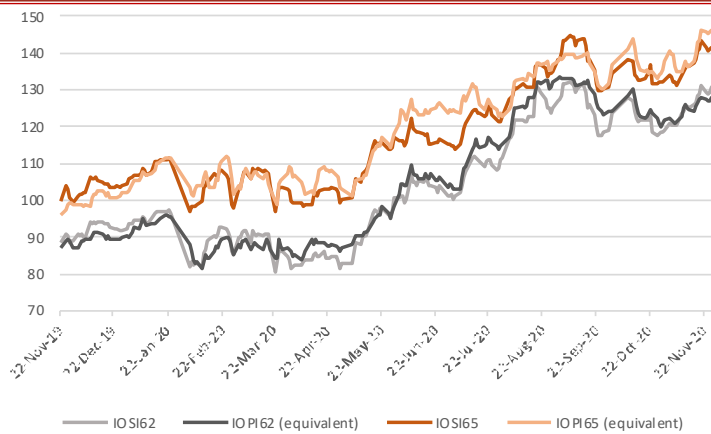
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending November 27th, 2020		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>1</sup>						
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	919	919	883	111.35	120.08	125.87	121.91	124.21	120.25	113.43

## IRON ORE INDEX PREMIUMS/DISCOUNTS

November 27th, 2020				PORT STOCK INDEX (RMB/WT)		November 27th, 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	-84	-9.31%	IOSI65	65% Fe Fines	10.20	7.77%		
IOPI65	65% Fe Fines	124	13.75%						

## IRON ORE INDEX COMPARISONS (USD/DMT)



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



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

November 27th, 2020				November 27th, 2020			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	869	-2	-33	Roy Hill	123.17	0.55	-8.08
SIMEC Fines	838	-7	-64	SIMEC Fines	113.90	0.55	-17.35
PB Fines	883	-1	-19	PB Fines	128.20	0.55	-3.05
Newman Fines	905	0	3	Newman Fines	129.12	0.55	-2.13
MAC Fines	873	-4	-29	MAC Fines	124.30	0.55	-6.95
Jimblebar Blended Fines	868	9	-34	Jimblebar Blended Fines	122.00	0.55	-9.25
Carajas Fines	1024	-4	122	Carajas Fines	140.94	0.37	9.69
Brazilian SSF	882	-11	-20	Brazilian SSF	119.69	0.24	-11.56
Brazilian Blend Fines	907	-5	5	Brazilian Blend Fines	129.31	0.36	-1.94
RTX Fines	874	-2	-28	RTX Fines	122.35	0.55	-8.90
West Pilbara Fines	859	-5	-43	West Pilbara Fines	122.92	0.55	-8.33

November 27th, 2020			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	764	6	-54
FMG Blended Fines	815	4	-3
Robe River	781	6	-37
Western Fines	769	5	-49
Atlas Fines	818	2	0
Yandi	826	1	8

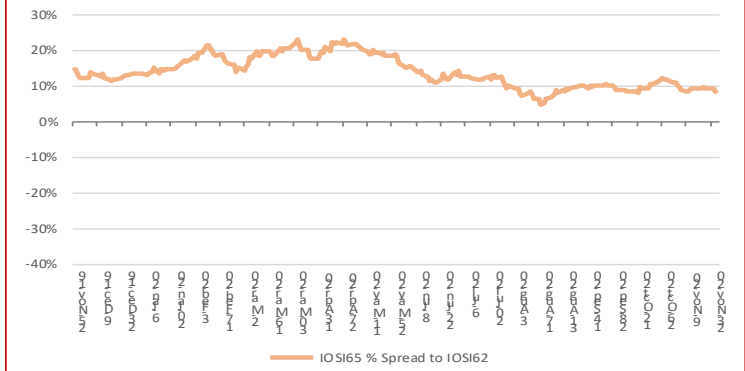
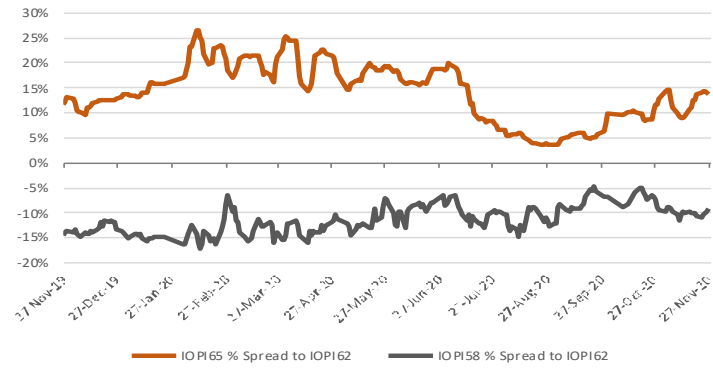
## IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	10.00	1.00	1% Fe	High Grade Fe 60 - 63%	2.25	0.00
	High Grade Fe 63 - 64%	27.00	0.00		High Grade Fe 63 - 64%	1.00	0.00
	High Grade Fe 64 - 65%	27.00	0.00		High Grade Fe 64 - 65%	1.00	0.00
	High Grade Fe 65 - 65.5%	27.00	0.00		High Grade Fe 65 - 65.5%	1.00	0.00
	Low Grade Fe	3.00	0.00				
1% Alumina	High Fe Grade Al <2.25%	23.00	-4.00	1% Alumina	High Fe Grade Al <2.25%	1.75	-0.25
	High Fe Grade Al 2.25-4%	0.00	-2.00		High Fe Grade Al 2.25-4%	4.00	0.00
	Low Fe Grade Al <2.25%	49.00	-3.00				
	Low Fe Grade Al 2.25-4%	35.00	-3.00				
1% Silica	High Fe Grade Si <4%	16.00	0.00	1% Silica	High Fe Grade Si <4%	2.00	0.00
	High Fe Grade Si 4-6.5%	27.00	2.00		High Fe Grade Si 4 - 6.5%	5.50	0.00
0.01% Phosphorus	Low Fe Grade	20.00	0.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.00	0.00
	High Fe Grade 0.09%<P<0.115%	2.00	0.00		High Fe Grade 0.115%<P<0.15%	0.25	0.00
	High Fe Grade 0.115%<P<0.15%	2.00	0.00		Low Fe Grade 0.09<P<0.1%	5.00	0.00

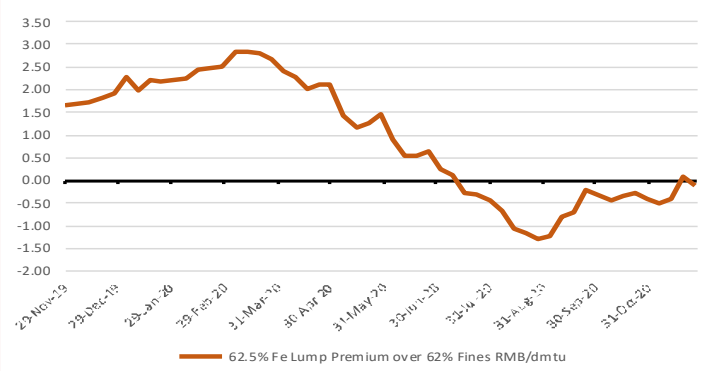
## Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-65.00	0.00	Fangcheng	-10.00	0.00	Lanshan	0.00	0.00	Rizhao	0.00	0.00
Beilun	-10.00	0.00	Jiangyin	-30.00	0.00	Lianyungang	0.00	0.00	Shekou	0.00	0.00
Caofeidian	0.00	0.00	Jingtang	0.00	0.00	Majishan	0.00	0.00	Taicang	-30.00	0.00
Dalian	-60.00	0.00	Lanqiao	0.00	0.00	Qingdao	0.00	0.00	Tianjin	-15.00	0.00

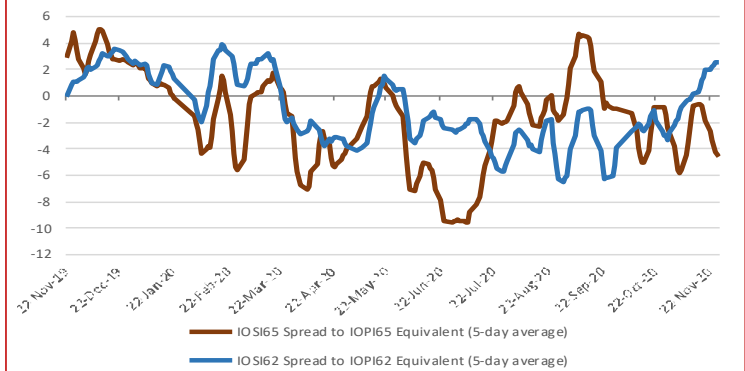
IRON ORE INDEX PREMIUMS/DISCOUNTS



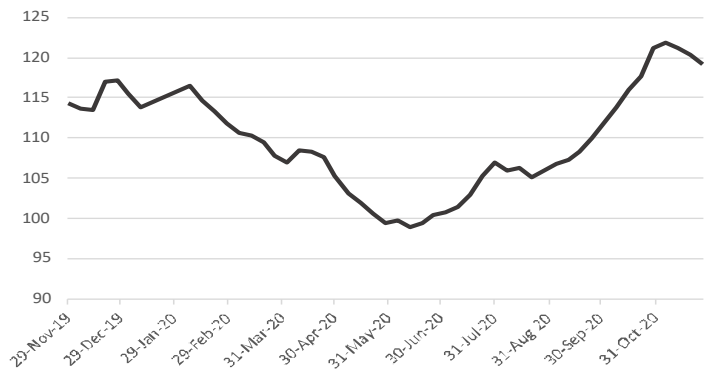
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



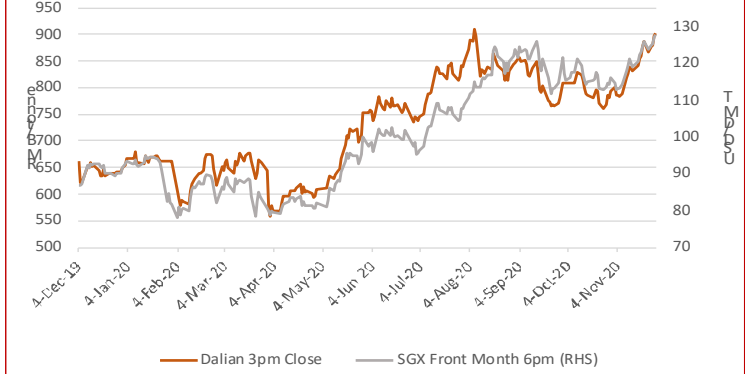
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



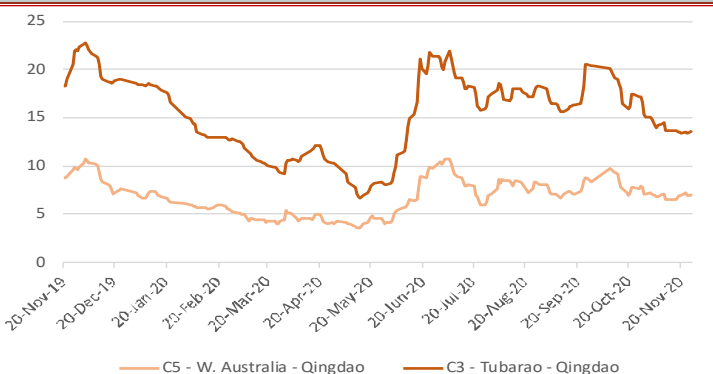
IRON ORE PORT INVENTORIES (MILLION TONNES)

Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	14.36	1.99%	12.26	16.08
Qingdao	15.30	0.33%	9.41	15.30
Caofeidian	14.86	-4.99%	12.46	16.44
Tianjin	10.03	2.98%	7.04	10.03
Rizhao	13.22	-1.93%	9.44	14.22
<b>Total (35 Ports)</b>	<b>119.08</b>	<b>-0.96%</b>	<b>98.80</b>	<b>121.69</b>

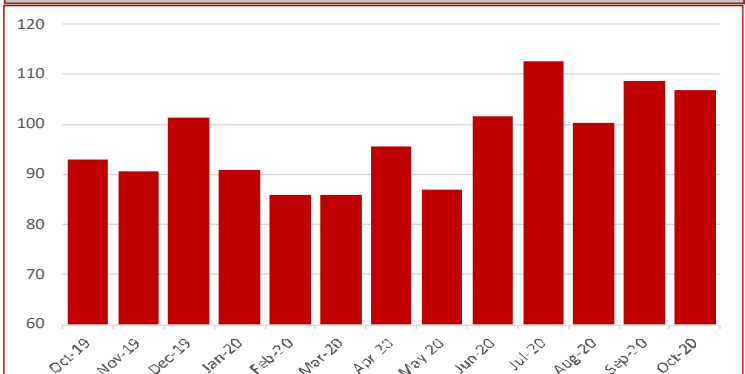
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Nov 27th, 3.00 pm close			Nov 27th, 5.30 pm		
Contract	I2101	Change	Change %	Dec '20	Change	Change %
Closing Price	902.00	5.0	0.56%	127.75	0.91	0.72%
Vol traded ('000 lots)	53.74	-3.92	-6.80%	16.33	5.57	51.68%
Open positions ('000 lots)	54.69	-2.06	-3.62%	185.48	4.31	2.38%
Day Low	892.5	14.0	1.59%	126.27	1.57	1.26%
Day High	908.5	10.0	1.11%	128.43	1.42	1.12%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)

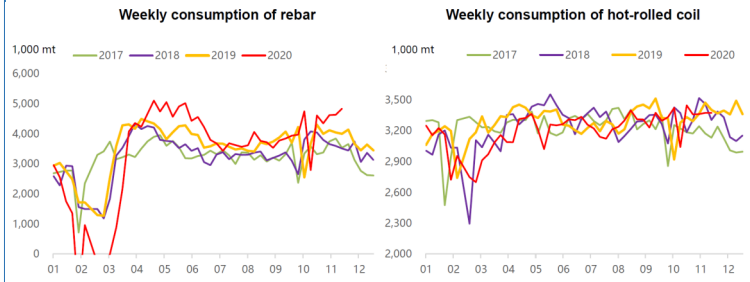


STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne

Product	20/11/2020	Change	Change %
ReBar HRB400 ?18mm	4,250.0	120	2.91%
Wirerod Q300 ?6.5mm	4,760.0	110	2.37%
HRC Q235/SS400 5.5mm*1500*C	4,160.0	90	2.21%
CRC SPCC/ST12 1.0mm*1250*2500	5,200.0	110	2.16%
Medium & Heavy Plate Q235B 20mm	4,040.0	20	0.50%
GI ST02Z 1.0mm*1000*C	5,380.0	100	1.89%
Colour Coated Plate	7,700.0	0	0.00%

CHINESE STEEL CONSUMPTION



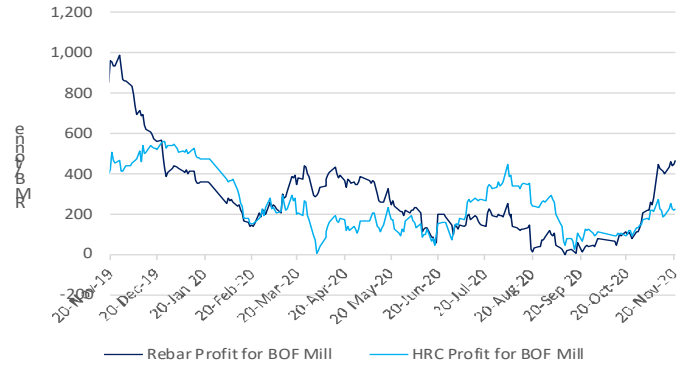
CHINESE STEEL MILL PROFITABILITY

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	128.95	3.35	MMi CFR Equivalent index for 1st Feb
Coke	2,210	50	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,510	-20	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,616	57	Q234, incl. tax
Rebar cost - Blast furnace	3,841	57	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	464	67	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,932	57	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	228	33	based on Shanghai prices, incl. tax

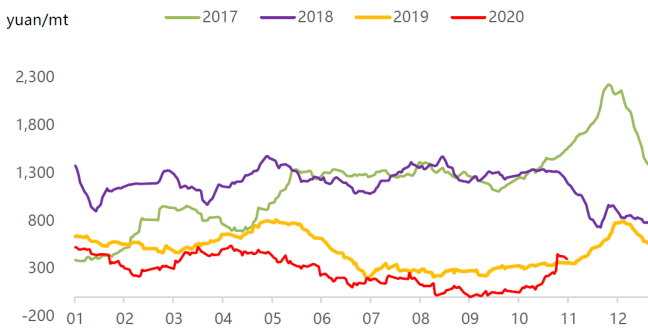
Note: 1.Costs in the table are calculated based on today's market prices and facout our management, sales, financial and depreciations fees.  
2.The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

CHINESE STEEL MILL PROFITABILITY

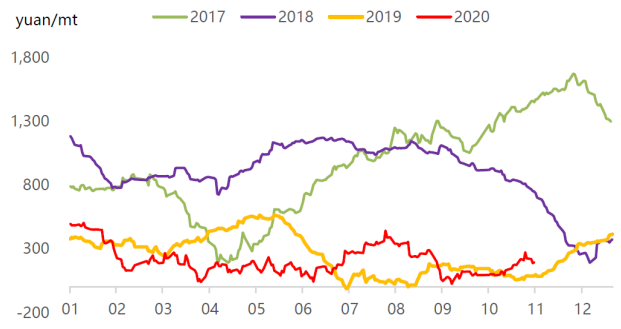


CHINESE STEEL MILL PROFITABILITY

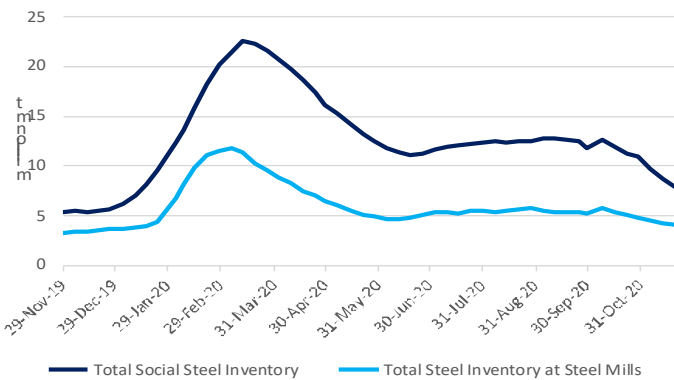
Rebar profits



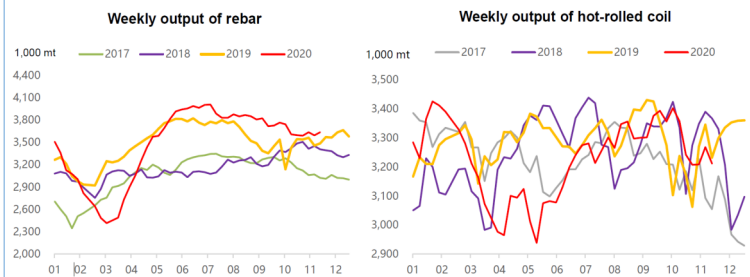
Hot-rolled coil profits



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
	<b>65% Fe Fines</b>	<b>62% Fe Fines</b>	<b>58% Fe Fines</b>	<b>62.5% Fe Lump</b>	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: <a href="http://www.mmiprices.com">www.mmiprices.com</a>
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					
November 27th, 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	60.94%	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	61.64%	2.32%	3.90%	0.100%	9.59%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	9.50%
Newman Fines	62.40%	2.34%	4.07%	0.092%	7.81%	Newman Fines	62.30%	2.40%	4.40%	0.090%	8.00%
MAC Fines	60.49%	2.39%	4.58%	0.079%	7.78%	MAC Fines	60.80%	2.35%	4.70%	0.080%	7.80%
Jimblebar Blended Fines	60.85%	2.98%	4.49%	0.112%	7.47%	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	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](mailto:jarek@mmiprices.com)  
 SMM Singapore Office Details: Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7630 E: [service.en@smm.cn](mailto: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](mailto:service.en@smm.cn)

Visit [www.mmiprices.com](http://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.