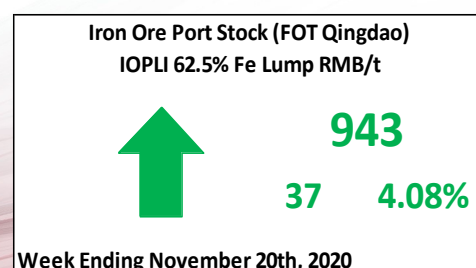
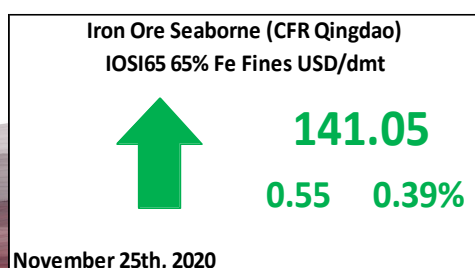
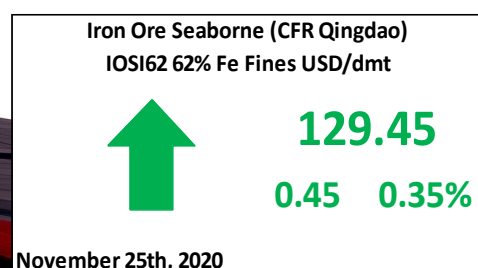
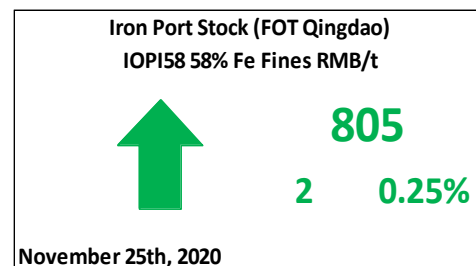
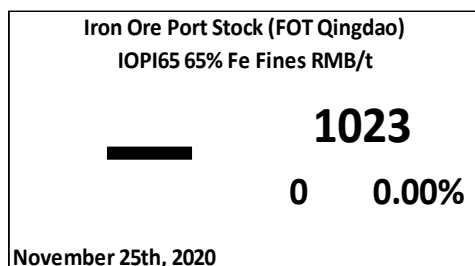
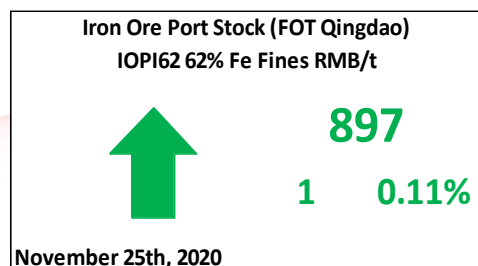


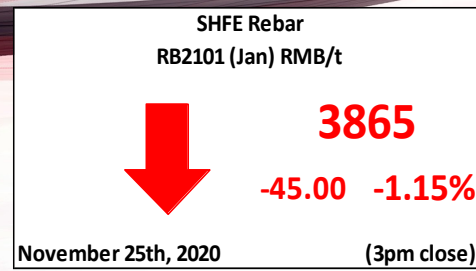
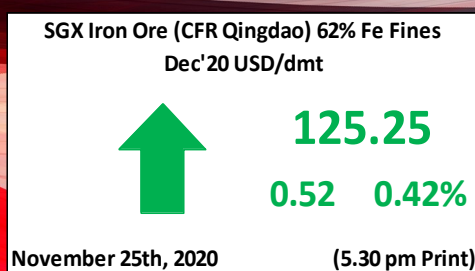
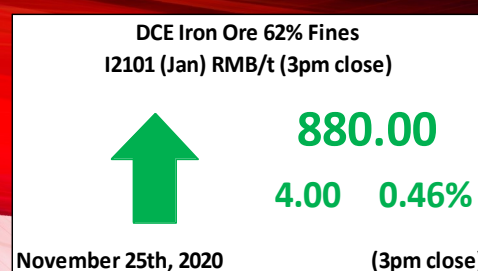


## MMi Dashboard

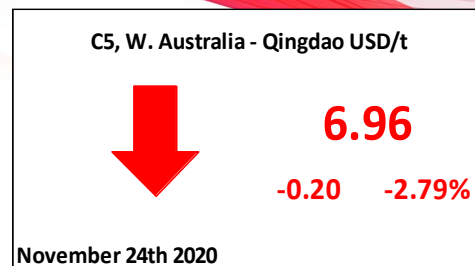
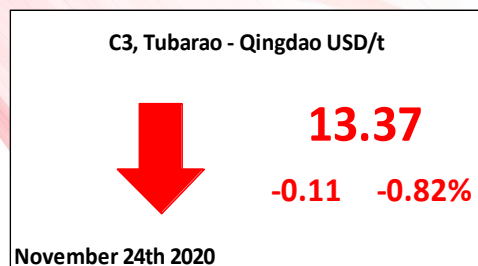
## Iron Ore Price Indices



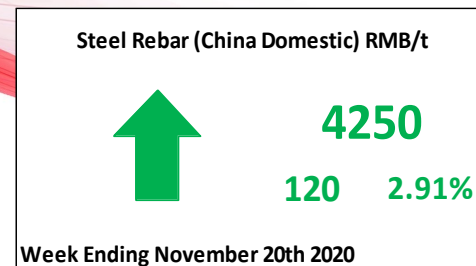
## Exchange Traded Contracts



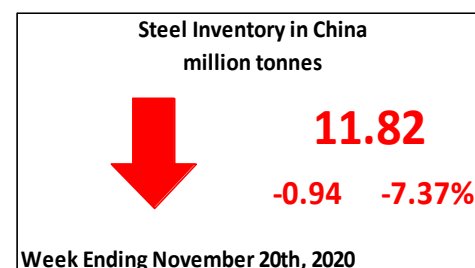
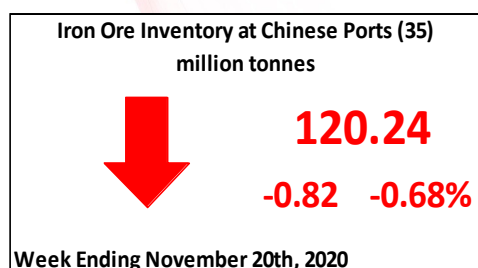
## Freight Rates



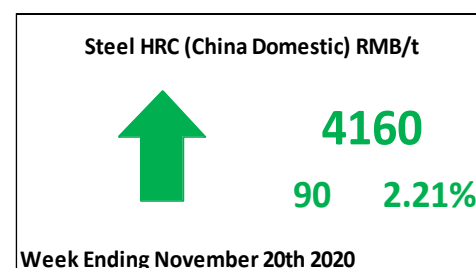
## Steel Price



## Inventory Levels



## Steel Price



## IRON ORE PORT STOCK INDEX (IOPI)

November 25th, 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	897	1	0.1%	886	795	619	983	127.13	0.26	0.2%	124.72	106.58	81.37	133.69
IOPI58	58% Fe Fines	805	2	0.2%	796	708	531	892	114.92	0.40	0.3%	112.89	95.50	70.02	122.73
IOPI65	65% Fe Fines	1023	0	0.0%	991	901	730	1031	145.57	0.13	0.1%	140.06	121.23	96.05	143.73

## IRON ORE SEABORNE INDEX (IOSI)

## MARKET COMMENTARY

November 25th, 2020		CFR Qingdao, USD/dry tonne							Despite some stronger activity in futures and swaps markets, domestic Chinese mills remain cautious due to falling finished steel prices. Some market players in Tangshan state that most steel mills bought only to satisfy near-term demand, as currently affected by rainy and snowy weather. Downstream demand has fallen sharply. It is expected that pig iron production will continue to fall, which may restrain iron ore prices. According to SMM, rebar profit margins hover around 400yuan/mt, based on an iron ore price of 129USD/mt. PBF concluded at 875-885yuan/mt in Shandong. Considering decreasing domestic concentrate inventories and falling pellet supply, mill demand for mainstream medium and high grade products have recently picked up.						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>							
IOSI62	62% Fe Fines	129.45	0.45	0.35%	125.39	105.05	80.65	132.25							
IOSI65	65% Fe Fines	141.05	0.55	0.39%	136.97	118.82	97.05	144.85							

## IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending November 20th, 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	943	37	4.1%	912	881	792	969	128.31	5.91	4.83%	123.05	113.11	97.81	128.31

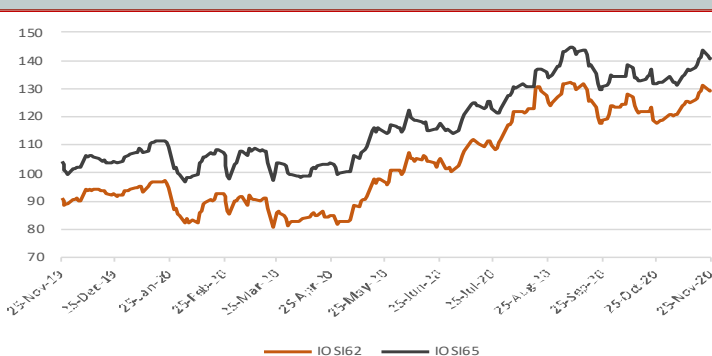
## IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

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>	<sup>1</sup> Exchange rate applied: RMB/USD = 6.5749 <sup>2</sup> Last 12 months <sup>3</sup> Weekly exchange rate applied: RMB/USD 6.5735			
China Mines Concentrate Composite Index RMB/WT				880.89	0.59%	702.47	924.68				

## 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 25th, 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	886	889	795	105.69	127.65	129.64	123.88	124.72	123.37	106.58
IOPI58	58% Fe Fines	758	838	870	828	796	811	708	96.40	113.63	120.14	115.94	112.89	112.46	95.50
IOPI65	65% Fe Fines	948	992	998	982	991	987	901	124.25	133.70	136.85	136.68	140.06	134.29	121.23

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

## FREIGHT RATES

November 25th, 2020		CFR Qingdao, USD/dry tonne							November 24th 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	125.39	123.61	105.05	W. Australia - Qingdao	C5	6.96	-0.20	-2.79%	3.57	10.80
IOSI65	65% Fe Fines	121.21	132.95	138.39	133.94	136.97	135.30	118.82	Tubarao - Qingdao	C3	13.37	-0.11	-0.82%	6.70	22.78

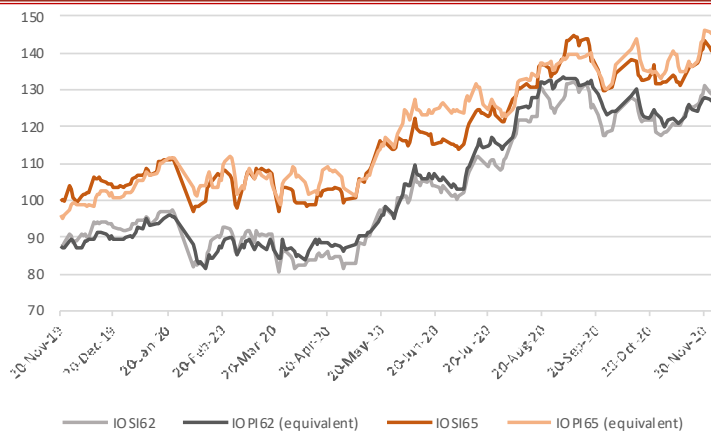
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending November 20th, 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	912	916	881	111.35	120.08	125.87	121.91	123.05	119.88	113.11

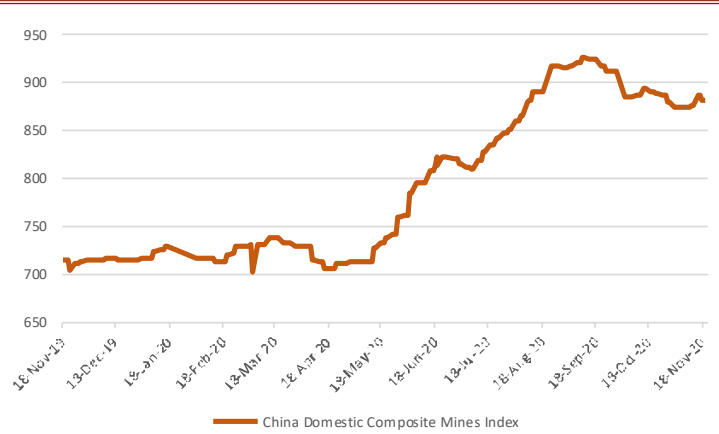
## IRON ORE INDEX PREMIUMS/DISCOUNTS

November 25th, 2020		PORT STOCK INDEX (RMB/WT)		November 25th, 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	-92	-10.26%	IOSI65	65% Fe Fines	11.60	8.96%
IOPI65	65% Fe Fines	126	14.05%				

## IRON ORE INDEX COMPARISONS (USD/DMT)



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



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

November 25th, 2020				November 25th, 2020			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	865	-2	-32	Roy Hill	121.36	0.45	-8.09
SIMEC Fines	839	-13	-58	SIMEC Fines	112.09	0.45	-17.36
PB Fines	878	1	-19	PB Fines	126.31	0.45	-3.14
Newman Fines	899	0	2	Newman Fines	127.29	0.45	-2.16
MAC Fines	871	-3	-26	MAC Fines	122.47	0.45	-6.98
Jimblebar Blended Fines	853	-1	-44	Jimblebar Blended Fines	120.01	0.45	-9.44
Carajas Fines	1022	-1	125	Carajas Fines	140.61	0.45	11.16
Brazilian SSF	887	-16	-10	Brazilian SSF	118.51	0.45	-10.94
Brazilian Blend Fines	906	-5	9	Brazilian Blend Fines	127.89	0.45	-1.56
RTX Fines	869	0	-28	RTX Fines	120.34	0.45	-9.11
West Pilbara Fines	858	-4	-39	West Pilbara Fines	121.11	0.45	-8.34

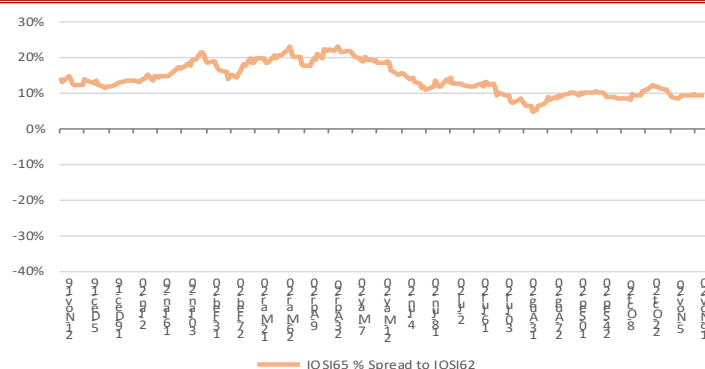
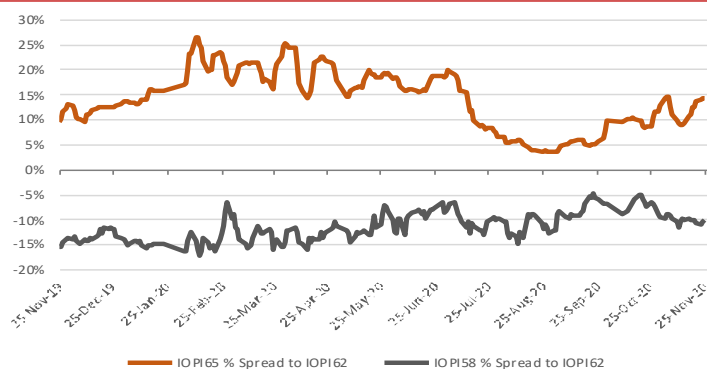
November 25th, 2020			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	748	-7	-57
FMG Blended Fines	801	1	-4
Robe River	765	-5	-40
Western Fines	754	-11	-51
Atlas Fines	806	1	1
Yandi	815	-5	10

## IRON ORE INDEX NORMALISATION DIFFERENTIALS

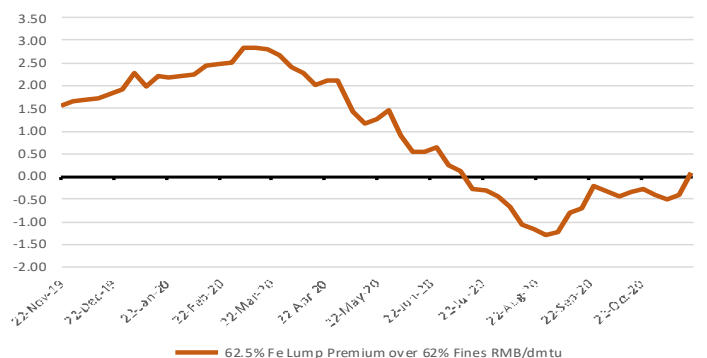
Port Stock Index Product Differentials (RMB/wet tonne)				Seaborne Index Product Differentials (USD/dry tonne)			
	Applicable range	Value	Change		Applicable range	Value	Change
1% Fe	High Grade Fe 60 - 63%	9.00	1.00	1% Fe	High Grade Fe 60 - 63%	2.25	0.00
	High Grade Fe 63 - 64%	27.00	0.00		High Grade Fe 63 - 64%	1.25	0.00
	High Grade Fe 64 - 65%	27.00	0.00		High Grade Fe 64 - 65%	1.25	0.00
	High Grade Fe 65 - 65.5%	27.00	0.00		High Grade Fe 65 - 65.5%	1.25	0.00
1% Alumina	Low Grade Fe	3.00	1.00	1% Alumina	High Fe Grade Al <2.25%	2.25	0.00
	High Fe Grade Al <2.25%	27.00	-3.00		High Fe Grade Al 2.25-4%	4.25	0.00
	High Fe Grade Al 2.25-4%	2.00	-3.00		High Fe Grade Si <4%	2.00	0.00
	Low Fe Grade Al <2.25%	52.00	-3.00		High Fe Grade Si 4 - 6.5%	5.50	0.00
1% Silica	Low Fe Grade Al 2.25-4%	38.00	4.00	1% Silica	High Fe Grade Si <4%	2.00	0.00
	High Fe Grade Si <4%	16.00	0.00		High Fe Grade Si 4 - 6.5%	5.50	0.00
	High Fe Grade Si 4-6.5%	25.00	5.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.00	0.00
0.01% Phosphorus	Low Fe Grade	20.00	5.00		High Fe Grade 0.115%<P<0.15%	0.25	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	Langqiao	0.00	0.00	Qingdao	0.00	0.00	Tianjin	-15.00	0.00

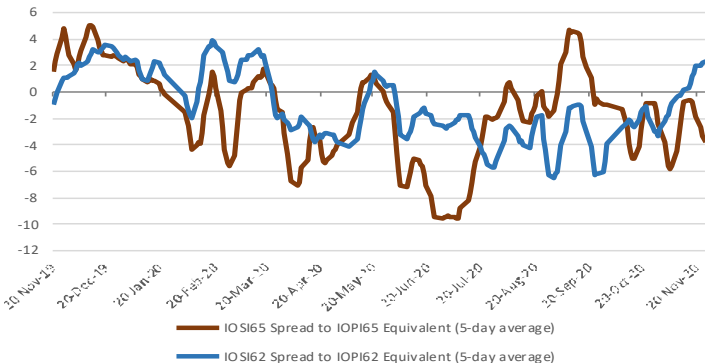
## IRON ORE INDEX PREMIUMS/DISCOUNTS



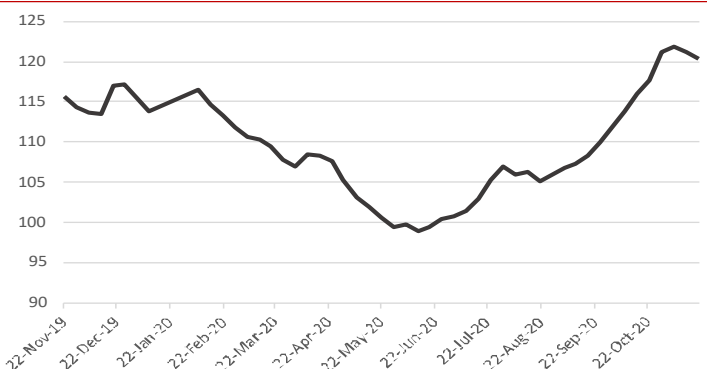
## WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



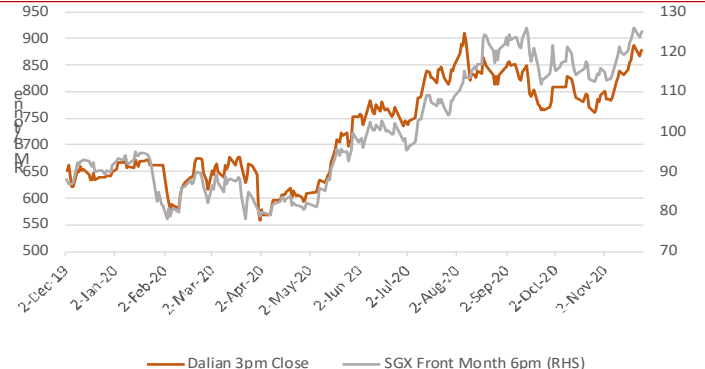
## IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



## TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



## FUTURE TRADING—FRONT MONTH CLOSING PRICE



## IRON ORE PORT INVENTORIES (MILLION TONNES)

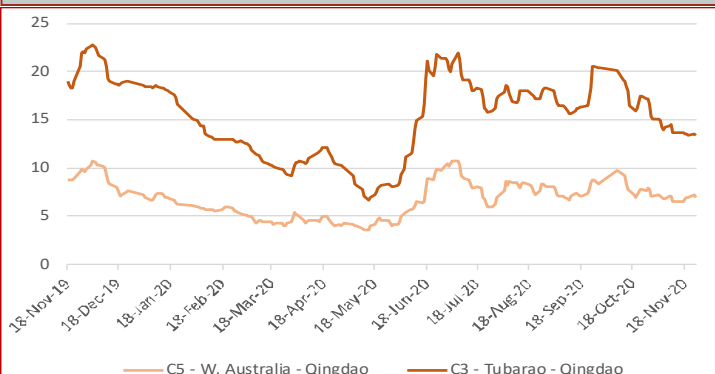
Week Ending November 20th, 2020

Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	14.08	-1.12%	12.26	16.08
Qingdao	15.25	0.53%	9.41	15.25
Caofeidian	15.64	2.36%	12.46	16.44
Tianjin	9.74	0.10%	7.04	9.74
Rizhao	13.48	-5.20%	9.44	14.22
Total (35 Ports)	120.24	-0.68%	98.80	121.69

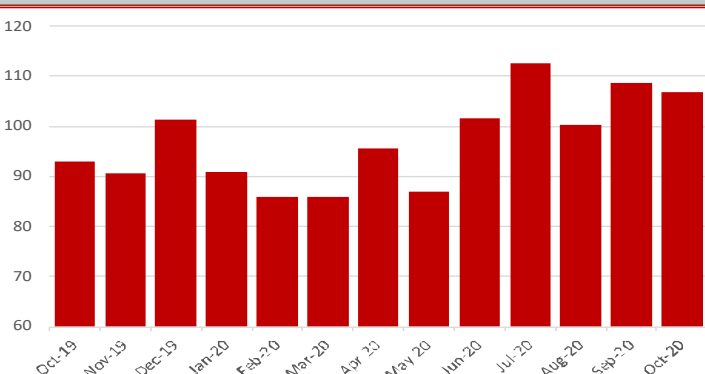
## IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Nov 25th, 3.00 pm close			Nov 25th, 5.30 pm		
Contract	I2101	Change	Change %	Dec '20	Change	Change %
Closing Price	880.00	4.0	0.46%	125.25	0.52	0.42%
Vol traded ('000 lots)	65.99	21.69	48.94%	16.69	3.92	30.65%
Open positions ('000 lots)	55.41	-0.87	-1.54%	180.82	1.26	0.70%
Day Low	869.0	1.5	0.17%	122.50	-0.97	-0.79%
Day High	892.0	9.5	1.08%	125.25	0.52	0.42%

## DRY BULK FREIGHT RATES (USD/MT)



## TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)

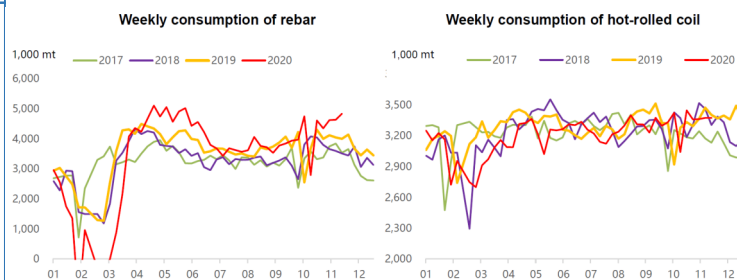


## STEEL SPOT MARKET PRICES—CHINA

## 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

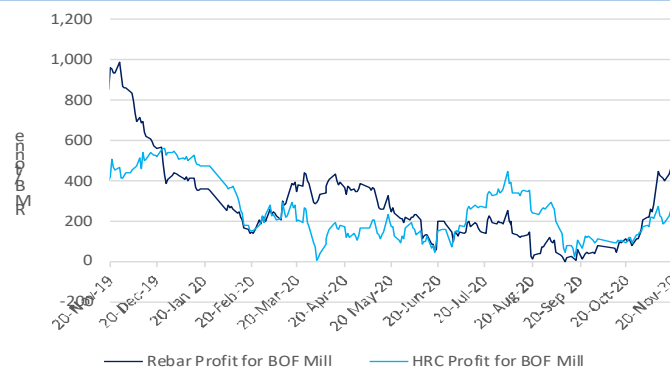
## SMM Tracking of Steel Mill P&amp;L - Rebar and Hot-rolled Coil (RMB/tonne)

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 facot our management, sales, financial and depreciations fees.

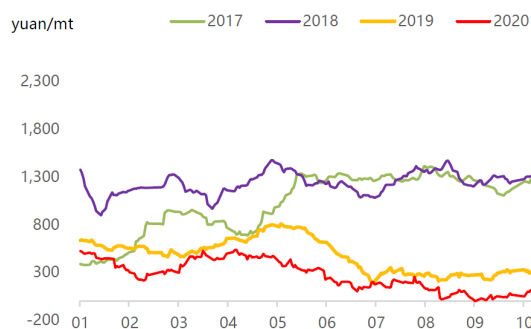
2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

## CHINESE STEEL MILL PROFITABILITY

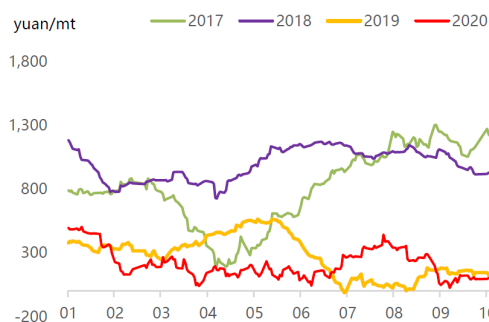


## CHINESE STEEL MILL PROFITABILITY

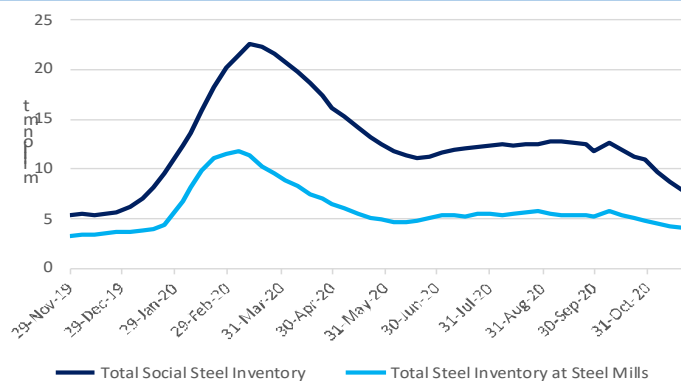
## Rebar profits



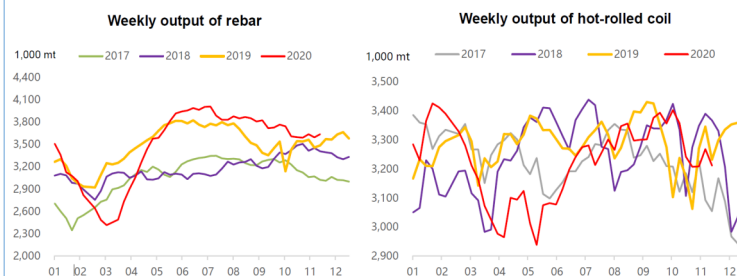
## Hot-rolled coil profits



## 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
Fe %	65% Fe Fines	62% Fe Fines	58% Fe Fines	62.5% Fe Lump	
Alumina %	65.00	62.00	58.00	62.50	
Silica%	1.40	2.25	2.25	1.50	
Phosphorus %	1.50	4.00	5.50	3.50	
Sulphur %	0.06	0.09	0.05	0.08	
Moisture %	0.01	0.02	0.02	0.02	
	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
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 25th, 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%
November 25th, 2020	Specifications applied for 58% brand assessments										
	Fe	Alumina	Silica	Phos	Moisture						
SSF	56.49%	3.16%	6.24%	0.062%	9.35%						
FMG Blended Fines	58.20%	2.49%	5.63%	0.055%	8.23%						
Robe River	56.43%	3.18%	5.75%	0.041%	8.42%						
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	56.99%	1.59%	6.38%	0.041%	9.41%						

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		

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