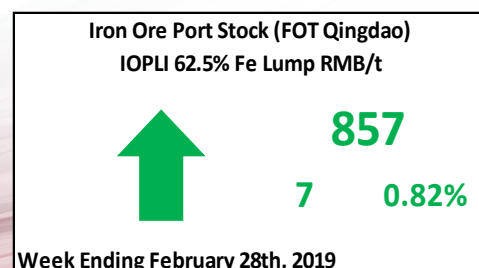
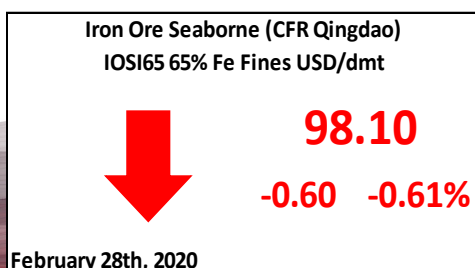
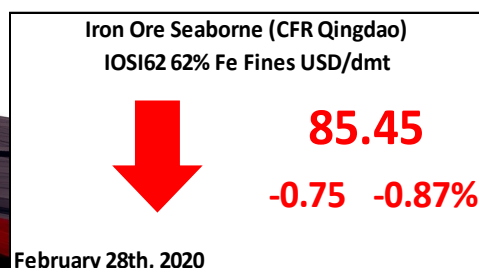
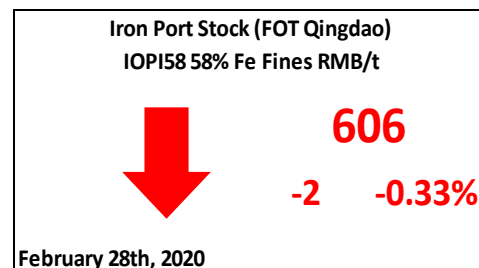
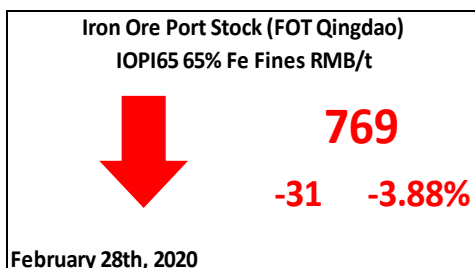
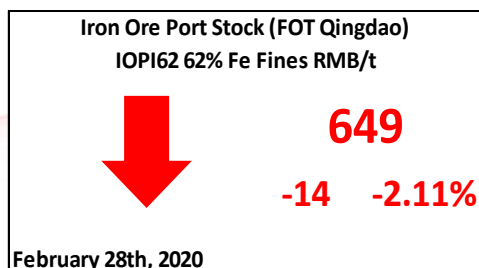


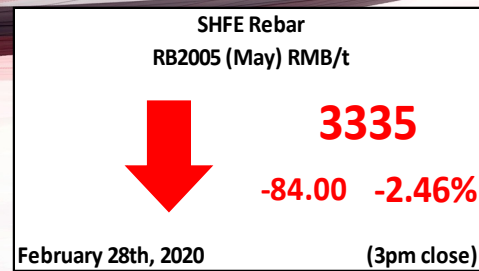
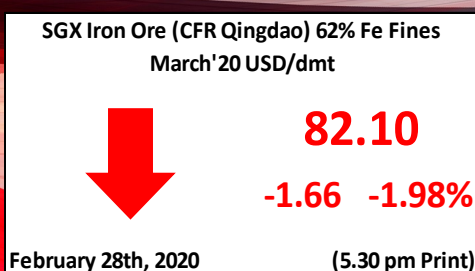
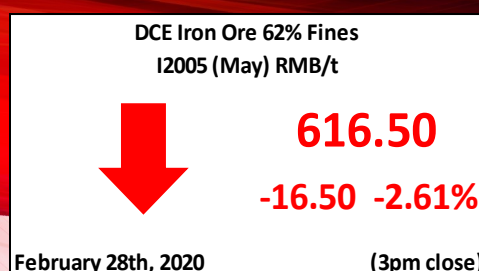


# MMi Dashboard

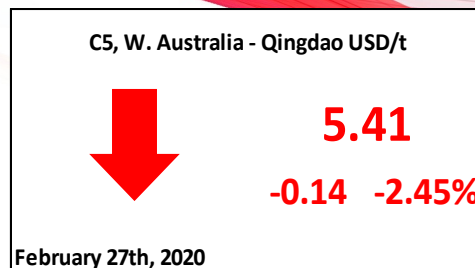
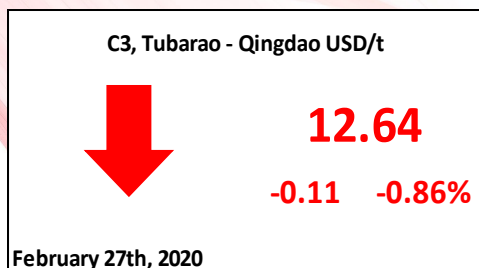
## Iron Ore Price Indices



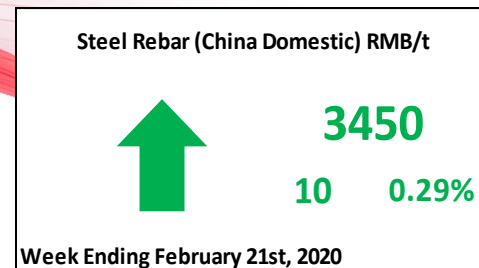
## Exchange Traded Contracts



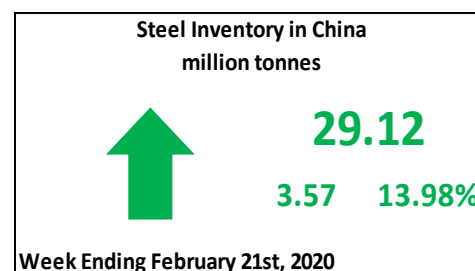
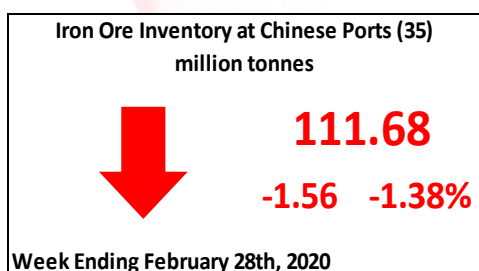
## Freight Rates



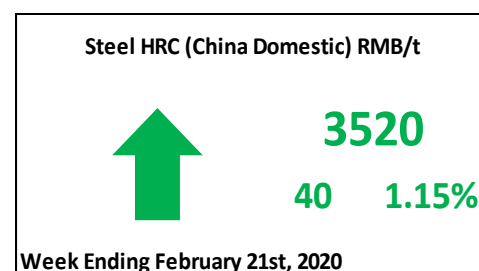
## Steel Price



## Inventory Levels



## Steel Price



## IRON ORE PORT STOCK INDEX (IOPI)

February 28th, 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 %	February	YTD	Low <sup>2</sup>	High <sup>2</sup>	Price	Change	Change %	February	YTD	Low <sup>2</sup>	High <sup>2</sup>
IOPI62	62% Fe Fines	649	-14	-2.1%	655	677	619	928	85.25	-1.74	-2.0%	86.23	89.78	81.37	126.12
IOPI58	58% Fe Fines	606	-2	-0.3%	563	579	531	823	80.22	-0.11	-0.1%	74.33	77.05	70.02	112.44
IOPI65	65% Fe Fines	769	-31	-3.9%	797	802	695	992	101.73	-4.03	-3.8%	105.84	107.04	91.81	135.34

## IRON ORE SEABORNE INDEX (IOSI)

## MARKET COMMENTARY

February 28th, 2020		CFR Qingdao, USD/dry tonne							SMM data showed that iron ore stocks across 35 Chinese ports totalled 111.68 million mt as of February 28, down 1.56 million mt from a week ago and 21.12 million mt lower than a year ago. This marked three consecutive weeks of decline, with no significant increase expected in the short term. Daily average deliveries from the 35 ports increased 135,000 mt from a week ago to 2.73 million mt this week, driven by Tangshan (+30%) and major ports in east, north and south China. Pollution control measures in Tangshan had limited impact on the actual production at local steel mills. Some steel mills increased purchases as they planned to resume production and as transport gradually recovered.							
Index	Fe Content	Price	Change	Change %	February	YTD	Low <sup>2</sup>	High <sup>2</sup>								
IOSI62	62% Fe Fines	85.45	-0.75	-0.87%	87.46	90.74	80.40	127.50								
IOSI65	65% Fe Fines	98.10	-0.60	-0.61%	102.94	105.30	91.20	137.95								

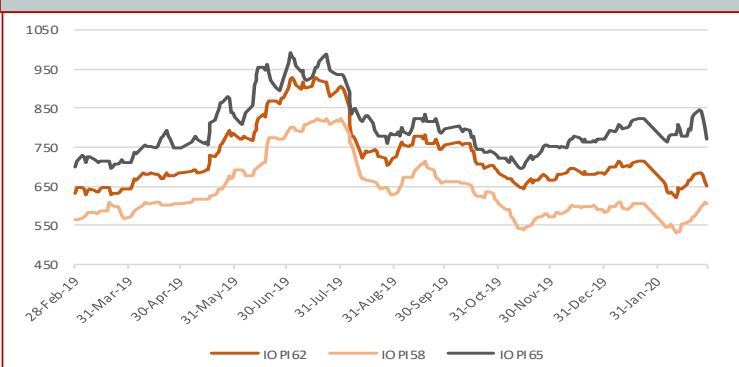
## IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending February 28th, 2019		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 %	February	YTD	Low <sup>2</sup>	High <sup>2</sup>	Price	W-o-W	Change %	February	YTD	Low <sup>2</sup>	High <sup>2</sup>
IOPLI62	62.5% Fe Lump	857	7	0.8%	834	851	763	1051	108.90	0.61	0.56%	106.19	107.59	93.24	133.81

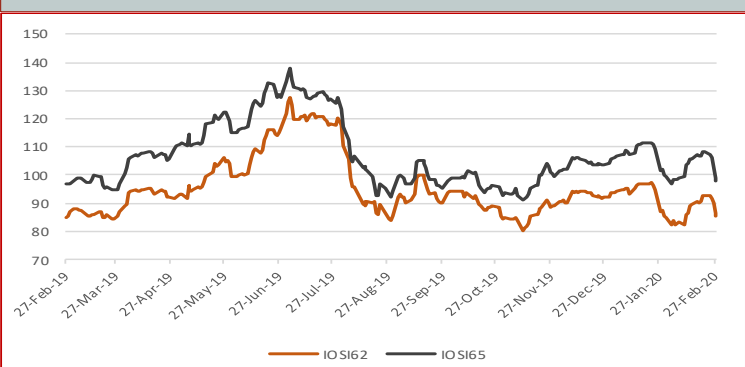
## IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending February 21st, 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	797	4.5%	761	1032	113.90	4.23%	109.21	150.03
Hebei	Qian'an	65% Fe Concentrate	Dry	840	3.7%	735	960	120.04	3.48%	109.45	139.35
Liaoning	Anshan	65% Fe Concentrate	Wet	640	0.0%	565	720	91.46	-0.22%	84.14	104.66
Shandong	Zibo	65% Fe Concentrate	Dry	830	0.0%	785	1040	118.62	-0.22%	113.34	151.33
Week Ending February 21st, 2020				This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	<sup>1</sup> Exchange rate applied: RMB/USD = 7.0066 <sup>2</sup> Last 12 months <sup>3</sup> Weekly exchange rate applied: RMB/USD 7.0177			
China Mines Concentrate Composite Index RMB/WT				720.53	1.22%	621.60	859.50				

## 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

February 28th, 2020		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	October	November	December	January	February	QTD	YTD	October	November	December	January	February	QTD	YTD
IOPI62	62% Fe Fines	721	665	683	706	655	677	677	94.29	87.30	89.84	94.23	86.23	89.78	89.78
IOPI58	58% Fe Fines	636	567	592	600	563	579	579	83.57	74.67	78.18	80.46	74.33	77.05	77.05
IOPI65	65% Fe Fines	758	723	764	808	797	802	802	99.32	95.29	100.90	108.54	105.84	107.04	107.04

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

## FREIGHT RATES

February 28th, 2020		CFR Qingdao, USD/dry tonne							February 27th, 2020		FREIGHT RATES - DRY BULK US\$/wet tonne				
Index	Fe Content	October	November	December	January	February	QTD	YTD	Route	Designation	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>	
IOSI62	62% Fe Fines	90.81	85.83	92.64	93.85	87.46	90.74	90.74	W. Australia - Qingdao	C5	5.41	-0.14	-2.45%	4.39	11.42
IOSI65	65% Fe Fines	97.45	96.49	104.14	107.56	102.94	105.30	105.30	Tubarao - Qingdao	C3	12.64	-0.11	-0.86%	11.61	29.10

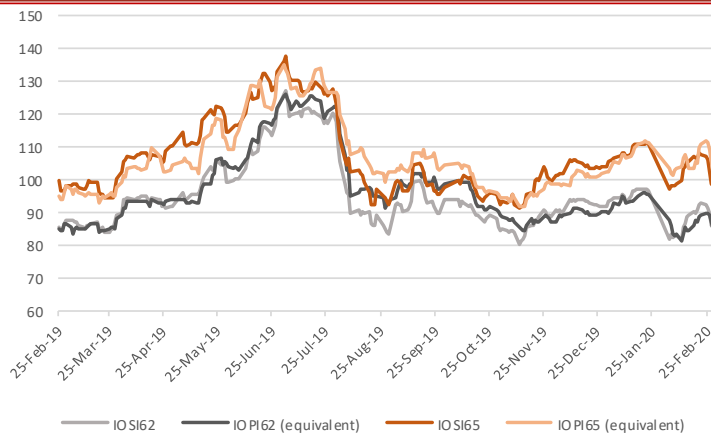
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending February 28th, 2019		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	October	November	December	January	February	QTD	YTD	October	November	December	January	February	QTD	YTD
IOPLI62	62.5% Fe Lump	829	794	825	868	834	851	851	108.80	98.44	97.89	108.99	106.19	107.59	107.59

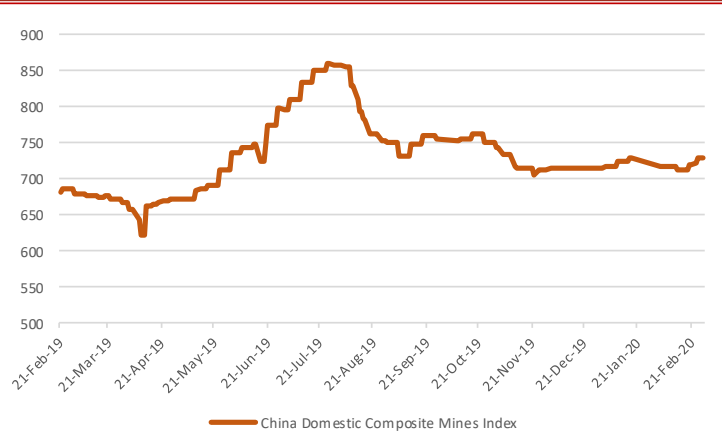
## IRON ORE INDEX PREMIUMS/DISCOUNTS

February 28th, 2020				PORT STOCK INDEX (RMB/WT)		February 28th, 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	-43	-6.63%	IOSI65	65% Fe Fines	12.65	14.80%		
IOPI65	65% Fe Fines	120	18.49%						

## IRON ORE INDEX COMPARISONS (USD/DMT)



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



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

February 28th, 2020				February 28th, 2020			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IO SI62
Roy Hill	613	-11	-36	Roy Hill	79.52	-0.75	-5.93
SIMEC Fines	593	-10	-56	SIMEC Fines	74.80	-0.75	-10.65
PB Fines	631	-9	-18	PB Fines	84.05	-0.75	-1.40
Newman Fines	649	-15	0	Newman Fines	86.27	-0.75	0.82
MAC Fines	629	-10	-20	MAC Fines	79.85	-0.75	-5.60
Jimblebar Blended Fines	571	3	-78	Jimblebar Blended Fines	70.55	-0.75	-14.90
Carajas Fines	772	-32	123	Carajas Fines	97.57	-0.75	12.12
Brazilian SSF	658	-21	9	Brazilian SSF	82.32	-0.75	-3.13
Brazilian Blend Fines	662	-19	13	Brazilian Blend Fines	86.07	-0.75	0.62
RTX Fines	573	-1	-76	RTX Fines	79.20	-0.75	-6.25
West Pilbara Fines	621	-10	-28	West Pilbara Fines	77.92	-0.75	-7.53

February 28th, 2020			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	518	-8	-88
FMG Blended Fines	585	-2	-21
Robe River	526	-8	-80
Western Fines	512	-6	-94
Atlas Fines	523	-9	-83
Yandi	593	-10	-13

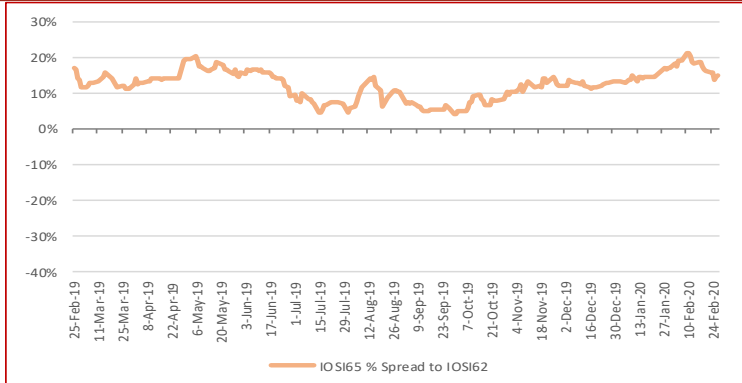
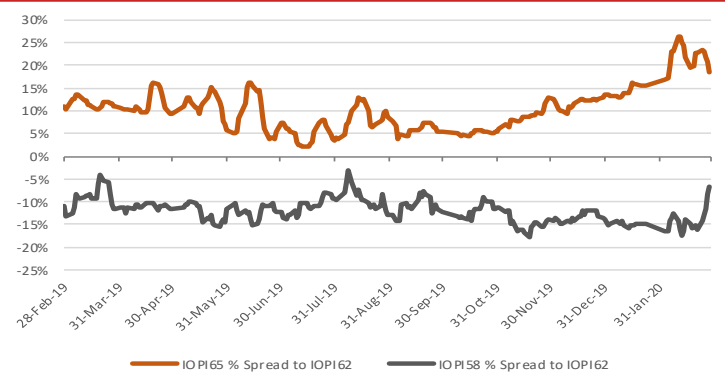
## IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	3.00	-2.00	1% Fe	High Grade Fe 60 - 63%	3.25	0.00	
	High Grade Fe 63 - 64%	12.00	-2.00		High Grade Fe 63 - 64%	2.50	0.00	
	High Grade Fe 64 - 65%	12.00	-2.00		High Grade Fe 64 - 65%	2.50	0.00	
	High Grade Fe 65 - 65.5%	12.00	-2.00		High Grade Fe 65 - 65.5%	2.50	0.00	
	Low Grade Fe	11.00	3.00					
1% Alumina	High Fe Grade Al <2.25%	50.00	-5.00	1% Alumina	High Fe Grade Al <2.25%	1.00	0.00	
	High Fe Grade Al 2.25-4%	8.00	-4.00		High Fe Grade Al 2.25-4%	2.50	0.00	
	Low Fe Grade Al <2.25%	37.00	-6.00					
	Low Fe Grade Al 2.25-4%	61.00	0.00					
1% Silica	High Fe Grade Si <4%	20.00	-3.00	1% Silica	High Fe Grade Si <4%	1.25	0.00	
	High Fe Grade Si 4-6.5%	27.00	0.00		High Fe Grade Si 4 - 6.5%	1.75	0.00	
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	11.00	-4.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.00	0.00	
	High Fe Grade 0.115%<P<0.15%	14.00	1.00		High Fe Grade 0.115%<P<0.15%	0.00	0.00	
	Low Fe Grade 0.09<P<0.1%	7.00	0.00					

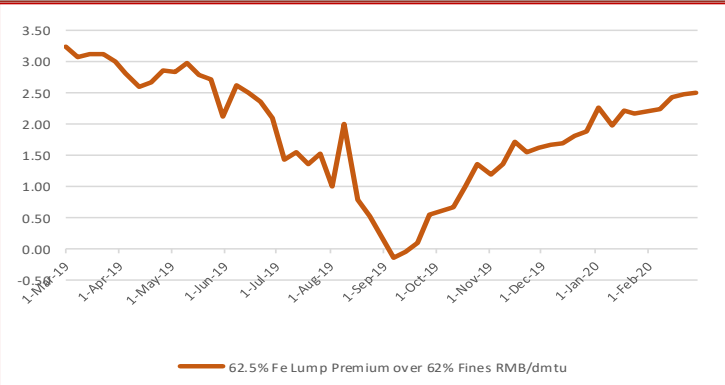
## Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-30.00	0.00	Fangcheng	-5.00	0.00	Lanshan	0.00	0.00	Qingdao	0.00	0.00
Beilun	5.00	0.00	Jiangyin	-30.00	0.00	Lianyungang	0.00	0.00	Rizhao	0.00	0.00
Caofeidian	-15.00	0.00	Jingtang	-15.00	0.00	Majishan	0.00	0.00	Shekou	0.00	0.00
Dalian	-30.00	0.00	Lanqiao	0.00	0.00	Nantong	-30.00	0.00	Tianjin	-15.00	0.00

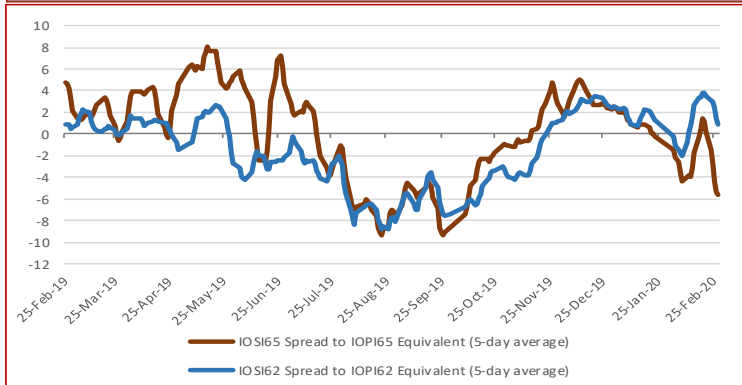
IRON ORE INDEX PREMIUMS/DISCOUNTS



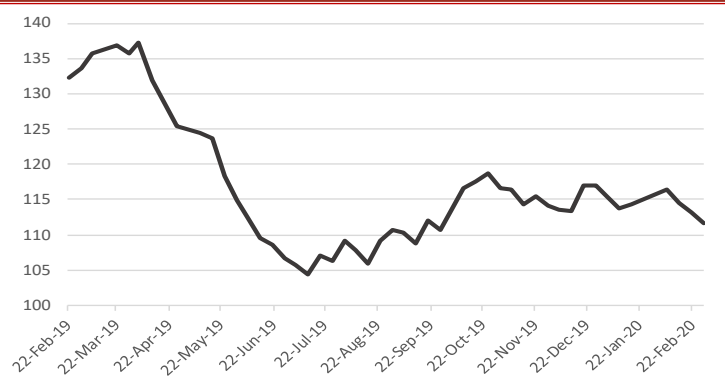
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



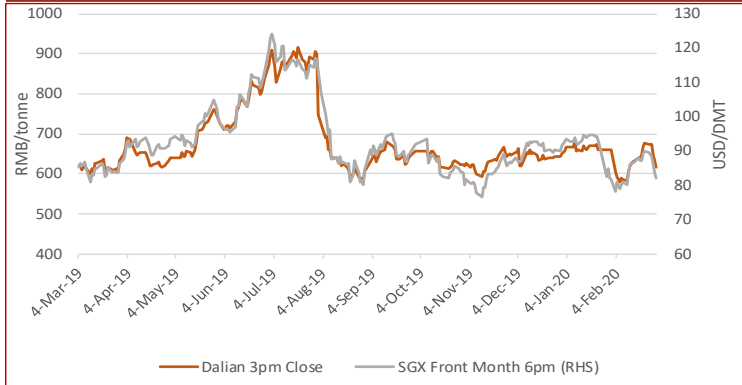
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



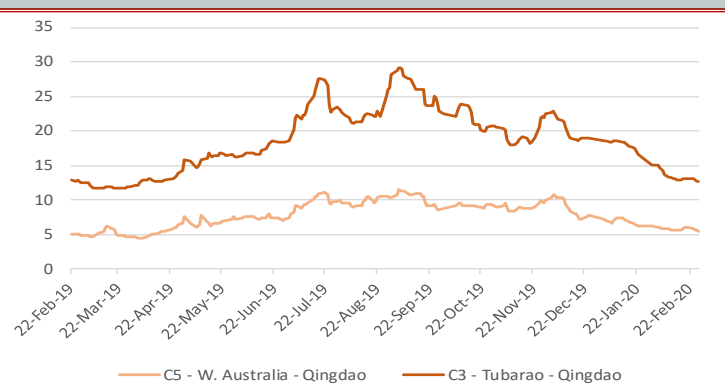
IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending February 28th, 2020				
Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	14.37	-4.77%	10.80	17.00
Qingdao	13.17	-0.75%	12.38	19.01
Caofeidian	15.37	-6.51%	13.47	18.98
Tianjin	7.72	5.46%	6.37	9.18
Rizhao	12.42	2.14%	11.41	17.10
<b>Total (35 Ports)</b>	<b>111.68</b>	<b>-1.38%</b>	<b>104.40</b>	<b>137.30</b>

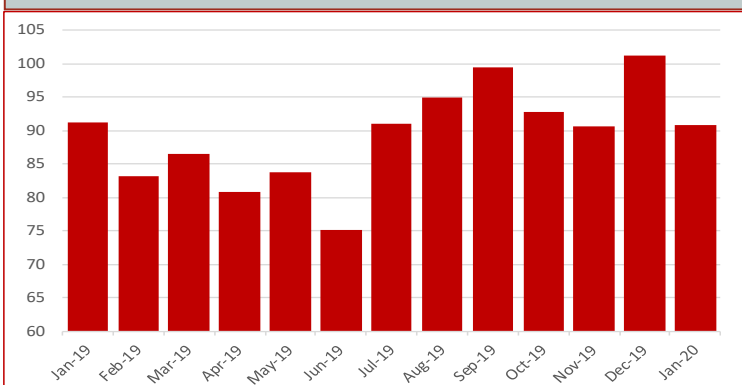
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Feb 28th 3.00 pm close			Feb 28th, 5.30 pm		
Contract	I2005	Change	Change %	Mar'20	Change	Change %
Closing Price	616.50	-16.5	-2.61%	82.10	-1.66	-1.98%
Vol traded ('000 lots)	127.80	22.2	21.01%	15.73	-4.69	-22.97%
Open positions ('000 lots)	70.81	-1.07	-1.49%	149.34	0.11	0.07%
Day Low	606.0	-24.0	-3.81%	81.17	-2.18	-2.62%
Day High	626.0	-20.0	-3.10%	83.10	-2.97	-3.45%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)

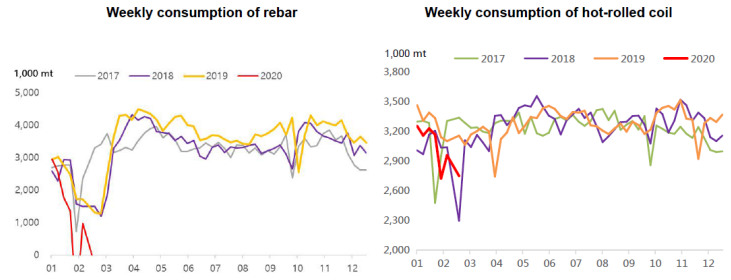


STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne

Product	21/2/2020	Change	Change %
ReBar HRB400 φ18mm	3,450.0	10	0.29%
Wirerod Q300 φ6.5mm	3,570.0	10	0.28%
HRC Q235/SS400 5.5mm*1500*C	3,520.0	40	1.15%
CRC SPCC/ST12 1.0mm*1250*2500	4,190.0	-20	-0.48%
Medium & Heavy Plate Q235B 20mm	3,600.0	0	0.00%
GI ST02Z 1.0mm*1000*C	4,400.0	-60	-1.35%
Colour Coated Plate	6,850.0	0	0.00%

CHINESE STEEL CONSUMPTION



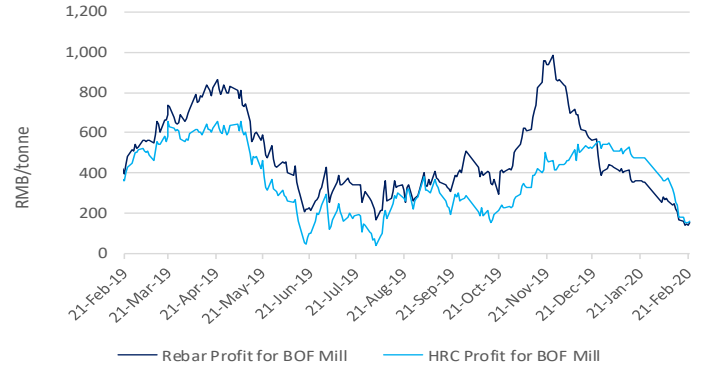
CHINESE STEEL MILL PROFITABILITY

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	92.75	3.75	Mmi CFR Equivalent index for 1st Feb
Coke	1,960	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,290	0	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,054	52	Q234, incl. tax
Rebar cost - Blast furnace	3,288	48	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	152	-18	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,370	52	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	160	-22	based on Shanghai prices, incl. tax

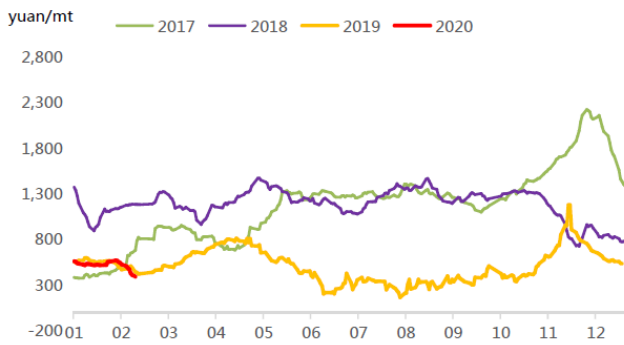
Note: 1.Costs in the table are calculated based on today's market prices and fact our management, sales, financial and depreciations fees.  
2.The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

CHINESE STEEL MILL PROFITABILITY

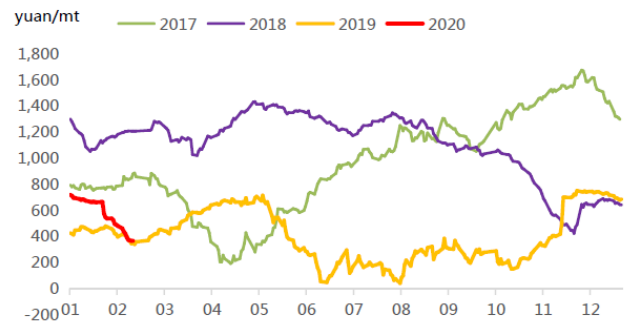


CHINESE STEEL MILL PROFITABILITY

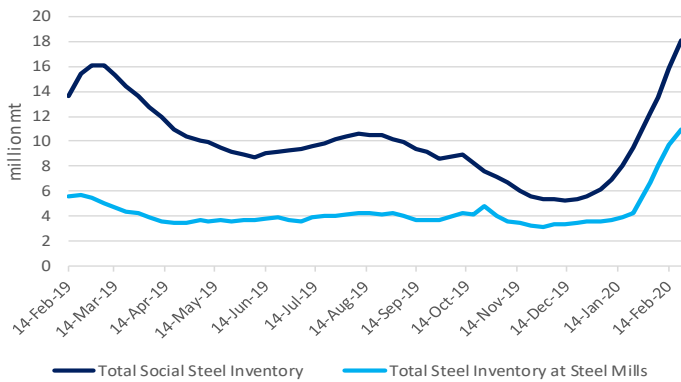
Rebar profits



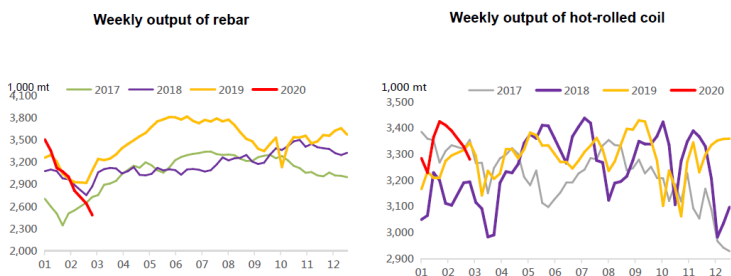
Hot-rolled coil profits



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*			
	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					
February 28th, 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	60.70%	2.24%	4.89%	0.060%	9.33%	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	61.50%	2.33%	3.83%	0.100%	9.30%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	10.00%
Newman Fines	62.42%	2.24%	4.15%	0.078%	7.63%	Newman Fines	62.40%	2.20%	4.30%	0.080%	6.40%
MAC Fines	60.78%	2.33%	4.68%	0.074%	7.68%	MAC Fines	61.00%	2.70%	4.70%	0.110%	9.30%
Jimblebar Blended Fines	60.29%	3.11%	4.71%	0.116%	7.75%	Jimblebar Blended Fines	59.50%	3.70%	5.80%	0.135%	8.30%
Carajas Fines	65.17%	1.31%	1.72%	0.081%	7.84%	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	62.66%	1.54%	4.93%	0.076%	7.94%	Brazilian Blend Fines	62.50%	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	IRCNO034	
IOPI58	IRCNQ002	IRCNQ005	IOSI65	IRCNO035	
IOPI65	IRCNQ003	IRCNQ006			
IOPLI62	IRCNO036	IRCNO037			

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