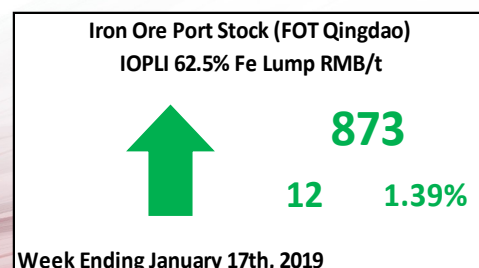
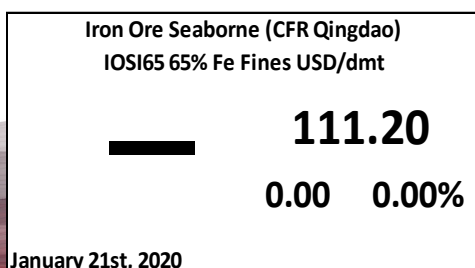
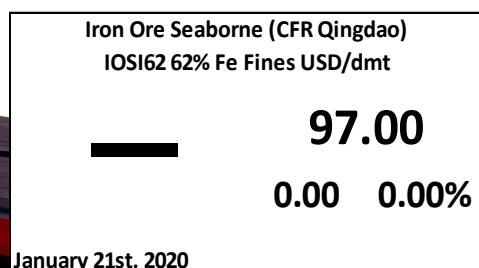
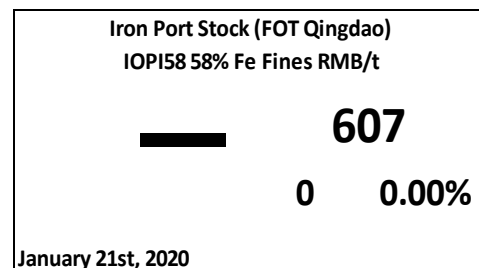
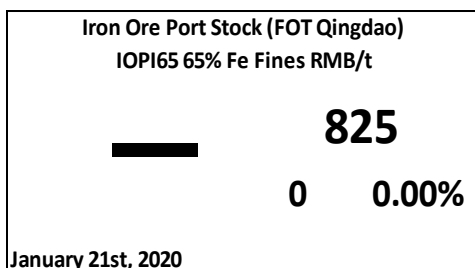
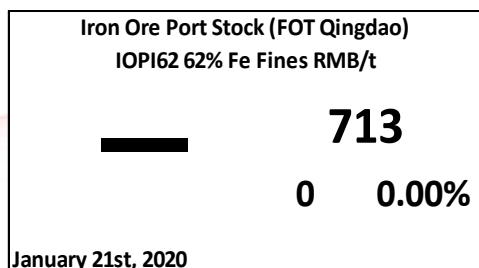


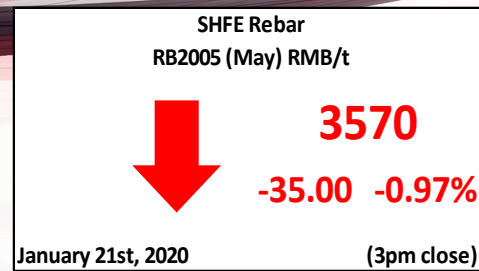
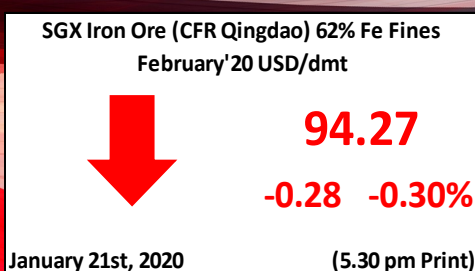
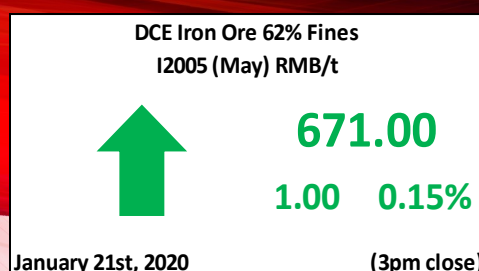


## MMi Dashboard

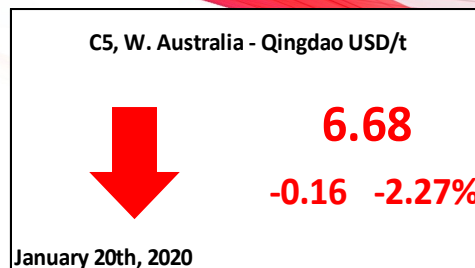
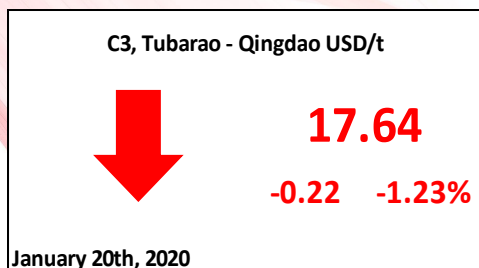
## Iron Ore Price Indices



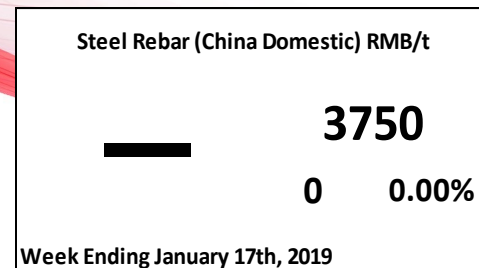
## Exchange Traded Contracts



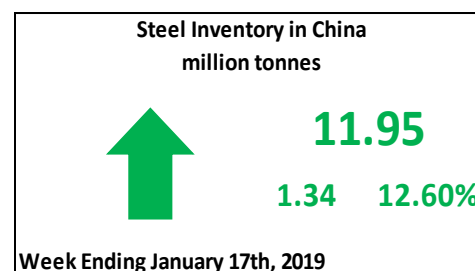
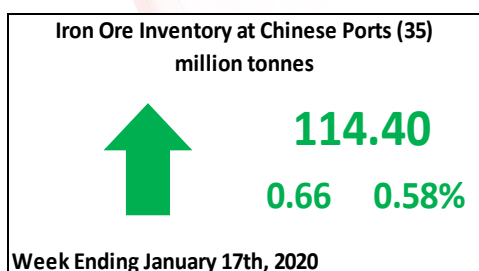
## Freight Rates



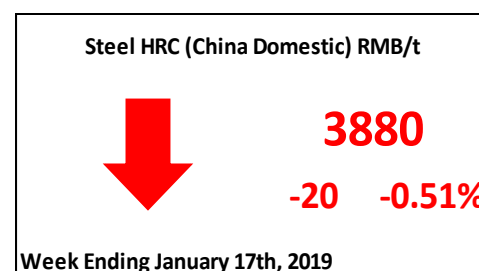
## Steel Price



## Inventory Levels



## Steel Price



## IRON ORE PORT STOCK INDEX (IOPI)

January 21st, 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	713	0	0.0%	704	704	576	928	96.04	0.08	0.1%	94.02	94.02	75.58	126.12
IOPI58	58% Fe Fines	607	0	0.0%	599	599	464	823	82.07	0.07	0.1%	80.27	80.27	59.82	112.44
IOPI65	65% Fe Fines	825	0	0.0%	805	805	665	992	111.75	0.10	0.1%	108.14	108.14	87.85	135.34

## IRON ORE SEABORNE INDEX (IOSI)

## MARKET COMMENTARY

January 21st, 2020		CFR Qingdao, USD/dry tonne							SMM estimates that there were 81 vessels carrying 12.61 million mt of iron ore arrived at major Chinese ports during January 12-18, down 1.57 million mt from the week ended January 11. The decline followed after two consecutive weeks of increase in the iron ore arrivals. During the same period, iron ore deliveries leaving Australian ports continued to fall by 470,000 mt on the week to 10.31 million mt, 4.6 million mt lower than the same period last year. Shipments that departed Brazilian ports were estimated to shrink 150,000 mt on the week, to 3.91 million mt, down 3.61 million mt from the same period a year earlier. The continued decline in supply from Australia and Brazil will offer strong support to near-term prices of seaborne iron ore.							
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	97.00	0.00	0.00%	95.59	95.59	74.90	127.50								
IOSI65	65% Fe Fines	111.20	0.00	0.00%	108.90	108.90	88.95	137.95								

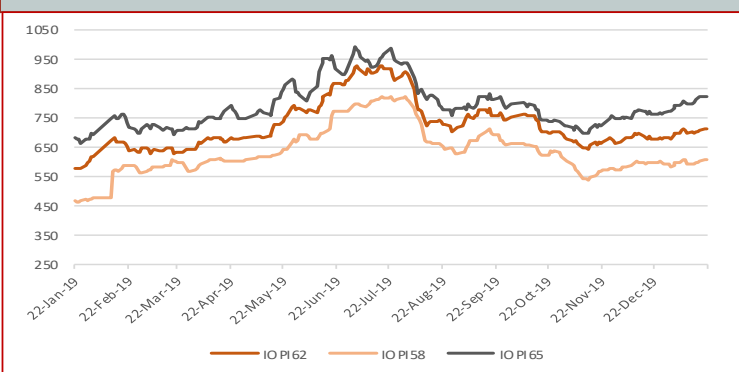
## IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending January 17th, 2019		FOT Qingdao (inc. 16% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 16% 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	873	12	1.4%	864	864	763	1051	110.05	2.48	2.31%	108.22	108.22	93.24	133.81

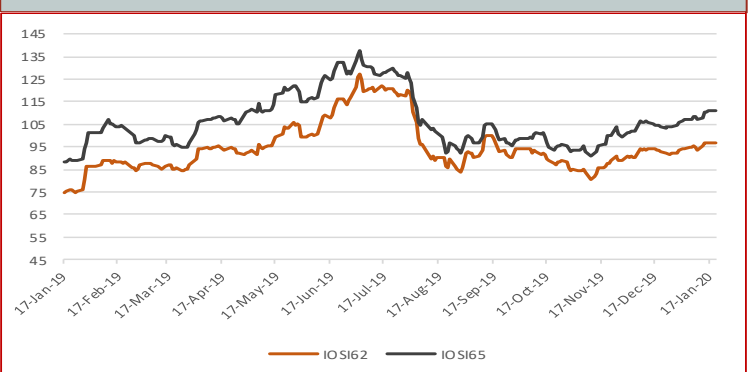
## IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending January 17th, 2019				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	847	1.0%	701	1032	122.84	1.78%	103.29	150.03
Hebei	Qian'an	65% Fe Concentrate	Dry	850	0.0%	735	960	123.28	0.82%	109.45	139.35
Liaoning	Anshan	65% Fe Concentrate	Wet	650	0.0%	535	745	94.27	0.82%	79.15	104.66
Shandong	Zibo	65% Fe Concentrate	Dry	830	0.0%	740	1040	120.38	0.82%	109.48	151.33
Week Ending January 17th, 2019				This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	1 Exchange rate applied: RMB/USD = 6.8606 <sup>2</sup> Last 12 months <sup>3</sup> Weekly exchange rate applied: RMB/USD 6.8949			
China Mines Concentrate Composite Index RMB/WT				728.48	0.63%	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

January 21st, 2020		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	September	October	November	December	MTD	QTD	YTD	September	October	November	December	MTD	QTD	YTD
IOPI62	62% Fe Fines	758	721	665	683	704	704	704	100.18	94.29	87.30	89.84	94.02	94.02	94.02
IOPI58	58% Fe Fines	674	636	567	592	599	599	599	91.86	83.57	74.67	78.18	80.27	80.27	80.27
IOPI65	65% Fe Fines	803	758	723	764	805	805	805	108.92	99.32	95.29	100.90	108.14	108.14	108.14

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

## FREIGHT RATES

January 21st, 2020		CFR Qingdao, USD/dry tonne							January 20th, 2020				FREIGHT RATES - DRY BULK US\$/wet tonne			
Index	Fe Content	September	October	November	December	MTD	QTD	YTD	Route	Designation	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>		
IOSI62	62% Fe Fines	93.76	90.81	85.83	92.64	95.59	95.59	95.59	W. Australia - Qingdao	C5	6.68	-0.16	-2.27%	4.39	11.42	
IOSI65	65% Fe Fines	99.42	97.45	96.49	104.14	108.90	108.90	108.90	Tubarao - Qingdao	C3	17.64	-0.22	-1.23%	11.61	29.10	

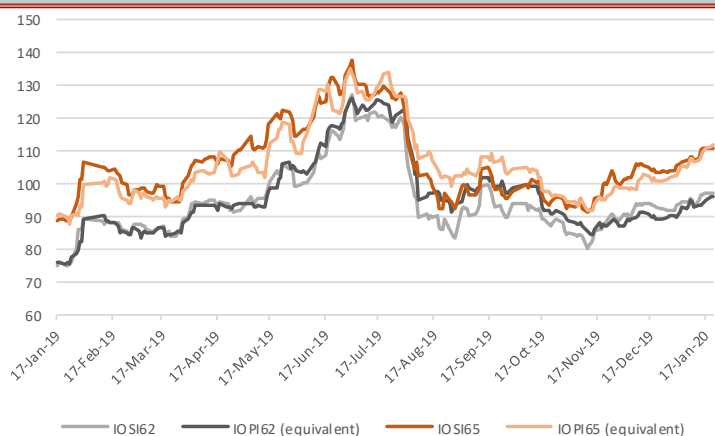
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending January 17th, 2019		FOT Qingdao (inc. 16% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	September	October	November	December	MTD	QTD	YTD	May	June	July	December	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	803	829	794	825	864	864	864	132.99	108.80	98.44	97.89	108.22	108.22	108.22

## IRON ORE INDEX PREMIUMS/DISCOUNTS

January 21st, 2020				PORT STOCK INDEX (RMB/WT)		January 21st, 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	-106	-14.87%	IOSI65	65% Fe Fines	14.20	14.64%		
IOPI65	65% Fe Fines	112	15.71%						

## IRON ORE INDEX COMPARISONS (USD/DMT)



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



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

January 21st, 2020				January 21st, 2020			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSi62
Roy Hill	670	0	-43	Roy Hill	92.09	0.57	-4.91
SIMEC Fines	656	0	-57	SIMEC Fines	88.59	1.09	-8.41
PB Fines	694	0	-19	PB Fines	95.91	0.16	-1.09
Newman Fines	721	0	8	Newman Fines	98.02	-0.02	1.02
MAC Fines	680	0	-33	MAC Fines	92.29	0.54	-4.71
Jimblebar Blended Fines	626	0	-87	Jimblebar Blended Fines	83.44	1.94	-13.56
Carajas Fines	832	0	119	Carajas Fines	111.20	0.46	14.20
Brazilian SSF	746	0	33	Brazilian SSF	97.62	0.93	0.62
Brazilian Blend Fines	758	0	45	Brazilian Blend Fines	99.37	0.31	2.37
RTX Fines	644	0	-69	RTX Fines	90.59	1.09	-6.41
West Pilbara Fines	670	0	-43	West Pilbara Fines	90.49	0.67	-6.51

January 21st, 2020			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	567	-2	-40
FMG Blended Fines	610	-1	3
Robe River	565	0	-42
Western Fines	585	-6	-22
Atlas Fines	571	-5	-36
Yandi	611	-3	4

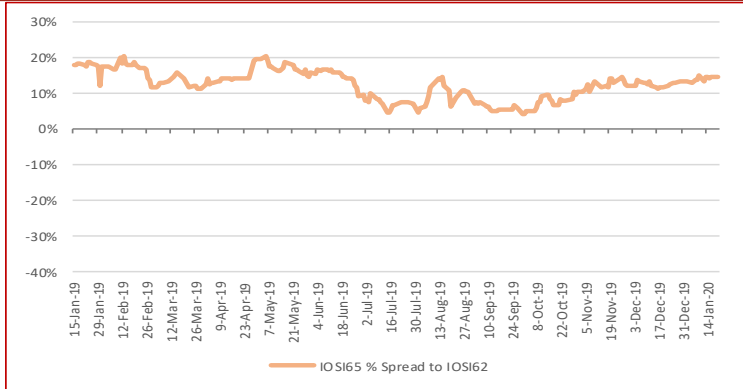
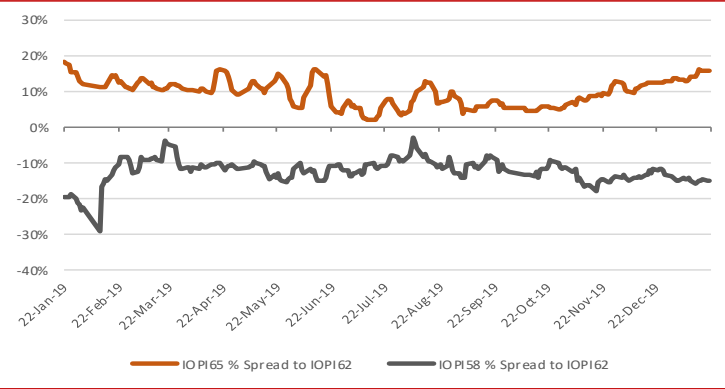
## IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	13.00	0.00	1% Fe	High Grade Fe 60 - 63%	3.00	-0.25	
	High Grade Fe 63 - 64%	6.00	0.00		High Grade Fe 63 - 64%	2.25	0.25	
	High Grade Fe 64 - 65%	6.00	0.00		High Grade Fe 64 - 65%	2.25	0.25	
	High Grade Fe 65 - 65.5%	6.00	0.00		High Grade Fe 65 - 65.5%	2.25	0.25	
	Low Grade Fe	13.00	0.00					
1% Alumina	High Fe Grade Al <2.25%	52.00	0.00	1% Alumina	High Fe Grade Al <2.25%	2.50	0.25	
	High Fe Grade Al 2.25-4%	33.00	0.00		High Fe Grade Al 2.25-4%	2.25	-0.25	
	Low Fe Grade Al <2.25%	36.00	0.00					
	Low Fe Grade Al 2.25-4%	20.00	0.00					
1% Silica	High Fe Grade Si <4%	17.00	0.00	1% Silica	High Fe Grade Si <4%	2.00	0.00	
	High Fe Grade Si 4-6.5%	19.00	0.00		High Fe Grade Si 4 - 6.5%	1.00	-0.25	
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	3.00	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%	7.00	0.00		High Fe Grade 0.115%<P<0.15%	0.50	-0.25	
	Low Fe Grade 0.09<P<0.1%	6.00	0.00					

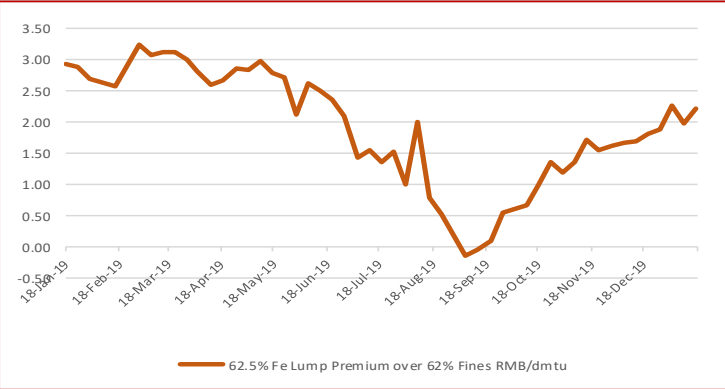
## Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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	Qingdao	0.00	0.00
Beilun	5.00	0.00	Jiangyin	-25.00	0.00	Lianyungang	0.00	0.00	Rizhao	0.00	0.00
Caofeidian	-5.00	0.00	Jingtang	-5.00	0.00	Majishan	0.00	0.00	Shekou	0.00	0.00
Dalian	-50.00	0.00	Lanqiao	0.00	0.00	Nantong	-25.00	0.00	Tianjin	-10.00	0.00

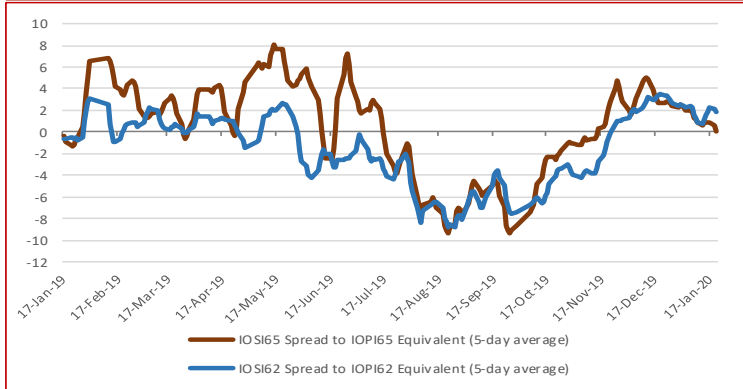
IRON ORE INDEX PREMIUMS/DISCOUNTS



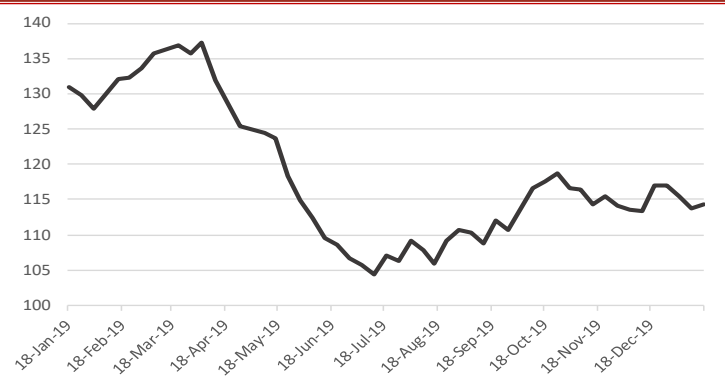
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



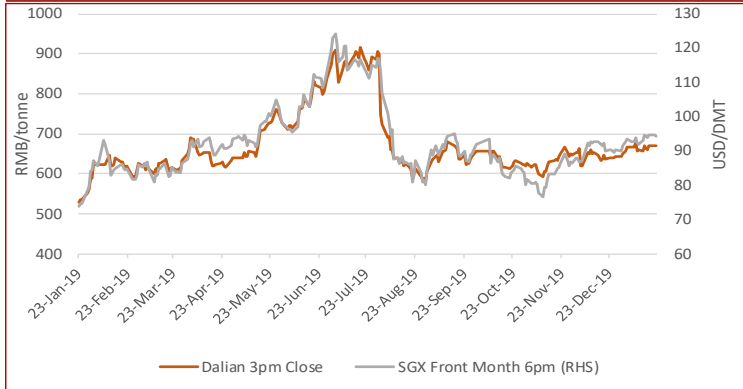
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



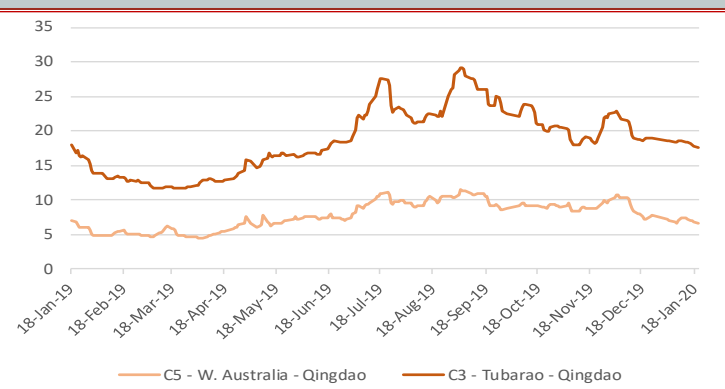
IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending January 17th, 2020				
Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	13.64	1.04%	10.80	17.00
Qingdao	13.88	-0.57%	12.38	19.01
Caofeidian	14.55	-2.61%	13.47	18.98
Tianjin	7.59	0.80%	6.37	9.40
Rizhao	12.86	-0.16%	11.41	17.10
<b>Total (35 Ports)</b>	<b>114.40</b>	<b>0.58%</b>	<b>104.40</b>	<b>137.30</b>

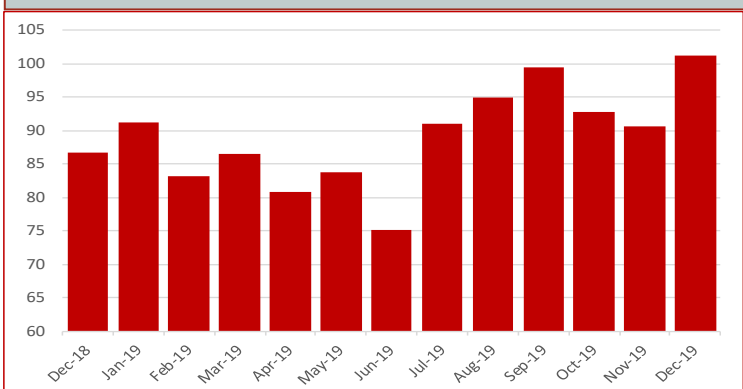
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Jan 21st 3pm close			Jan 21st, 5:30 pm		
	Contract	Change	Change %	Feb'20	Change	Change %
Closing Price	671.00	1.0	0.15%	94.27	-0.28	-0.30%
Vol traded ('000 lots)	38.86	3.3	9.36%	8.74	-7.66	-46.71%
Open positions ('000 lots)	64.28	-0.20	-0.30%	115.12	4.26	3.84%
Day Low	665.0	-1.0	-0.15%	93.78	-0.18	-0.19%
Day High	672.5	-2.5	-0.37%	94.35	-0.52	-0.55%

DRY BULK FREIGHT RATES (USD/MT)



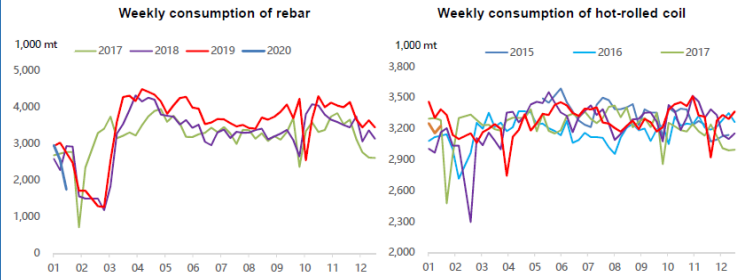
TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne

Product	17/1/2020	Change	Change %
ReBar HRB400 φ18mm	3,750.0	0	0.00%
Wirerod Q300 φ6.5mm	3,830.0	0	0.00%
HRC Q235/SS400 5.5mm*1500*C	3,880.0	-20	-0.51%
CRC SPPC/ST12 1.0mm*1250*2500	4,470.0	0	0.00%
Medium & Heavy Plate Q235B 20mm	3,870.0	0	0.00%
GI ST02Z 1.0mm*1000*C	4,590.0	0	0.00%
Colour Coated Plate	6,900.0	0	0.00%



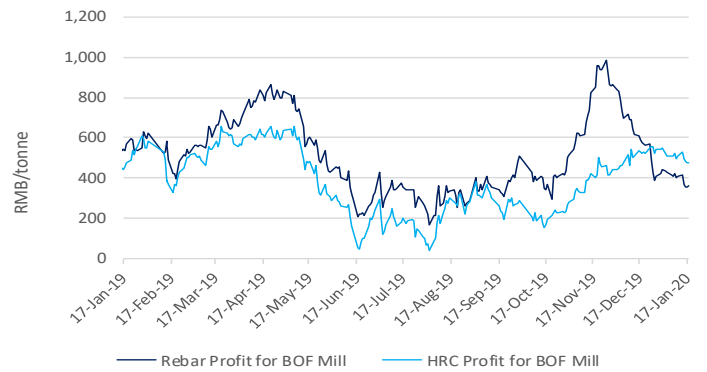
CHINESE STEEL MILL PROFITABILITY

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	97.00	1.90	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	3,089	14	Q234, incl. tax
Rebar cost - Blast furnace	3,322	14	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	358	-54	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,406	15	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	474	-35	based on Shanghai prices, incl. tax

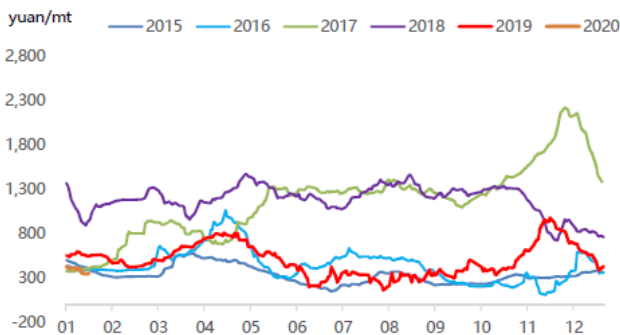
Note: 1.Costs in the table are calculated based on today's market prices and fact our management, sales, financial and depreciations fees.  
2.The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

CHINESE STEEL MILL PROFITABILITY

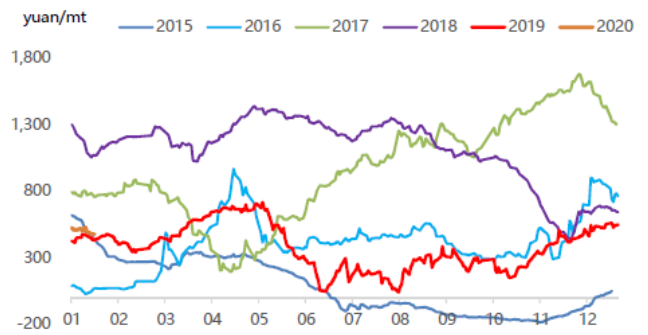


CHINESE STEEL MILL PROFITABILITY

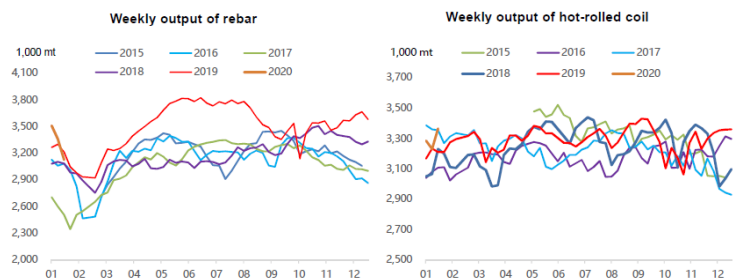
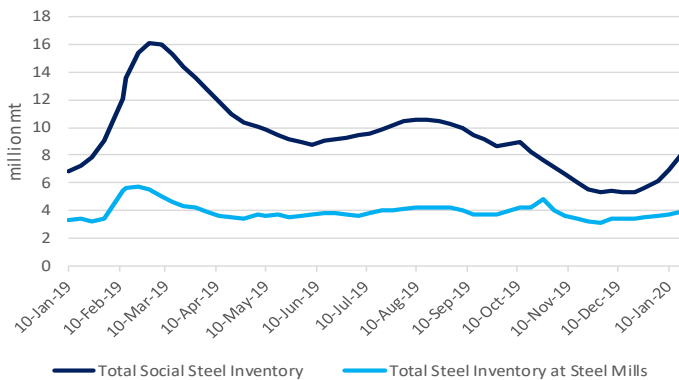
Rebar profits



Hot-rolled coil profits



CHINESE STEEL INVENTORIES



## 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					
January 21st, 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	61.52%	2.33%	3.81%	0.100%	9.36%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	10.00%
Newman Fines	62.46%	2.22%	4.09%	0.082%	7.65%	Newman Fines	62.40%	2.20%	4.30%	0.080%	6.40%
MAC Fines	60.68%	2.34%	4.70%	0.079%	7.91%	MAC Fines	61.00%	2.70%	4.70%	0.110%	9.30%
Jimblebar Blended Fines	60.38%	3.07%	4.63%	0.115%	7.87%	Jimblebar Blended Fines	59.50%	3.70%	5.80%	0.135%	8.30%
Carajas Fines	65.30%	1.28%	1.59%	0.082%	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	62.93%	1.39%	4.97%	0.073%	7.22%	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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