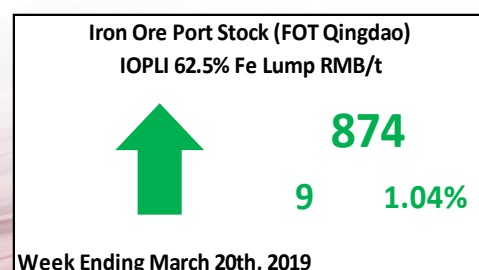
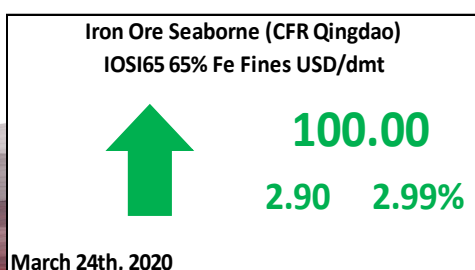
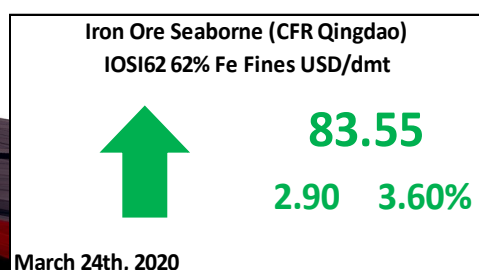
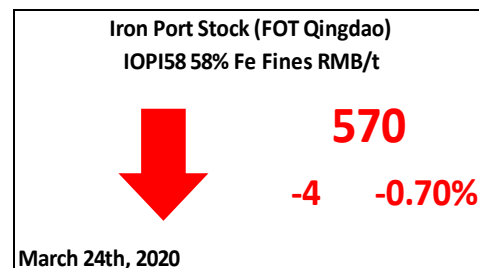
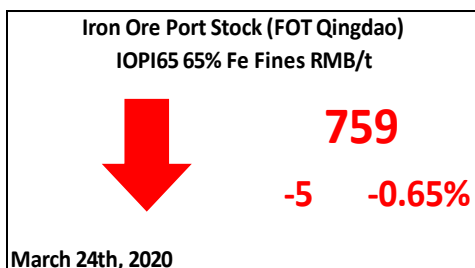
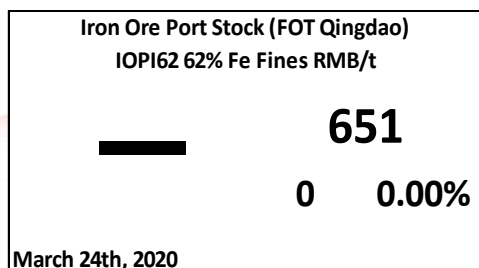


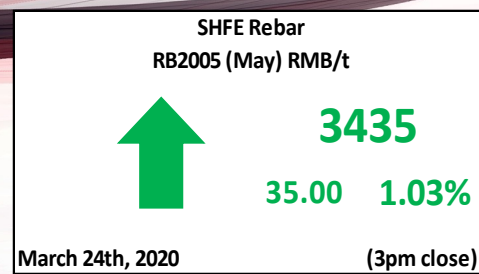
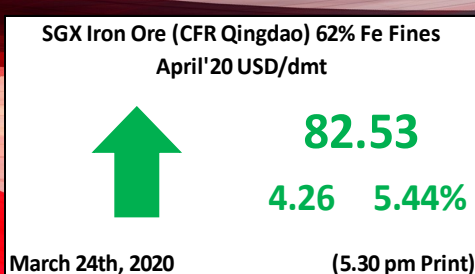
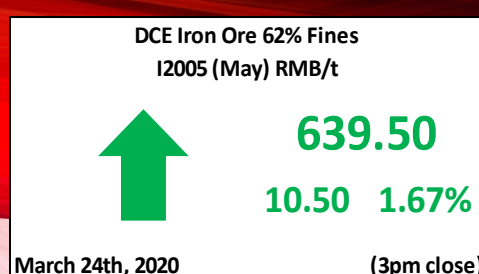


## MMi Dashboard

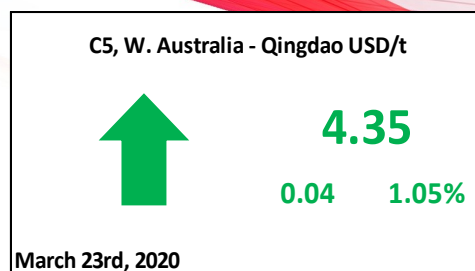
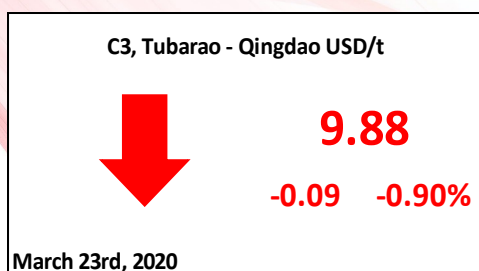
## Iron Ore Price Indices



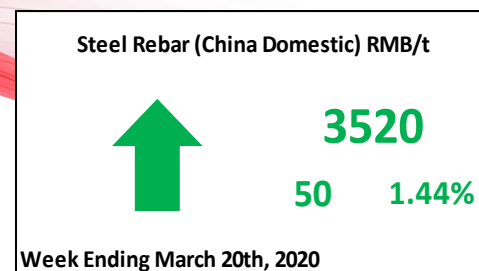
## Exchange Traded Contracts



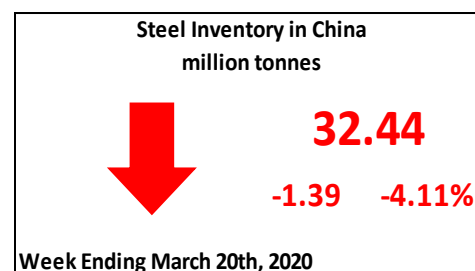
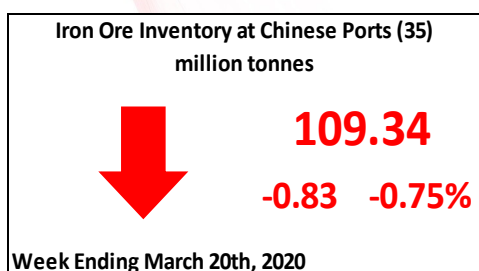
## Freight Rates



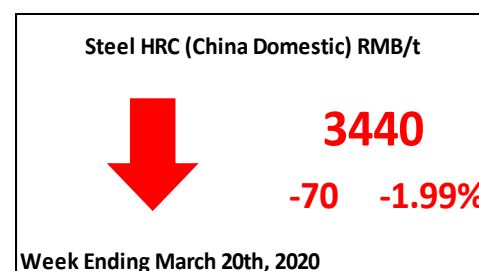
## Steel Price



## Inventory Levels



## Steel Price



## IRON ORE PORT STOCK INDEX (IOPI)

March 24th, 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	651	0	0.0%	665	674	619	928	84.41	-0.07	-0.1%	87.63	89.09	81.37	126.12
IOPI58	58% Fe Fines	570	-4	-0.7%	580	579	531	823	74.24	-0.61	-0.8%	76.72	76.95	70.02	112.44
IOPI65	65% Fe Fines	759	-5	-0.7%	794	800	695	992	99.04	-0.76	-0.8%	105.36	106.50	91.81	135.34

## IRON ORE SEABORNE INDEX (IOSI)

## MARKET COMMENTARY

March 24th, 2020		CFR Qingdao, USD/dry tonne							PBF traded at 615-630yuan/mt in Shandong ports, and was 640yuan/mt in Tangshan. Mills bought only to satisfy near term demand and concluded transactions fell. SMM estimates that there were 71 vessels carrying 11.75 million mt of iron ore arrived at major Chinese ports during March 15-21, down 260,000 mt from the week ended March 14 but up 1.65 million mt from the same period a year earlier. Arrivals in China's steelmaking hub Tangshan declined on the week, while shipments arrived in Shandong edged higher. During the same period, iron ore deliveries leaving Australian ports rose 1.63 million mt on the week to 17.39 million mt, 1.55 million mt higher than the same period last year. The proportion of shipments to China extended its increase from the previous week. Shipments that departed Brazilian ports were estimated to increase 1.27 million mt on the week, to 4.78 million mt. This was 1.18 million mt lower than the same period last year. While iron ore shipments from Australia and Brazil expanded, demand from Chinese steelmakers remained solid and this will support the demand and supply fundamentals of iron ore in the near 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	83.55	2.90	3.60%	89.54	90.38	80.40	127.50								
IOSI65	65% Fe Fines	100.00	2.90	2.99%	105.89	105.48	91.20	137.95								

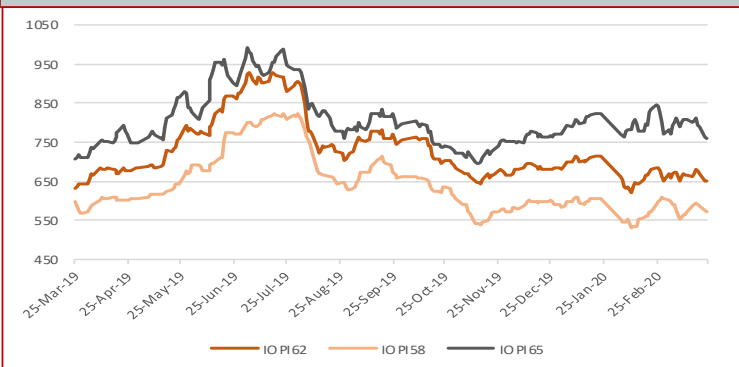
## IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending March 20th, 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 %	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	874	9	1.0%	870	856	763	1051	110.77	-0.11	-0.10%	111.19	108.57	93.24	133.81

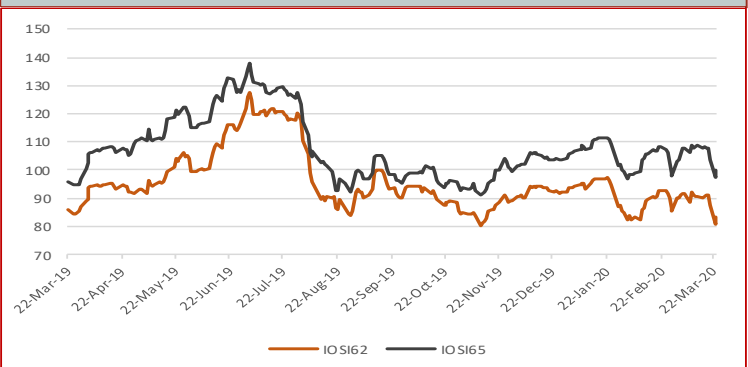
## IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending March 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	819	0.1%	763	1032	116.33	-1.04%	109.21	150.03
Hebei	Qian'an	65% Fe Concentrate	Dry	850	0.0%	735	960	120.73	-1.16%	109.45	139.35
Liaoning	Anshan	65% Fe Concentrate	Wet	660	3.1%	565	720	93.75	1.93%	84.14	104.66
Shandong	Zibo	65% Fe Concentrate	Dry	880	0.0%	785	1040	124.99	-1.16%	113.34	151.33
Week Ending March 20th, 2020				This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	Exchange rate applied: RMB/USD = 7.0999 <sup>2</sup> Last 12 months			
China Mines Concentrate Composite Index RMB/WT				738.54	1.03%	621.60	859.50	Weekly exchange rate applied: RMB/USD 7.0403			

## 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

March 24th, 2020		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	November	December	January	February	MTD	QTD	YTD	November	December	January	February	MTD	QTD	YTD
IOPI62	62% Fe Fines	665	683	706	655	665	674	674	87.30	89.84	94.23	86.23	87.63	89.09	89.09
IOPI58	58% Fe Fines	567	592	600	563	580	579	579	74.67	78.18	80.46	74.33	76.72	76.95	76.95
IOPI65	65% Fe Fines	723	764	808	797	794	800	800	95.29	100.90	108.54	105.84	105.36	106.50	106.50

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

## FREIGHT RATES

March 24th, 2020		CFR Qingdao, USD/dry tonne							March 23rd, 2020		FREIGHT RATES - DRY BULK US\$/wet tonne				
Index	Fe Content	November	December	January	February	MTD	QTD	YTD	Route	Designation	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>	
IOSI62	62% Fe Fines	85.83	92.64	93.85	87.46	89.54	90.38	90.38	W. Australia - Qingdao	C5	4.35	0.04	1.05%	4.21	11.42
IOSI65	65% Fe Fines	96.49	104.14	107.56	102.94	105.89	105.48	105.48	Tubarao - Qingdao	C3	9.88	-0.09	-0.90%	9.88	29.10

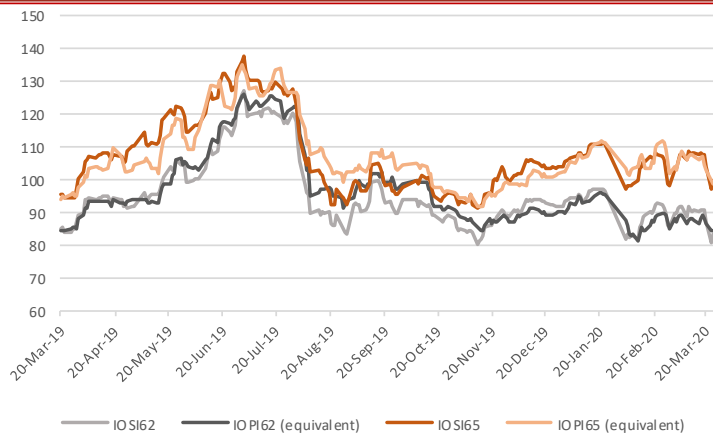
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending March 20th, 2019		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	November	December	January	February	MTD	QTD	YTD	November	December	January	February	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	794	825	868	834	870	856	856	98.44	97.89	108.99	106.19	111.19	108.57	108.57

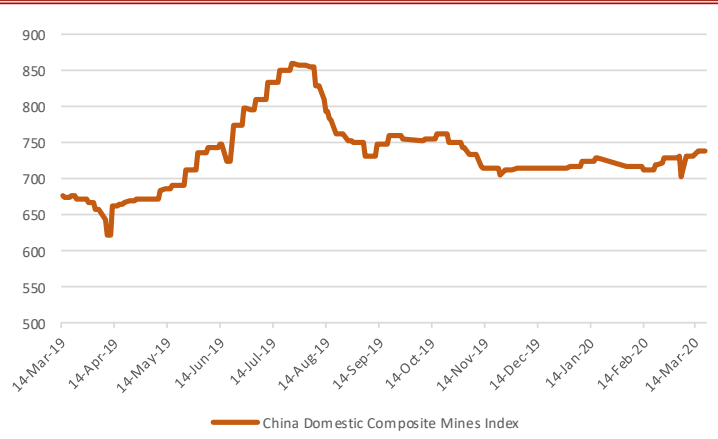
## IRON ORE INDEX PREMIUMS/DISCOUNTS

March 24th, 2020		PORT STOCK INDEX (RMB/WT)				March 24th, 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	-81		-12.44%		IOSI65	65% Fe Fines	16.45		19.69%	
IOPI65	65% Fe Fines	108		16.59%							

## IRON ORE INDEX COMPARISONS (USD/DMT)



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



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

March 24th, 2020				March 24th, 2020			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	612	2	-39	Roy Hill	78.61	2.90	-4.94
SIMEC Fines	594	4	-57	SIMEC Fines	75.29	2.90	-8.26
PB Fines	630	-2	-21	PB Fines	83.06	2.90	-0.49
Newman Fines	652	1	1	Newman Fines	84.76	2.90	1.21
MAC Fines	627	1	-24	MAC Fines	78.44	2.90	-5.11
Jimblebar Blended Fines	568	-4	-83	Jimblebar Blended Fines	70.74	2.90	-12.81
Carajas Fines	758	-5	107	Carajas Fines	99.71	2.90	16.16
Brazilian SSF	652	1	1	Brazilian SSF	85.11	2.90	1.56
Brazilian Blend Fines	661	0	10	Brazilian Blend Fines	86.49	2.90	2.94
RTX Fines	588	1	-63	RTX Fines	77.04	2.90	-6.51
West Pilbara Fines	617	1	-34	West Pilbara Fines	76.81	2.90	-6.74

March 24th, 2020			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	530	-3	-40
FMG Blended Fines	560	-5	-10
Robe River	535	-4	-35
Western Fines	531	3	-39
Atlas Fines	569	-3	-1
Yandi	605	1	35

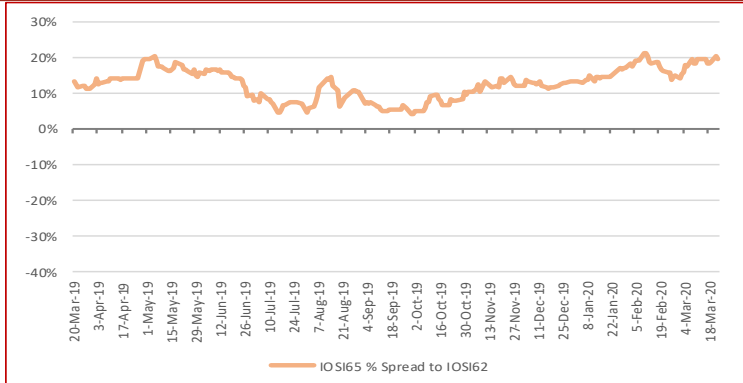
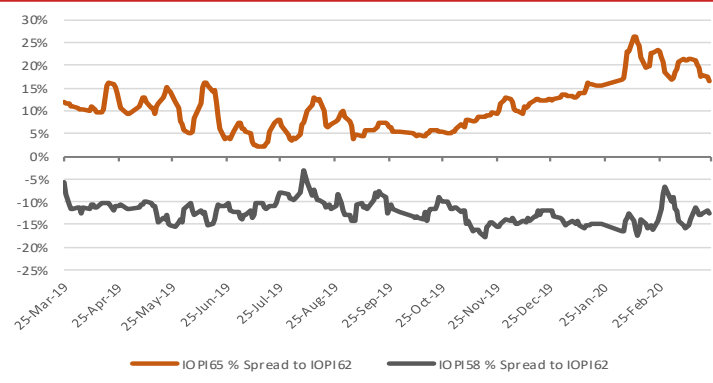
## IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	7.00	0.00	1% Fe	High Grade Fe 60 - 63%	3.25	0.00
	High Grade Fe 63 - 64%	2.00	-1.00		High Grade Fe 63 - 64%	3.25	0.00
	High Grade Fe 64 - 65%	2.00	-1.00		High Grade Fe 64 - 65%	3.25	0.00
	High Grade Fe 65 - 65.5%	2.00	-1.00		High Grade Fe 65 - 65.5%	3.25	0.00
1% Alumina	Low Grade Fe	1.00	0.00	1% Alumina	High Fe Grade Al <2.25%	2.75	0.00
	High Fe Grade Al <2.25%	38.00	-3.00		High Fe Grade Al 2.25-4%	0.75	0.00
	High Fe Grade Al 2.25-4%	4.00	1.00				
	Low Fe Grade Al <2.25%	69.00	3.00				
1% Silica	Low Fe Grade Al 2.25-4%	33.00	0.00	1% Silica	High Fe Grade Si <4%	1.75	0.00
	High Fe Grade Si <4%	26.00	0.00		High Fe Grade Si 4 - 6.5%	0.75	0.00
0.01% Phosphorus	High Fe Grade Si 4-6.5%	24.00	-2.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.50	0.00
	Low Fe Grade	13.00	-4.00		High Fe Grade 0.115%<P<0.15%	0.50	0.00
	High Fe Grade 0.09%<P<0.115%	12.00	2.00				
	High Fe Grade 0.115%<P<0.15%	7.00	-3.00				
	Low Fe Grade 0.09%<P<0.15%	7.00	0.00				

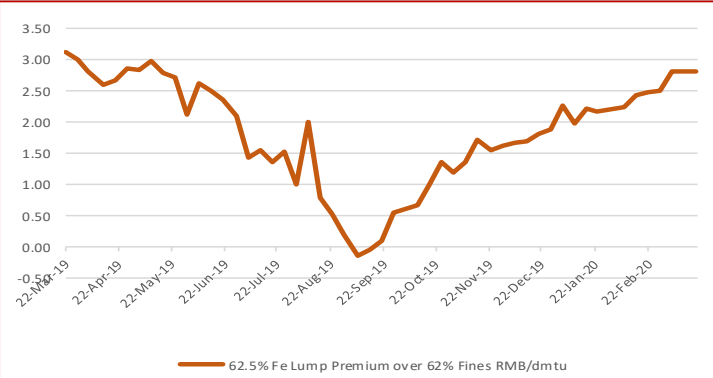
## Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-35.00	0.00	Fangcheng	-5.00	0.00	Lanshan	0.00	0.00	Qingdao	0.00	0.00
Beilun	5.00	0.00	Jiangyin	-20.00	0.00	Lianyungang	0.00	0.00	Rizhao	0.00	0.00
Caofeidian	-10.00	0.00	Jingtang	-10.00	0.00	Majishan	0.00	0.00	Shekou	0.00	0.00
Dalian	-35.00	0.00	Lanqiao	0.00	0.00	Nantong	-20.00	0.00	Tianjin	-20.00	0.00

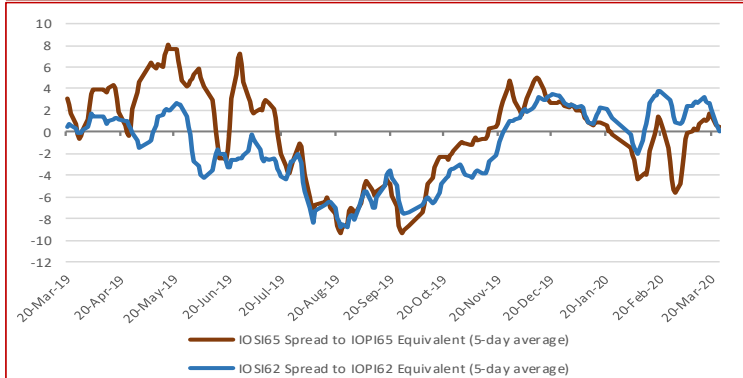
IRON ORE INDEX PREMIUMS/DISCOUNTS



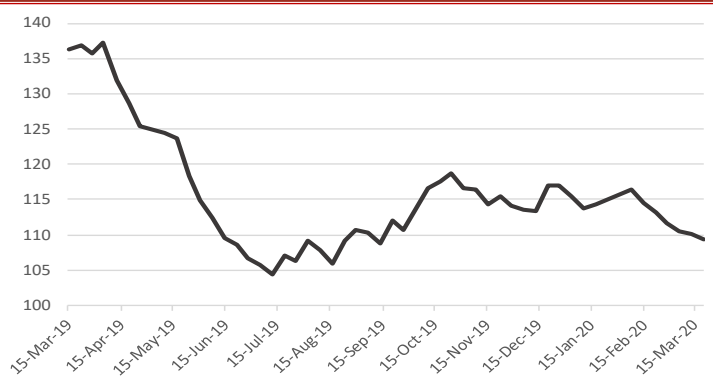
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



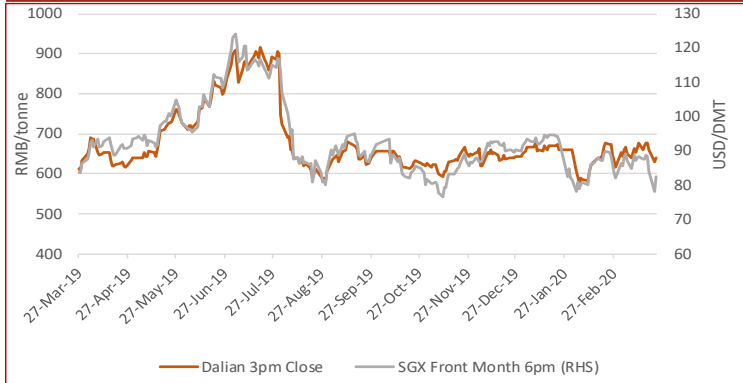
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



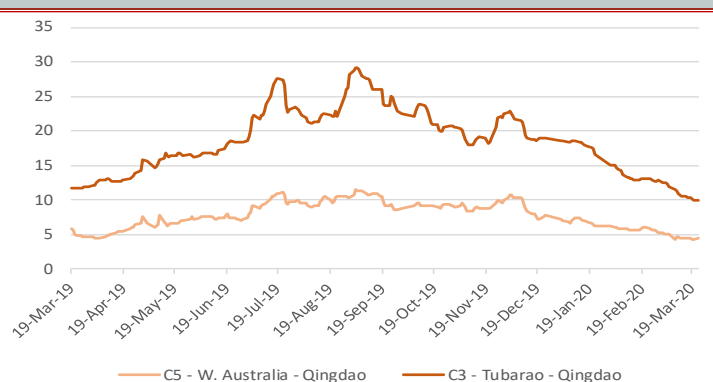
IRON ORE PORT INVENTORIES (MILLION TONNES)

Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	13.92	-1.90%	10.80	17.00
Qingdao	13.27	-0.75%	12.38	18.32
Caofeidian	15.08	2.52%	13.47	18.98
Tianjin	7.24	-2.03%	6.37	8.68
Rizhao	12.58	-0.32%	11.41	17.10
<b>Total (35 Ports)</b>	<b>109.34</b>	<b>-0.75%</b>	<b>104.40</b>	<b>137.30</b>

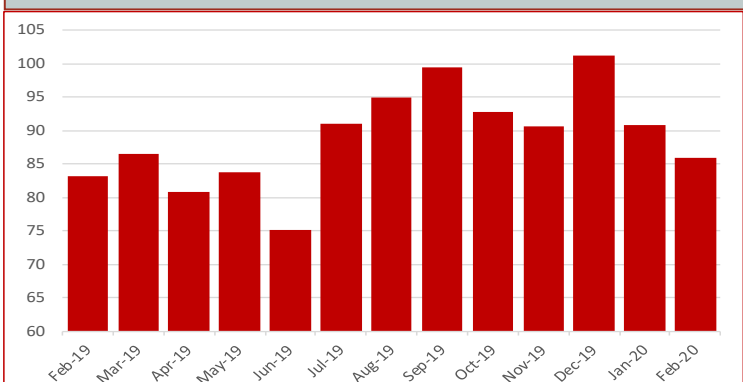
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Mar 24th, 3.00 pm close			Mar 24th, 5.30 pm		
Contract	I2005	Change	Change %	Apr'20	Change	Change %
Closing Price	639.50	10.5	1.67%	82.53	4.26	5.44%
Vol traded ('000 lots)	136.32	37.0	37.19%	36.03	3.49	10.73%
Open positions ('000 lots)	48.05	-0.45	-0.94%	154.90	-8.97	-5.47%
Day Low	619.0	-10.0	-1.59%	78.52	1.22	1.58%
Day High	644.0	-6.0	-0.92%	82.73	-1.27	-1.51%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)

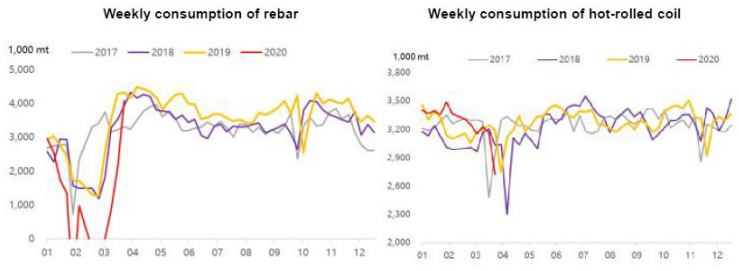


STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne

Product	20/3/2020	Change	Change %
ReBar HRB400 φ18mm	3,520.0	50	1.44%
Wirerod Q300 φ6.5mm	3,650.0	50	1.39%
HRC Q235/SS400 5.5mm*1500*C	3,440.0	-70	-1.99%
CRC SPCC/ST12 1.0mm*1250*2500	4,080.0	-70	-1.69%
Medium & Heavy Plate Q235B 20mm	3,700.0	50	1.37%
GI ST02Z 1.0mm*1000*C	4,270.0	-70	-1.61%
Colour Coated Plate	6,650.0	0	0.00%

CHINESE STEEL CONSUMPTION



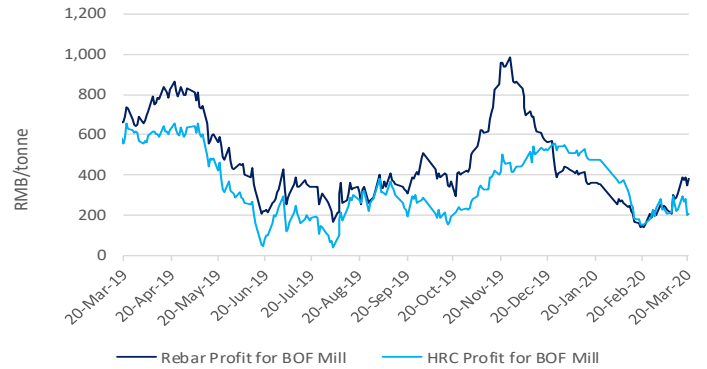
CHINESE STEEL MILL PROFITABILITY

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	90.90	0.35	Mmi CFR Equivalent index for 1st Feb
Coke	1,760	-50	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,240	0	steel scrap (6mm) in Zhangjiagang, exl. tax
Billet Cost	2,929	-14	Q234, incl. tax
Rebar cost - Blast furnace	3,158	-11	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	382	71	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,245	-14	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	205	-20	based on Shanghai prices, incl. tax

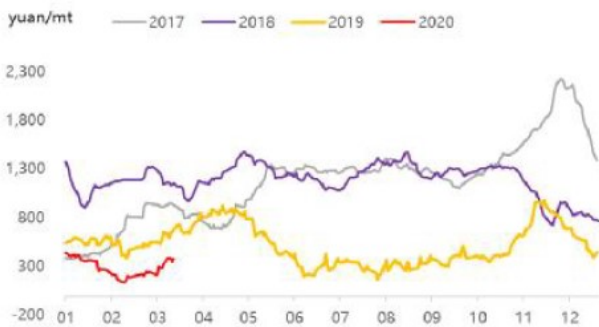
Note: 1 Costs in the table are calculated based on today's market prices and fact of our management, sales, financial and depreciations fees.  
2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

CHINESE STEEL MILL PROFITABILITY



CHINESE STEEL MILL PROFITABILITY

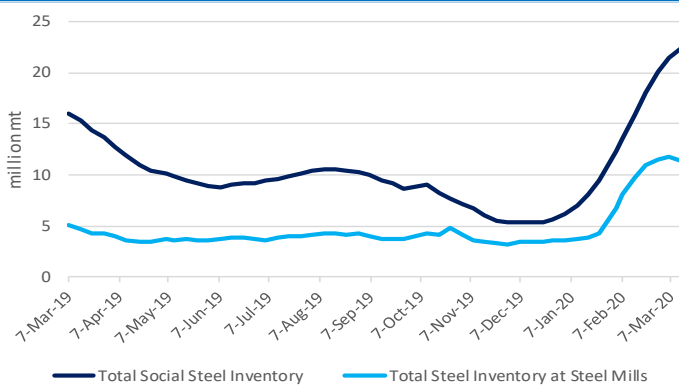
Rebar profits



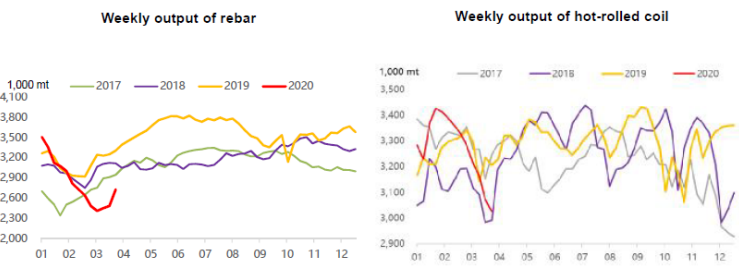
Hot-rolled coil profits



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	
<b>Data Exclusions*</b>					
	<b>62%</b>	<b>58%</b>	<b>65%</b>		
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					
March 24th, 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	61.49%	2.33%	3.85%	0.100%	9.29%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	10.00%
Newman Fines	62.40%	2.27%	4.16%	0.078%	7.74%	Newman Fines	62.40%	2.20%	4.30%	0.080%	6.40%
MAC Fines	60.80%	2.33%	4.66%	0.075%	7.89%	MAC Fines	61.00%	2.70%	4.70%	0.110%	9.30%
Jimblebar Blended Fines	60.25%	3.13%	4.77%	0.115%	7.78%	Jimblebar Blended Fines	59.50%	3.70%	5.80%	0.135%	8.30%
Carajas Fines	65.19%	1.34%	1.67%	0.079%	7.99%	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	62.68%	1.53%	4.94%	0.079%	7.96%	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%
March 24th, 2020	Specifications applied for 58% brand assessments										
	Fe	Alumina	Silica	Phos	Moisture						
SSF	56.70%	3.08%	6.18%	0.061%	9.16%						
FMG Blended Fines	58.15%	2.66%	5.60%	0.059%	7.98%						
Robe River	56.31%	3.17%	5.64%	0.041%	9.10%						
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	57.09%	1.55%	6.43%	0.034%	8.97%						

## 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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