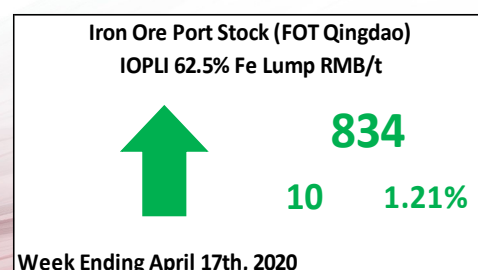
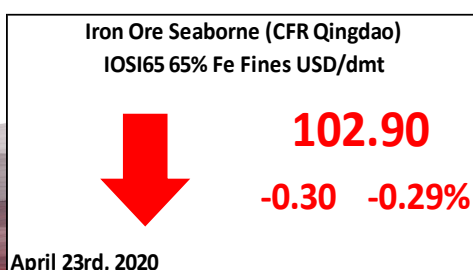
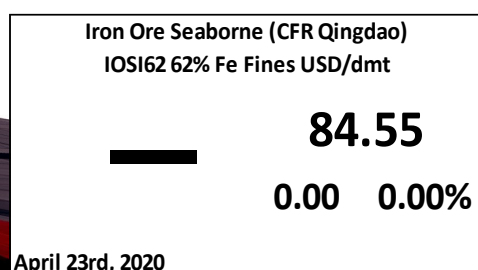
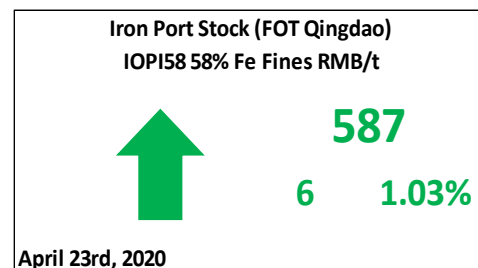
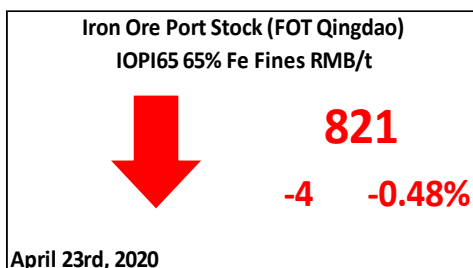
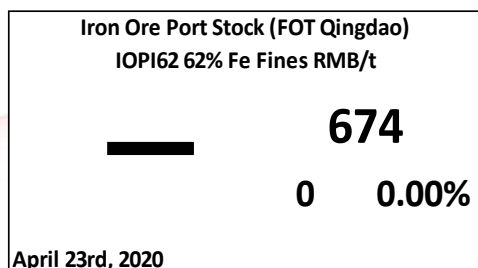


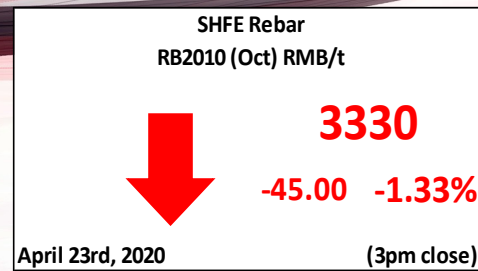
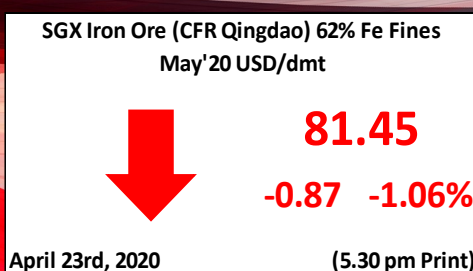
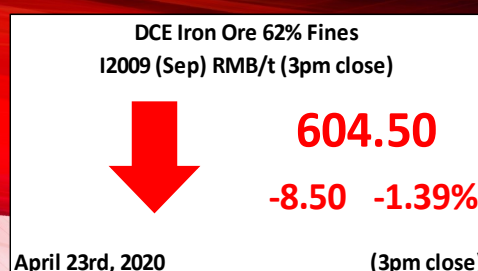


## MMi Dashboard

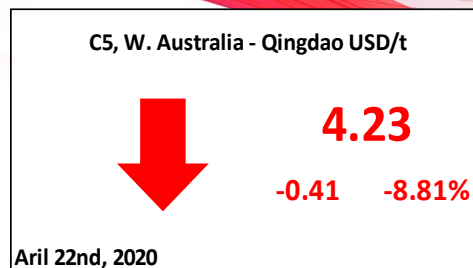
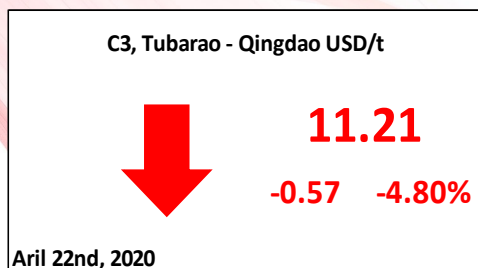
## Iron Ore Price Indices



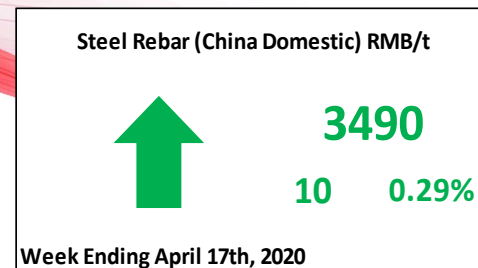
## Exchange Traded Contracts



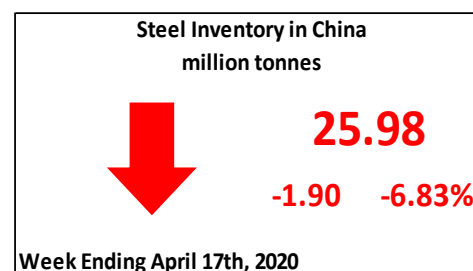
## Freight Rates



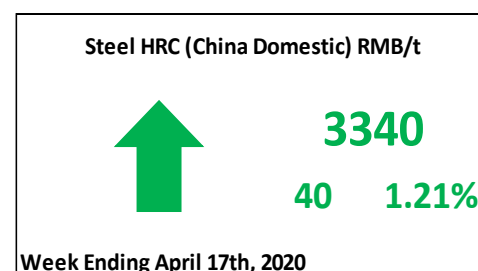
## Steel Price



## Inventory Levels



## Steel Price



## IRON ORE PORT STOCK INDEX (IOPI)

April 23rd, 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	674	0	0.0%	668	672	619	928	87.66	0.02	0.0%	87.12	88.56	81.37	126.12
IOPI58	58% Fe Fines	587	6	1.0%	577	578	531	823	76.69	0.84	1.1%	75.49	76.46	70.02	112.44
IOPI65	65% Fe Fines	821	-4	-0.5%	804	801	696	992	107.61	-0.52	-0.5%	105.57	106.29	91.81	135.34

## IRON ORE SEABORNE INDEX (IOSI)

## MARKET COMMENTARY

April 23rd, 2020		CFR Qingdao, USD/dry tonne							Iron ore physical port stock prices remain volatile this week, prices generally drifting lower on slack demand. According to SMM, mill profit margins for rebar have declined to 370yuan/mt and to 140yuan/mt for HRC, so their demand for low grade iron ore products has increased, with the price spread between high-grade and low-grade iron ore products likely to shrink. Lump and pellet premiums keep falling, mainly caused by the increasing supply of domestic concentrates and the thinner profits margins at the mills. In the port stock market, the price spread of lump and fines has narrowed, boosting demand for lump and likely to keep those premiums stable for now.							
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	84.55	0.00	0.00%	83.98	88.77	80.40	127.50								
IOSI65	65% Fe Fines	102.90	-0.30	-0.29%	100.75	104.38	91.20	137.95								

## IRON ORE PORT LUMP INDEX (IOPLI)

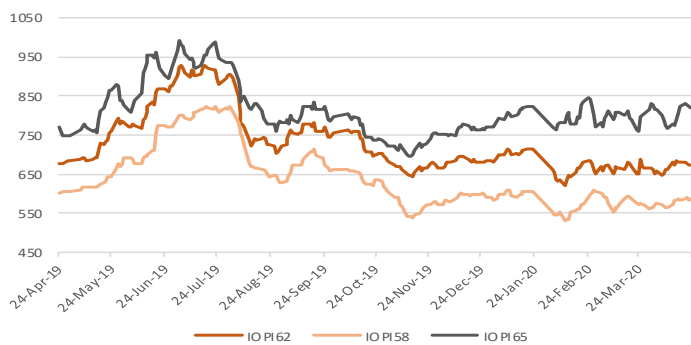
Week Ending April 17th, 2020		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>3</sup>						
Index	Fe Content	Price	W-o-W	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>	Price	W-o-W	Change %	MTD	YTD	Low <sup>2</sup>	High <sup>2</sup>
IOPLI62	62.5% Fe Lump	834	10	1.2%	832	852	763	1051	105.38	1.42	1.37%	104.92	107.82	93.24	133.81

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

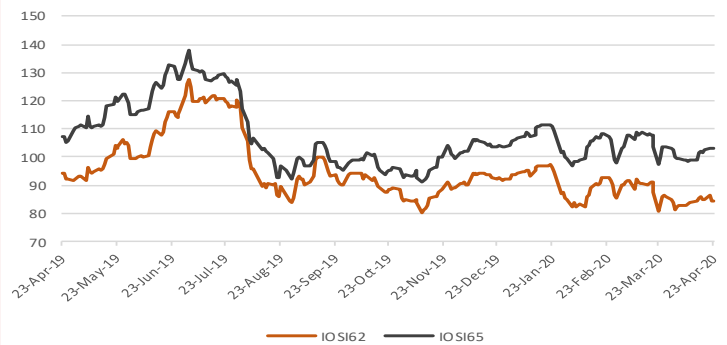
Week Ending April 17th, 2020		RMB/tonne (excluding tax) <sup>3</sup>						USD/tonne (excluding tax) <sup>3</sup>			
Province	Region	Product	Basis	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Hebei	Hanxing	66% Fe Concentrate	Dry	779	-0.3%	763	1032	110.48	-0.15%	109.21	150.03
Hebei	Qian'an	65% Fe Concentrate	Dry	780	0.0%	765	960	110.63	0.11%	110.51	139.35
Liaoning	Anshan	65% Fe Concentrate	Wet	630	-3.1%	565	720	89.35	-2.97%	84.14	104.66
Shandong	Zibo	65% Fe Concentrate	Dry	865	0.0%	795	1040	122.68	0.11%	113.34	151.33
Week Ending April 17th, 2020				This week	Change %	Low <sup>2</sup>	High <sup>2</sup>				
China Mines Concentrate Composite Index RMB/WT				706.36	-1.07%	621.60	859.50				

<sup>1</sup> Exchange rate applied: RMB/USD = 7.0887 <sup>2</sup>Last 12 months  
<sup>3</sup> Weekly exchange rate applied: RMB/USD 7.0508

## 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

April 23rd, 2020		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	December	January	February	March	MTD	QTD	YTD	December	January	February	March	MTD	QTD	YTD
IOPI62	62% Fe Fines	683	706	655	667	668	668	672	89.84	94.23	86.23	87.61	87.12	87.12	88.56
IOPI58	58% Fe Fines	592	600	563	577	577	577	578	78.18	80.46	74.33	76.20	75.49	75.49	76.46
IOPI65	65% Fe Fines	764	808	797	798	804	804	801	100.90	108.54	105.84	105.60	105.57	105.57	106.29

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

## FREIGHT RATES

April 23rd, 2020		CFR Qingdao, USD/dry tonne							Freight Rates - Dry Bulk US\$/wet tonne						
Index	Fe Content	December	January	February	March	MTD	QTD	YTD	Route	Designation	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>	
IOSI62	62% Fe Fines	92.64	93.85	87.46	88.60	83.98	83.98	88.77	W. Australia - Qingdao	C5	4.23	-0.41	-8.81%	4.00	11.42
IOSI65	65% Fe Fines	104.14	107.56	102.94	105.31	100.75	100.75	104.38	Tubarao - Qingdao	C3	11.21	-0.57	-4.80%	9.20	29.10

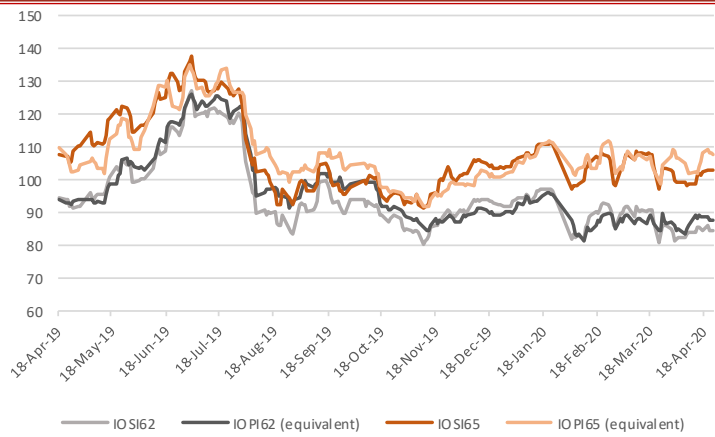
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending April 17th, 2020		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	December	January	February	March	MTD	QTD	YTD	December	January	February	March	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	825	868	834	868	832	832	852	97.89	108.99	106.19	110.46	104.92	104.92	107.82

## IRON ORE INDEX PREMIUMS/DISCOUNTS

April 23rd, 2020		PORT STOCK INDEX (RMB/WT)				April 23rd, 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	-87		-12.91%		IOSI65	65% Fe Fines	18.35		21.70%	
IOPI65	65% Fe Fines	147		21.81%							

## IRON ORE INDEX COMPARISONS (USD/DMT)



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



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

April 23rd, 2020				April 23rd, 2020			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	632	0	-42	Roy Hill	80.05	0.00	-4.50
SIMEC Fines	598	0	-76	SIMEC Fines	77.42	0.00	-7.13
PB Fines	657	0	-17	PB Fines	84.12	0.00	-0.43
Newman Fines	670	0	-4	Newman Fines	85.95	0.00	1.40
MAC Fines	639	0	-35	MAC Fines	79.17	0.00	-5.38
Jimblebar Blended Fines	595	0	-79	Jimblebar Blended Fines	71.65	0.00	-12.90
Carajas Fines	822	-4	148	Carajas Fines	102.90	0.00	18.35
Brazilian SSF	670	-1	-4	Brazilian SSF	88.30	0.00	3.75
Brazilian Blend Fines	698	3	24	Brazilian Blend Fines	88.55	0.00	4.00
RTX Fines	630	0	-44	RTX Fines	77.45	0.00	-7.10
West Pilbara Fines	627	0	-47	West Pilbara Fines	78.15	0.00	-6.40

April 23rd, 2020			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	533	6	-54
FMG Blended Fines	574	6	-13
Robe River	540	6	-47
Western Fines	527	5	-60
Atlas Fines	600	5	13
Yandi	593	3	6

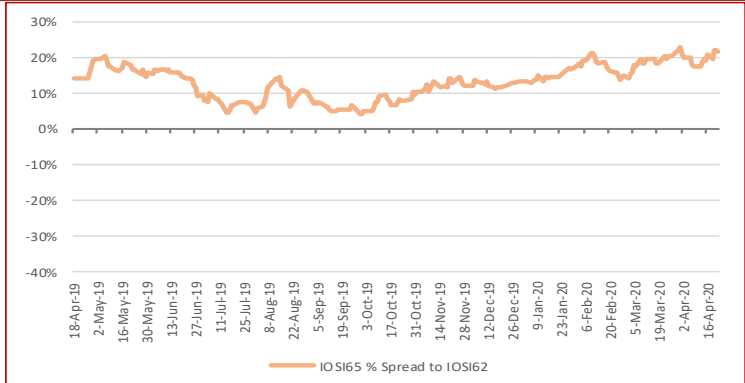
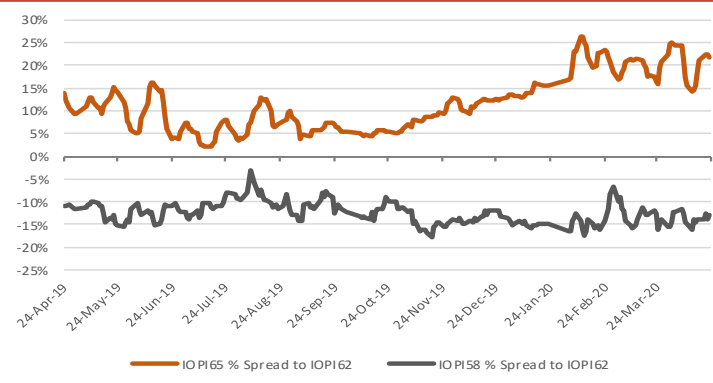
## IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	3.25	0.00	
	High Grade Fe 63 - 64%	8.00	0.00		High Grade Fe 63 - 64%	3.75	0.00	
	High Grade Fe 64 - 65%	8.00	0.00		High Grade Fe 64 - 65%	3.75	0.00	
	High Grade Fe 65 - 65.5%	8.00	0.00		High Grade Fe 65 - 65.5%	3.75	0.00	
	Low Grade Fe	2.00	0.00					
1% Alumina	High Fe Grade Al <2.25%	39.00	-1.00	1% Alumina	High Fe Grade Al <2.25%	3.50	0.00	
	High Fe Grade Al 2.25-4%	4.00	0.00		High Fe Grade Al 2.25-4%	1.00	0.00	
	Low Fe Grade Al <2.25%	43.00	-3.00					
	Low Fe Grade Al 2.25-4%	44.00	0.00					
1% Silica	High Fe Grade Si <4%	34.00	-1.00	1% Silica	High Fe Grade Si <4%	2.00	0.00	
	High Fe Grade Si 4-6.5%	27.00	0.00		High Fe Grade Si 4 - 6.5%	0.25	0.00	
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	4.00	0.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.75	0.00	
	High Fe Grade 0.115%<P<0.15%	4.00	0.00		High Fe Grade 0.115%<P<0.15%	0.50	0.00	
	Low Fe Grade 0.09<P<0.1%	1.00	0.00					

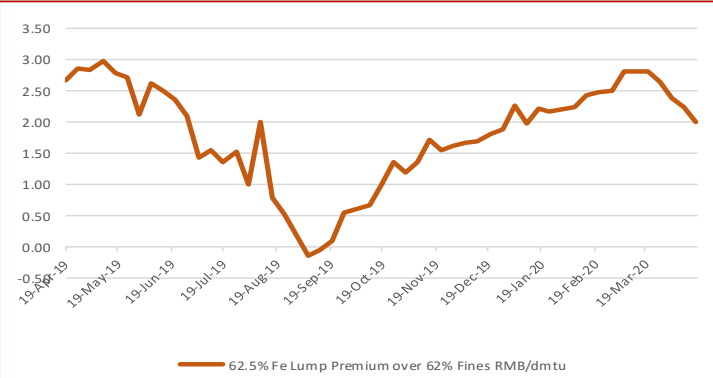
## Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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	-10.00	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	-15.00	0.00

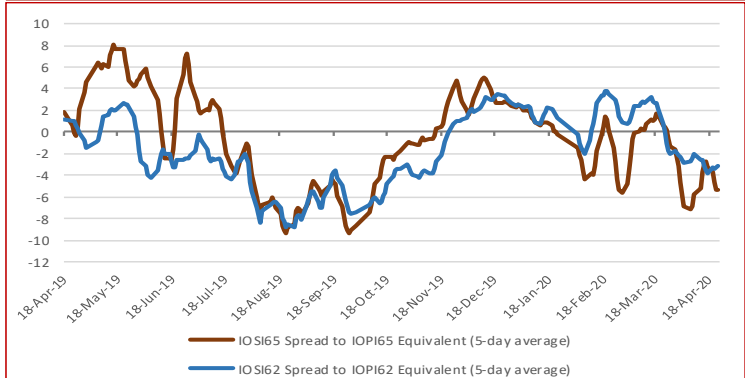
IRON ORE INDEX PREMIUMS/DISCOUNTS



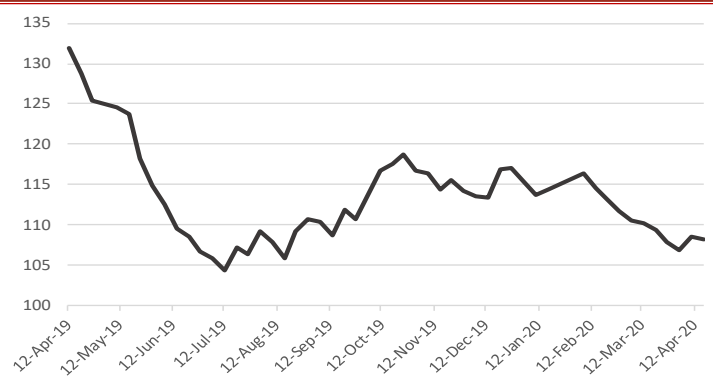
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



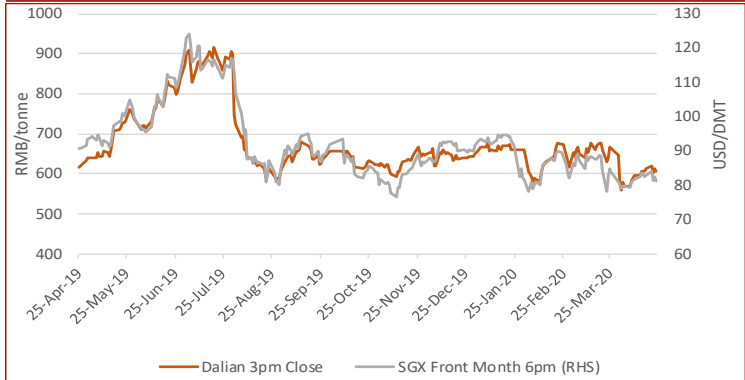
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending April 17th, 2020				
Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	14.39	2.35%	10.80	17.00
Qingdao	12.65	-3.21%	12.38	17.13
Caofeidian	14.21	-0.21%	13.47	17.71
Tianjin	8.08	2.54%	6.37	8.08
Rizhao	11.61	0.09%	11.41	16.48
<b>Total (35 Ports)</b>	<b>108.14</b>	<b>-0.27%</b>	<b>104.40</b>	<b>131.93</b>

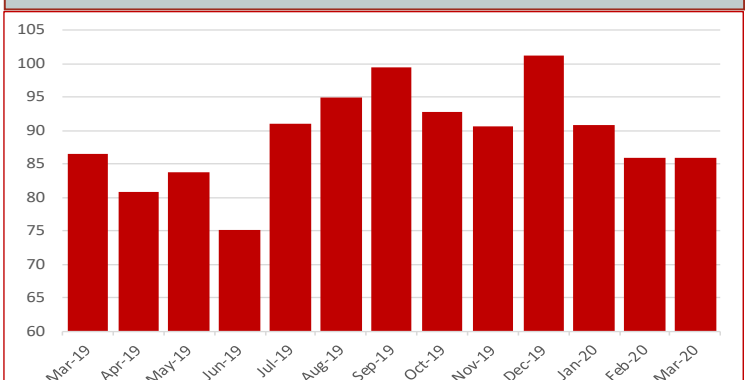
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	April 23rd, 3.00 pm close					
	Contract	Change	Change %	May'20	Change	Change %
Closing Price	604.50	-8.5	-1.39%	81.45	-0.87	-1.06%
Vol traded ('000 lots)	87.39	-8.45	-8.81%	9.13	-8.98	-49.60%
Open positions ('000 lots)	66.28	5.25	8.60%	158.96	-0.98	-0.61%
Day Low	601.5	7.5	1.26%	80.95	0.90	1.12%
Day High	617.5	3.5	0.57%	83.21	0.89	1.08%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)

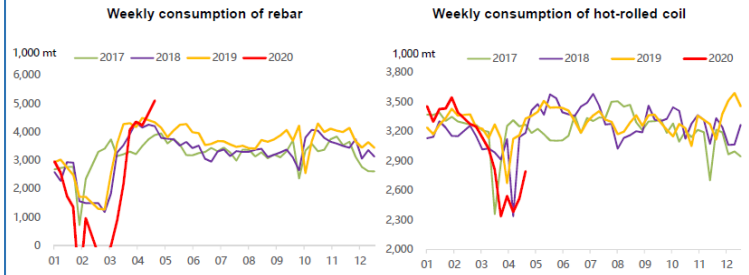


STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne

Product	17/4/2020	Change	Change %
ReBar HRB400 φ18mm	3,490.0	10	0.29%
Wirerod Q300 φ6.5mm	3,630.0	0	0.00%
HRC Q235/SS400 5.5mm*1500*C	3,340.0	40	1.21%
CRC SPCC/ST12 1.0mm*1250*2500	3,720.0	30	0.81%
Medium & Heavy Plate Q235B 20mm	3,600.0	10	0.28%
GI ST02Z 1.0mm*1000*C	4,050.0	40	1.00%
Colour Coated Plate	6,400.0	-50	-0.78%

CHINESE STEEL CONSUMPTION



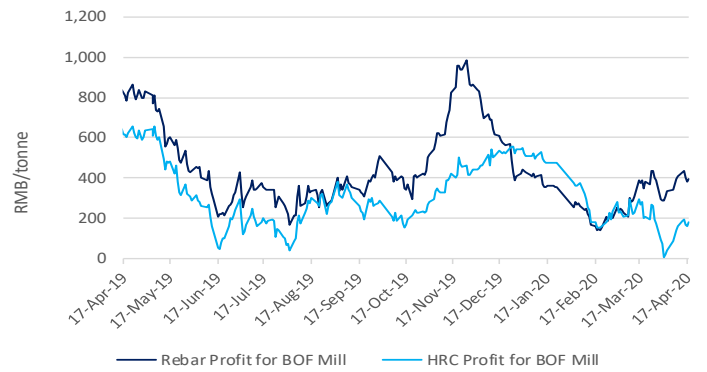
CHINESE STEEL MILL PROFITABILITY

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	84.90	1.00	Mmi CFR Equivalent index for 1st Feb
Coke	1,710	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	1,930	60	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	2,844	1	Q234, incl. tax
Rebar cost - Blast furnace	3,084	22	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	396	-12	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,160	21	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	180	19	based on Shanghai prices, incl. tax

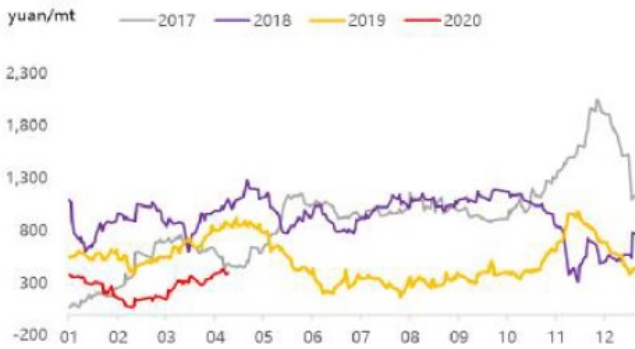
Note: 1 Costs in the table are calculated based on today's market prices and factored our management, sales, financial and depreciations fees.  
2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

CHINESE STEEL MILL PROFITABILITY

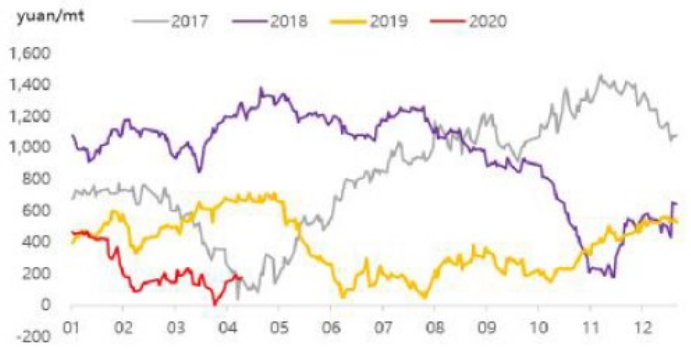


CHINESE STEEL MILL PROFITABILITY

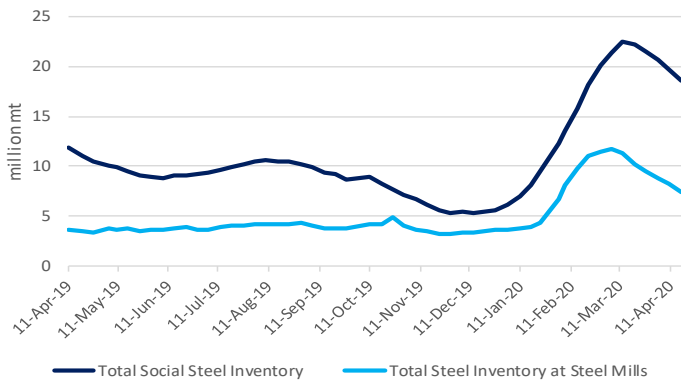
Rebar profits



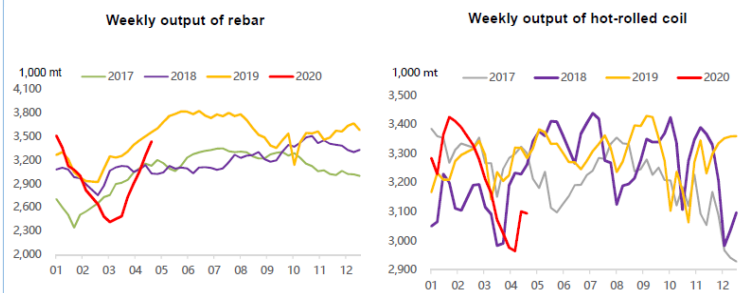
Hot-rolled coil profits



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	1	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					
April 23rd, 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	60.83%	2.31%	4.67%	0.056%	9.15%	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%	2.35%	3.87%	0.101%	9.35%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	10.00%
Newman Fines	62.27%	2.37%	4.28%	0.084%	7.91%	Newman Fines	62.40%	2.20%	4.30%	0.080%	6.40%
MAC Fines	60.74%	2.34%	4.70%	0.076%	7.97%	MAC Fines	61.00%	2.70%	4.70%	0.110%	9.30%
Jimblebar Blended Fines	60.16%	3.16%	4.88%	0.114%	7.77%	Jimblebar Blended Fines	59.50%	3.70%	5.80%	0.135%	8.30%
Carajas Fines	65.31%	1.35%	1.55%	0.075%	8.21%	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	62.89%	1.43%	4.66%	0.084%	8.25%	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%
April 23rd, 2020	Specifications applied for 58% brand assessments						Specifications applied for 58% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture		Fe	Alumina	Silica	Phos	Moisture
SSF	56.69%	3.09%	6.17%	0.061%	9.13%						
FMG Blended Fines	58.11%	2.65%	5.59%	0.058%	8.08%						
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	57.08%	1.60%	6.45%	0.035%	9.07%						

## 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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