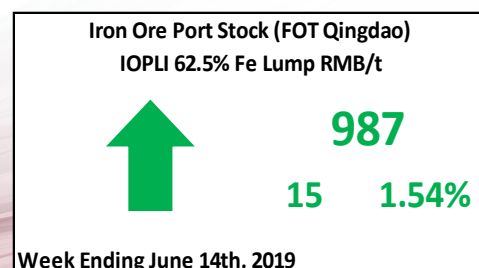
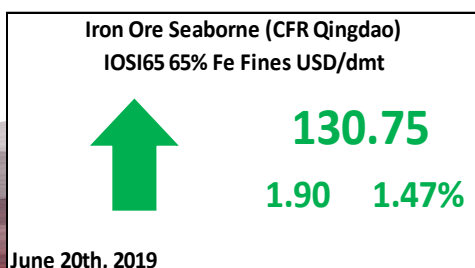
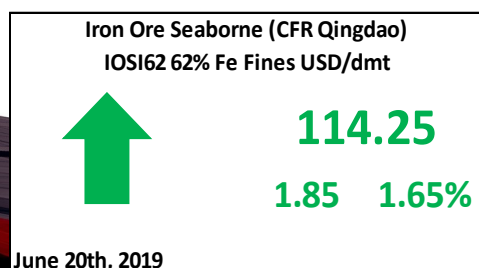
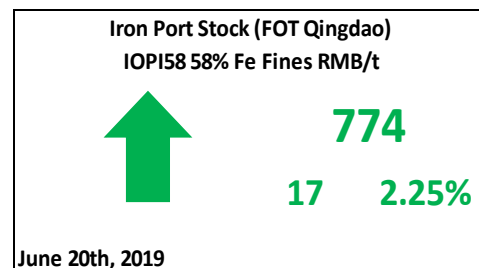
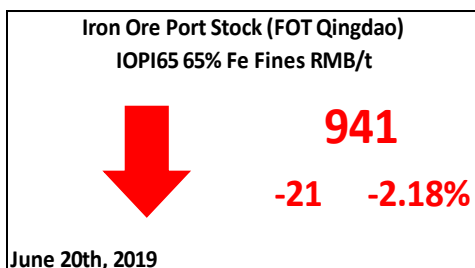
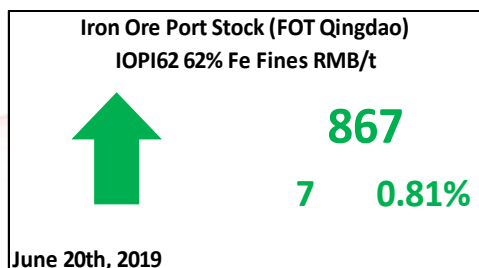


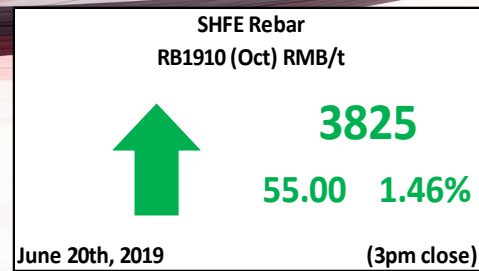
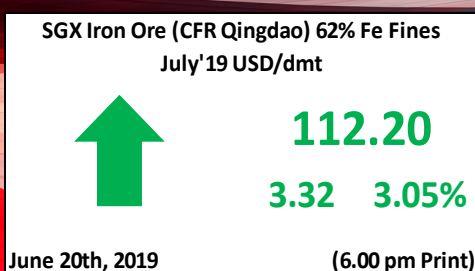
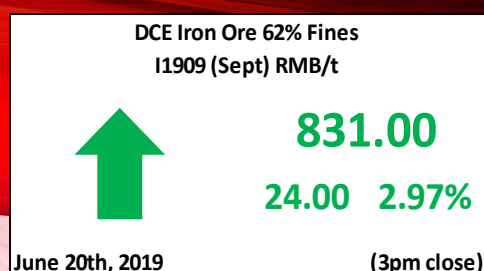


## MMi Dashboard

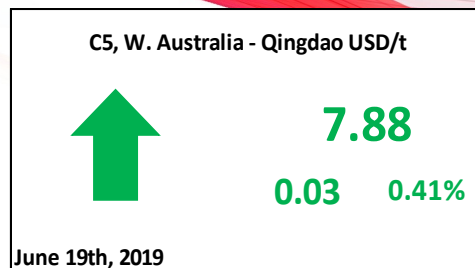
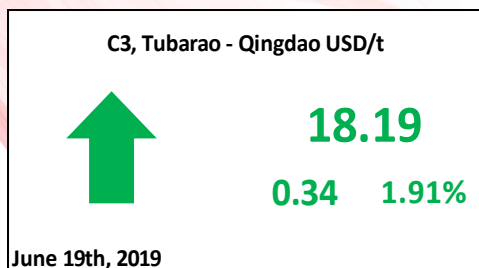
## Iron Ore Price Indices



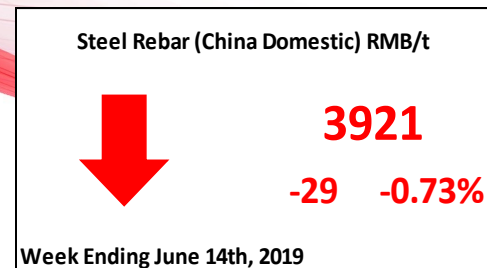
## Exchange Traded Contracts



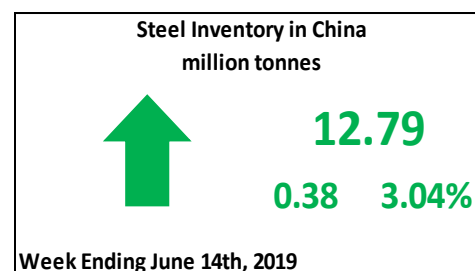
## Freight Rates



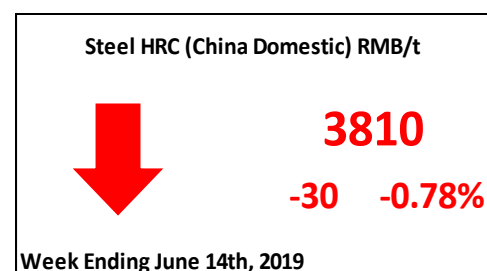
## Steel Price



## Inventory Levels



## Steel Price



## IRON ORE PORT STOCK INDEX (IOPI)

June 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	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	867	7	0.8%	805	672	453	867	117.29	1.12	1.0%	108.45	90.17	61.66	117.29
IOPI58	58% Fe Fines	774	17	2.2%	704	581	324	774	105.44	2.54	2.5%	95.45	77.90	41.71	105.44
IOPI65	65% Fe Fines	941	-21	-2.2%	897	754	579	962	127.64	-2.77	-2.1%	121.33	101.72	79.79	130.41

## IRON ORE SEABORNE INDEX (IOSI)

June 20th, 2019		CFR Qingdao, USD/dry tonne							MARKET COMMENTARY			
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low <sup>3</sup>	High <sup>3</sup>				
IOSI62	62% Fe Fines	114.25	1.85	1.65%	105.39	90.18	62.95	114.25	Vale announced that it is getting the permission to resume its 20 million mt wet processing operation at Brucutu within 72 hours while Rio Tinto revised its iron ore production guidance down by around 13 million mt. The Chinese DCE iron ore futures market continued to hit new multi-year highs, reaching 837yuan/mt. Port stock quotes reaching higher as PB Fines in Tangshan was heard trading at 855yuan/mt, up 20yuan/mt over yesterday. Some traders are still reluctant to sell and expect higher prices, while mills continued to buy in small parcels, behaving cautiously in this volatile market.			
IOSI65	65% Fe Fines	130.75	1.90	1.47%	122.04	104.49	83.20	130.75				

## IRON ORE PORT LUMP INDEX (IOPLI)

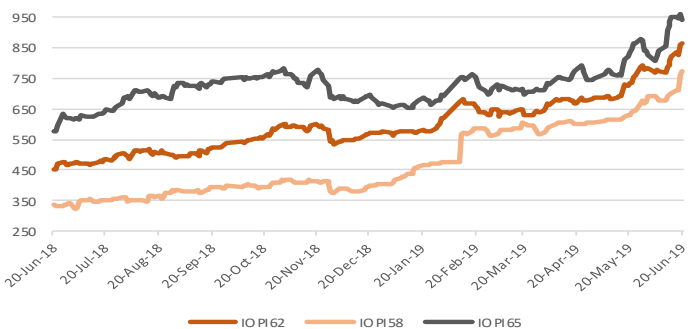
Week Ending June 14th, 2019		FOT Qingdao (inc. 16% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne <sup>4</sup>						
Index	Fe Content	Price	W-o-W	Change %	MTD	YTD	Low <sup>3</sup>	High <sup>3</sup>	Price	W-o-W	Change %	MTD	YTD	Low <sup>3</sup>	High <sup>3</sup>
IOPLI62	62.5% Fe Lump	987	15	1.5%	980	869	584	987	124.93	1.88	1.53%	123.99	111.49	76.82	124.93

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

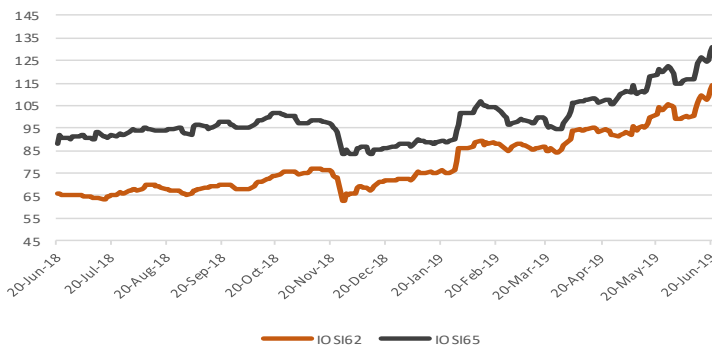
Week Ending June 14th, 2019				RMB/tonne (excluding tax) <sup>4</sup>				USD/tonne (excluding tax) <sup>4</sup>			
Province	Region	Product	Basis	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Hebei	Hanxing	66% Fe Concentrate	Dry	866	-4.0%	596	902	125.63	-4.05%	91.97	130.93
Hebei	Qian'an	65% Fe Concentrate	Dry	840	2.4%	645	840	121.86	2.38%	100.26	121.86
Liaoning	Anshan	65% Fe Concentrate	Wet	645	0.0%	465	745	93.57	-0.06%	68.21	93.62
Shandong	Zibo	65% Fe Concentrate	Dry	910	-0.5%	660	915	132.01	-0.60%	99.75	132.82
Week Ending June 14th, 2019				This week	Change %	Low <sup>2</sup>	High <sup>2</sup>				
China Mines Concentrate Composite Index RMB/WT				747.91	0.5%	551.00	747.91				

<sup>1</sup> Exchange rate applied: RMB/USD = 6.8805 <sup>2</sup> Last 12 months <sup>3</sup> Since June 1  
<sup>4</sup> Weekly exchange rate applied: RMB/USD 6.8932

## 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

June 20th, 2019		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne						
Index	Fe Content	February	March	April	May	MTD	QTD	YTD	February	March	April	May	MTD	QTD	YTD
IOPI62	62% Fe Fines	654	639	675	729	805	726	672	76.16	87.09	85.37	98.40	108.45	98.60	90.17
IOPI58	58% Fe Fines	569	583	600	637	704	639	581	57.99	75.22	77.49	86.39	95.45	86.91	77.90
IOPI65	65% Fe Fines	733	714	753	812	897	810	754	88.65	98.08	95.78	110.00	121.33	110.36	101.72

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

June 20th, 2019		CFR Qingdao, USD/dry tonne							FREIGHT RATES - DRY BULK US\$/wet tonne						
Index	Fe Content	February	March	April	May	MTD	QTD	YTD	Route	Designation	Change	Change %	Low <sup>2</sup>	High <sup>2</sup>	
IOSI62	62% Fe Fines	87.39	86.18	93.42	98.68	105.39	98.26	90.18	W. Australia - Qingdao	C5	7.88	0.03	0.41%	4.39	10.00
IOSI65	65% Fe Fines	102.56	97.22	106.75	115.53	122.04	113.71	104.49	Tubarao - Qingdao	C3	18.19	0.34	1.91%	11.61	24.76

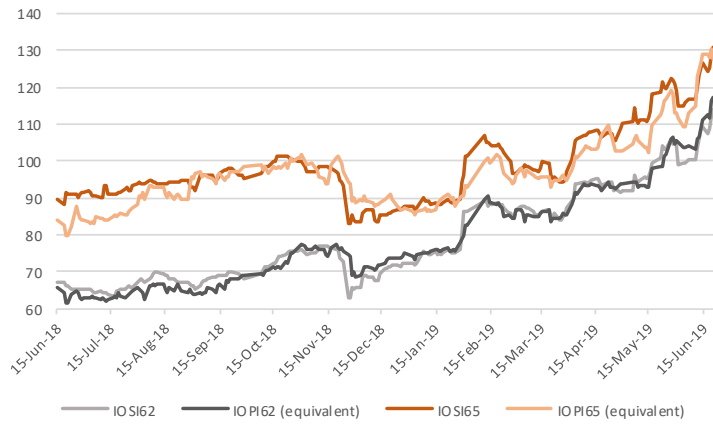
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending June 14th, 2019		FOT Qingdao (inc. 16% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 16% VAT), USD/dry tonne <sup>1</sup>						
Index	Fe Content	February	March	April	May	MTD	QTD	YTD	February	March	April	May	MTD	QTD	YTD
IOPLI62	62.5% Fe Lump	842	858	872	919	980	913	869	94.22	99.57	111.03	117.12	123.99	116.81	109.33

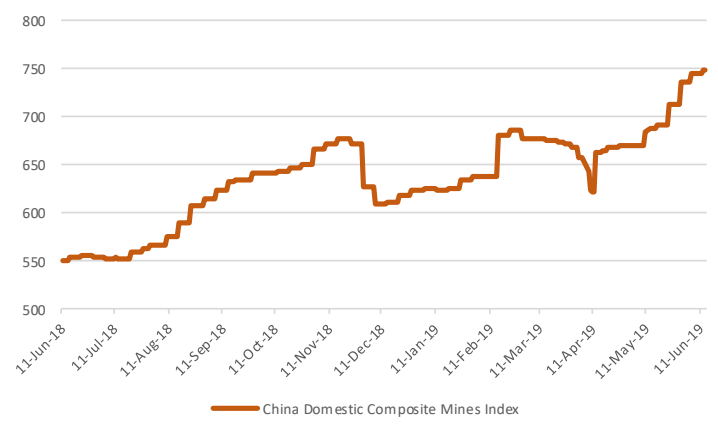
## IRON ORE INDEX PREMIUMS/DISCOUNTS

June 20th, 2019				PORT STOCK INDEX (RMB/WT)				June 20th, 2019				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	-93		-10.73%		IOSI65	65% Fe Fines	16.50		14.44%					
IOPI65	65% Fe Fines	74		8.54%											

## IRON ORE INDEX COMPARISONS (USD/DMT)



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



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

June 20th, 2019				June 20th, 2019			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	828	6	-39	Roy Hill	111.97	1.52	-2.28
SIMEC Fines	798	2	-69	SIMEC Fines	110.75	1.35	-3.50
PB Fines	845	6	-22	PB Fines	114.25	1.85	0.00
Newman Fines	875	4	8	Newman Fines	115.87	2.03	1.62
MAC Fines	840	8	-27	MAC Fines	112.00	1.60	-2.25
Jimblebar Blended Fines	822	8	-45	Jimblebar Blended Fines	110.37	1.60	-3.88
Carajas Fines	946	-25	79	Carajas Fines	130.27	1.91	16.02
Brazilian SSF	849	-13	-18	Brazilian SSF	119.87	1.53	5.62
Brazilian Blend Fines	871	-4	4	Brazilian Blend Fines	118.50	1.79	4.25
RTX Fines	834	3	-33	RTX Fines	110.37	1.60	-3.88
West Pilbara Fines	821	7	-46	West Pilbara Fines	110.92	1.37	-3.33

June 20th, 2019			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	726	20	-48
FMG Blended Fines	775	20	1
Robe River	727	19	-47
Western Fines	741	19	-33
Atlas Fines	733	18	-41
Yandi	797	31	23

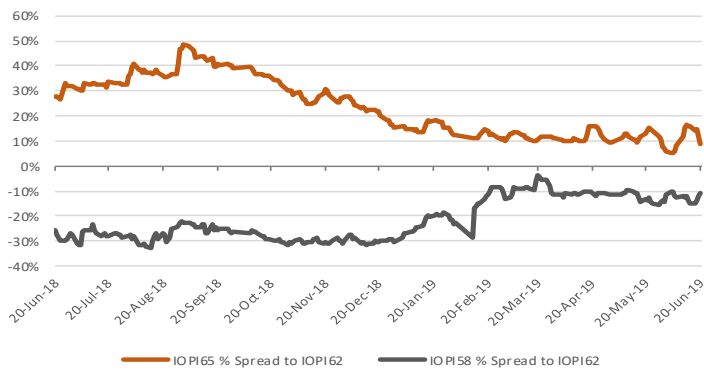
## IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	12.00	-1.00	1% Fe	High Grade Fe 60 - 63%	1.75	0.25
	High Grade Fe 63 - 64%	14.00	-3.00		High Grade Fe 63 - 64%	3.00	0.00
	High Grade Fe 64 - 65%	14.00	-3.00		High Grade Fe 64 - 65%	3.00	0.00
	High Grade Fe 65 - 65.5%	14.00	-3.00		High Grade Fe 65 - 65.5%	3.00	0.00
1% Alumina	Low Grade Fe	12.00	0.00	1% Alumina	High Fe Grade Al <2.25%	4.50	-0.25
	High Fe Grade Al <2.25%	25.00	-10.00		High Fe Grade Al 2.25-4%	0.00	0.00
	High Fe Grade Al 2.25-4%	1.00	0.00				
	Low Fe Grade Al <2.25%	49.00	-3.00				
1% Silica	Low Fe Grade Al 2.25-4%	35.00	-3.00	1% Silica	High Fe Grade Si <4%	2.00	0.00
	High Fe Grade Si <4%	5.00	-5.00		High Fe Grade Si 4 - 6.5%	0.00	0.00
0.01% Phosphorus	High Fe Grade Si 4-6.5%	27.00	3.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.25	0.00
	Low Fe Grade	11.00	0.00		High Fe Grade 0.115%<P<0.15%	0.75	0.00
	High Fe Grade 0.09%<P<0.115%	3.00	0.00				
	High Fe Grade 0.115%<P<0.15%	2.00	2.00				
	Low Fe Grade 0.09%<P<0.1%	0.00	0.00				

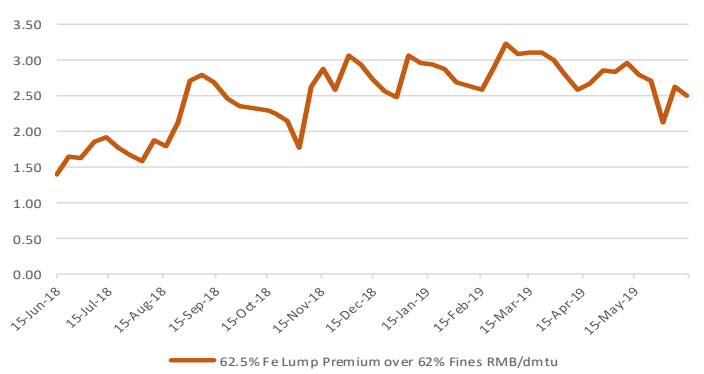
## Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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	-10.00	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	0.00	0.00

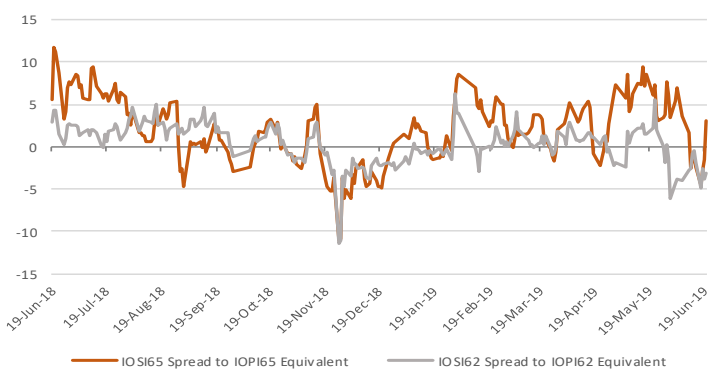
IRON ORE INDEX PREMIUMS/DISCOUNTS



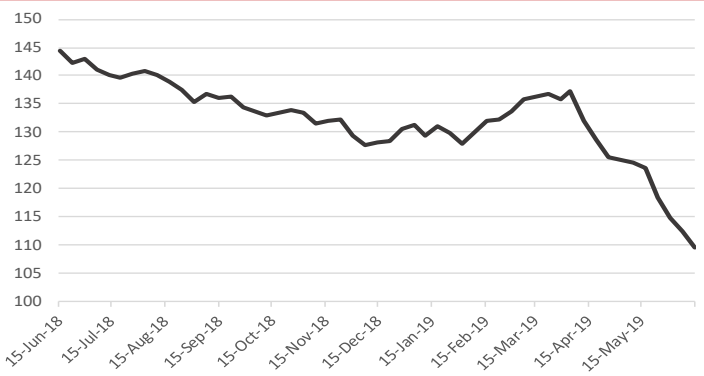
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



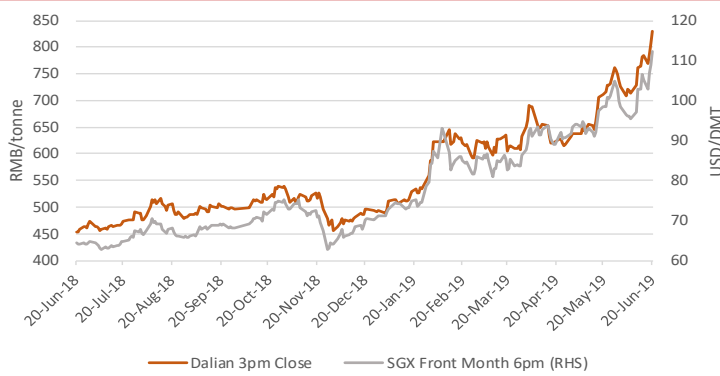
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending June 14th, 2019				
Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	11.94	-0.83%	11.94	17.87
Qingdao	13.37	-4.91%	13.37	19.01
Caofeidian	16.33	0.37%	15.59	20.50
Tianjin	7.49	-4.95%	6.69	10.48
Rizhao	12.03	-6.53%	12.03	18.97
<b>Total (35 Ports)</b>	<b>109.55</b>	<b>-2.57%</b>	<b>109.55</b>	<b>144.38</b>

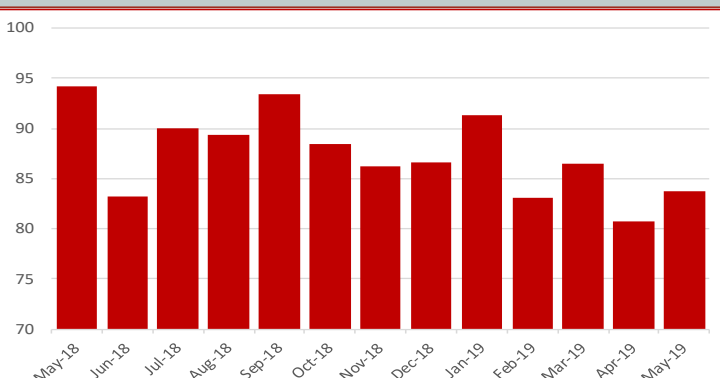
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	June 20th 3pm close			June 20th Feb 5.30 pm		
Contract	I1909	Change	Change %	Jul'19	Change	Change %
Closing Price	831.00	24.0	2.97%	112.20	3.32	3.05%
Vol traded ('000 lots)	310.65	-42.5	-12.03%	17.30	0.03	0.20%
Open positions ('000 lots)	194.56	7.7	4.13%	120.33	-5.79	-4.59%
Day Low	786.0	3.0	0.38%	107.99	0.82	0.77%
Day High	837.0	24.0	2.95%	112.30	2.27	2.06%

DRY BULK FREIGHT RATES (USD/MT)

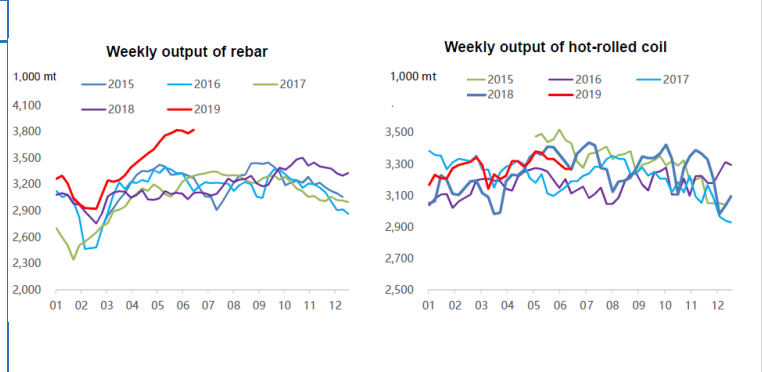


TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne			
Product	14/6/2019	Change	Change %
ReBar HRB400 φ18mm	3,921.0	-29	-0.73%
Wirerod Q300 φ6.5mm	4,140.0	-40	-0.96%
HRC Q235/SS400 5.5mm*1500*C	3,810.0	-30	-0.78%
CRC SPPC/ST12 1.0mm*1250*2500	4,160.0	-30	-0.72%
Medium & Heavy Plate Q235B 20mm	3,940.0	-30	-0.76%
GI ST02Z 1.0mm*1000*C	4,590.0	-10	-0.22%
Colour Coated Plate	6,850.0	-200	-2.84%

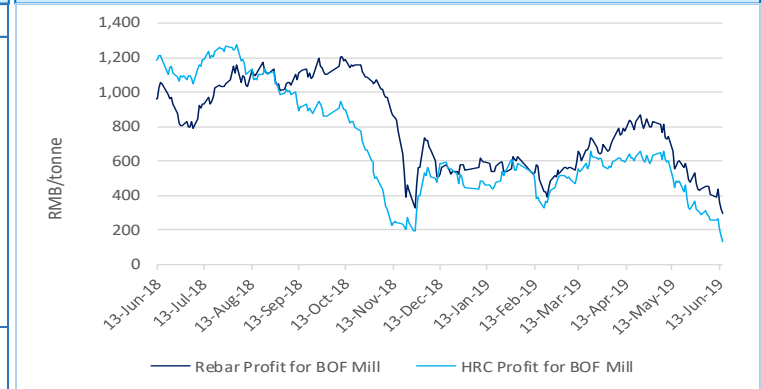


CHINESE STEEL MILL PROFITABILITY

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	108.30	8.60	Mmi CFR Equivalent index for 1st Feb
Coke	2,210	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,230	20	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,373	100	Q234, incl. tax
Rebar cost - Blast furnace	3,617	102	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	293	-112	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,690	101	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	130	-131	based on Shanghai prices, incl. tax

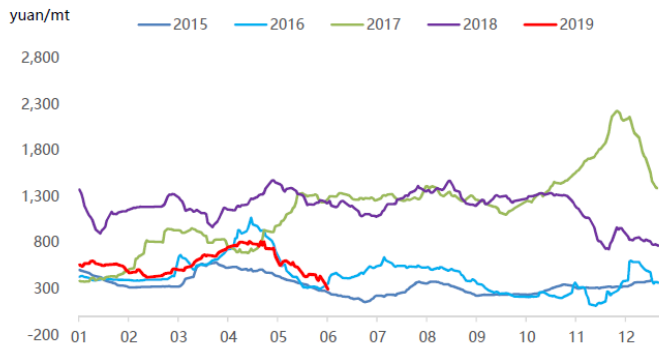
Note: 1. Costs in the table are calculated based on today's market prices and facout our management, sales, financial and depreciations fees.  
2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

CHINESE STEEL MILL PROFITABILITY

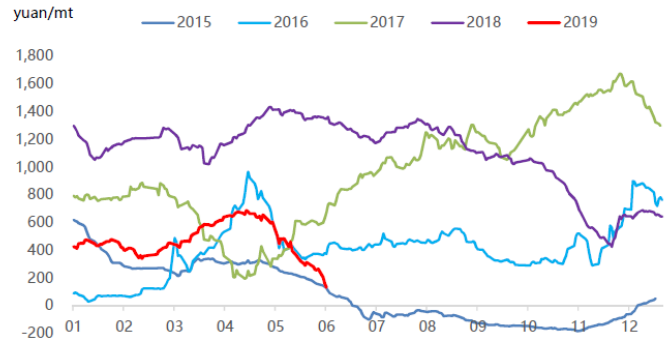


CHINESE STEEL MILL PROFITABILITY

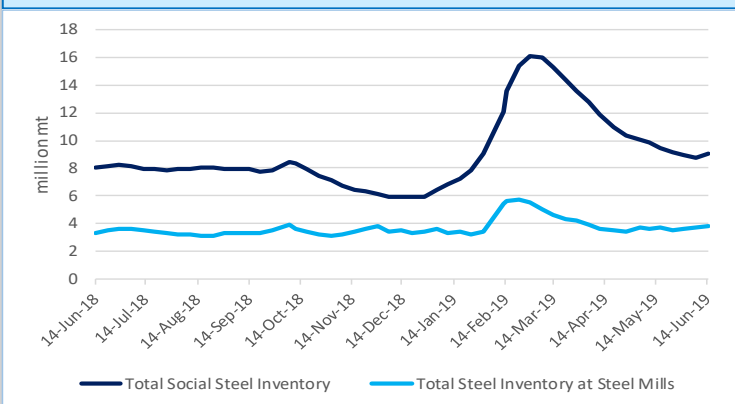
Rebar profits



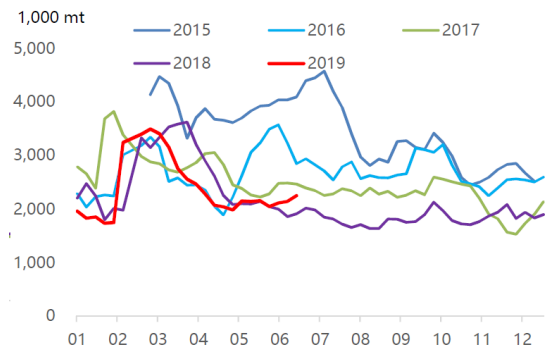
Hot-rolled coil profits



CHINESE STEEL INVENTORIES



In-plant inventory of rebar



## 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					
June 20th, 2019	Specifications applied for 62% brand assessments						Specifications applied for 62% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture		Fe	Alumina	Silica	Phos	Moisture
Roy Hill	61.16%	2.25%	4.61%	0.052%	9.35%	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%	2.35%	3.86%	0.100%	9.44%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	10.00%
Newman Fines	62.51%	2.28%	4.03%	0.082%	7.69%	Newman Fines	62.80%	2.20%	4.30%	0.080%	6.40%
MAC Fines	60.80%	2.24%	4.69%	0.080%	7.36%	MAC Fines	61.00%	2.70%	4.70%	0.110%	9.30%
Jimblebar Blended Fines	60.83%	3.00%	4.37%	0.114%	7.28%	Jimblebar Blended Fines	61.79%	2.67%	4.08%	0.115%	7.16%
Carajas Fines	65.62%	1.23%	1.41%	0.063%	8.82%	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	62.70%	1.50%	4.81%	0.070%	8.11%	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%
June 20th, 2019	Specifications applied for 58% brand assessments						Specifications applied for 58% brand assessments				
	Fe	Alumina	Silica	Phos	Moisture		Fe	Alumina	Silica	Phos	Moisture
SSF	56.74%	3.04%	6.25%	0.057%	8.60%						
FMG Blended Fines	58.13%	2.62%	5.41%	0.059%	7.62%						
Robe River	56.28%	2.91%	5.58%	0.035%	9.29%						
Western Fines	57.88%	2.87%	7.50%	0.062%	7.45%						
Atlas Fines	56.59%	2.55%	7.14%	0.080%	8.46%						
Yandi	57.43%	1.51%	6.36%	0.042%	8.66%						

## BLOOMBERG TICKERS

PORT STOCK INDICES		
	FOT Qingdao (RMB/wet tonne)	CFR Qingdao Equivalent (USD/dry tonne)
IOP162	IRCNQ001	IRCNQ004
IOP158	IRCNQ002	IRCNQ005
IOP165	IRCNQ003	IRCNQ006

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