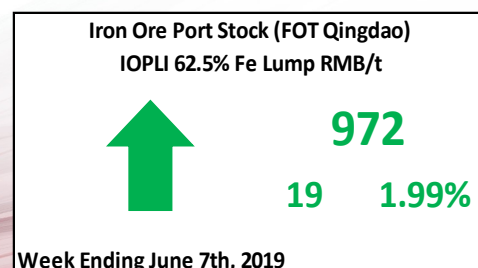
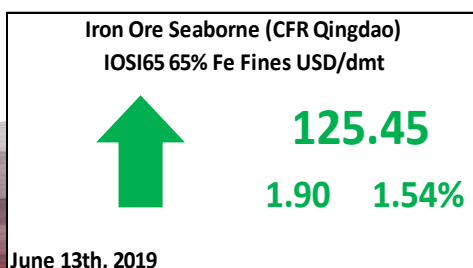
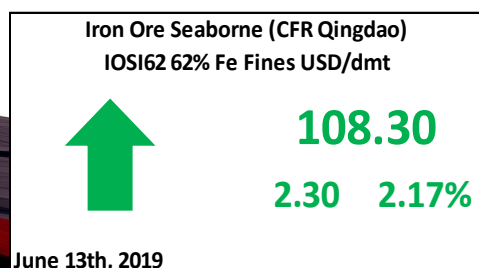
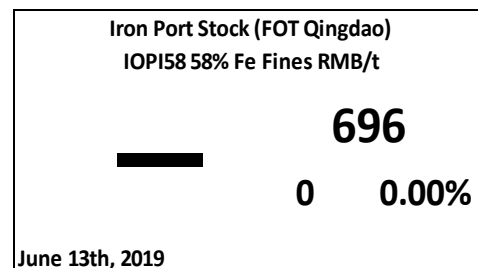
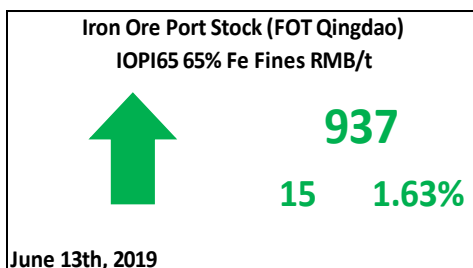
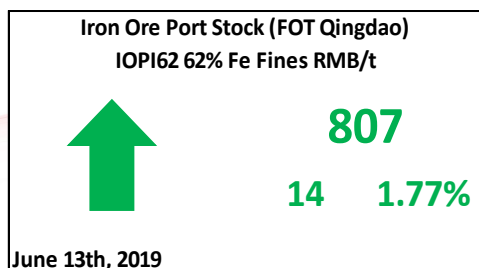


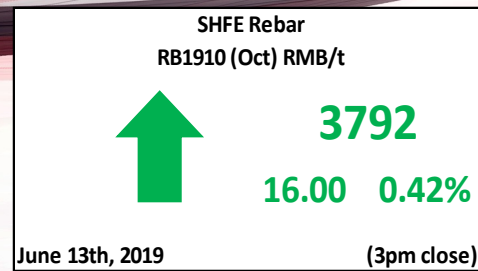
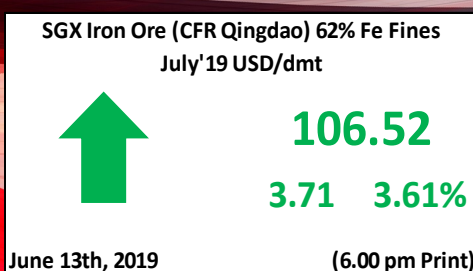
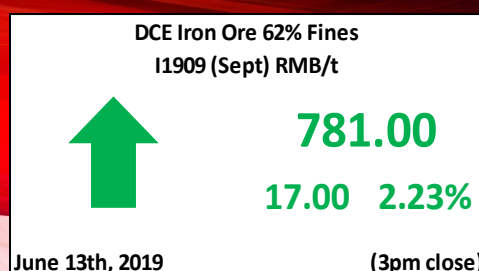


## MMi Dashboard

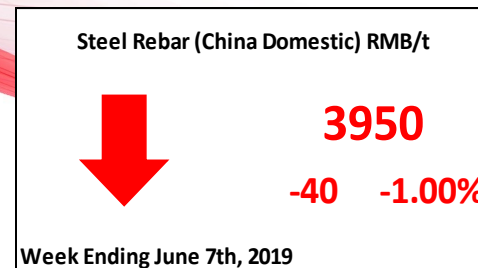
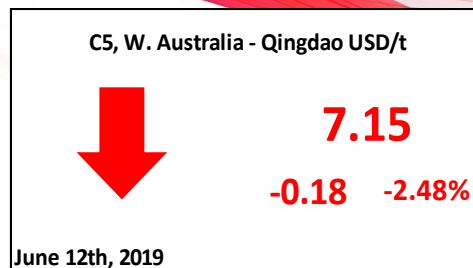
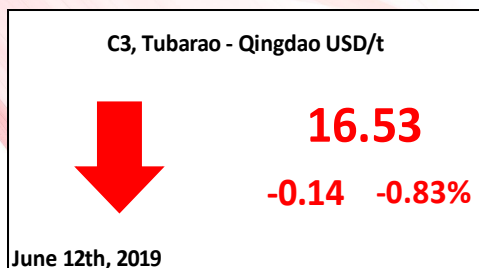
## Iron Ore Price Indices



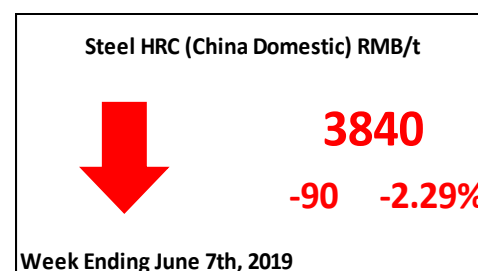
## Exchange Traded Contracts



## Freight Rates



## Inventory Levels



## Steel Price

## Steel Price

## IRON ORE PORT STOCK INDEX (IOPI)

June 13th, 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>
788	62% Fe Fines	807	14	1.8%	782	664	453	807	108.70	1.95	1.8%	105.18	89.07	61.66	108.70
690	58% Fe Fines	696	0	0.0%	688	575	324	696	94.24	0.00	0.0%	93.14	76.91	41.71	92.24
908	65% Fe Fines	937	15	1.6%	863	745	579	937	126.84	2.09	1.7%	116.61	100.45	79.79	126.84

## IRON ORE SEABORNE INDEX (IOSI)

June 13th, 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	108.30	2.30	2.17%	102.21	89.26	62.95	108.30	News of tanker explosions in the Middle East had commodities markets soaring world-wide, and the Chinese DCE iron ore market was no exception. Traders were confident of increasing freight premiums and that market uncertainty will be adding a premium to current iron ore prices. Mills balked at the current high prices and were unwilling to look to the port market, preferring to continue to destock from their own inventories. Supply remains very tight and there seems to be no respite in the near future.	
IOSI65	65% Fe Fines	125.45	1.90	1.54%	118.80	103.46	83.20	125.45		

## IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending June 7th, 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	972	19	2.0%	972	864	581	972	123.05	2.62	2.18%	123.05	110.88	76.82	123.05

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

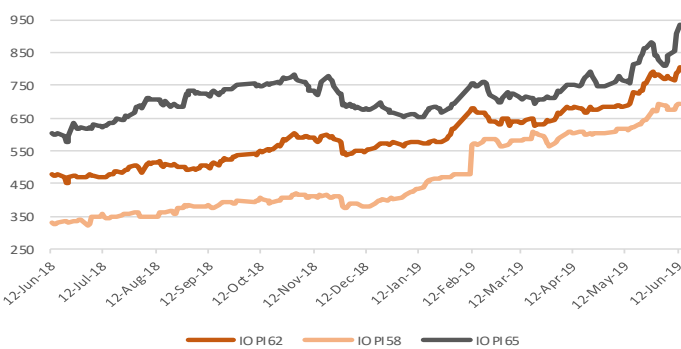
Week Ending June 7th, 2019				RMB/tonne (excluding tax) <sup>4</sup>				USD/tonne (excluding tax) <sup>4</sup>			
Province	Region	Product	Basis	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Hebei	Hanxing	66% Fe Concentrate	Dry	902	0.0%	592	902	130.93	0.12%	91.97	130.93
Hebei	Qian'an	65% Fe Concentrate	Dry	820	-0.6%	645	825	119.03	-0.49%	100.26	119.61
Liaoning	Anshan	65% Fe Concentrate	Wet	645	0.0%	465	745	93.62	0.12%	68.21	93.62
Shandong	Zibo	65% Fe Concentrate	Dry	915	3.4%	660	915	132.82	3.51%	99.75	132.82

Week Ending June 7th, 2019

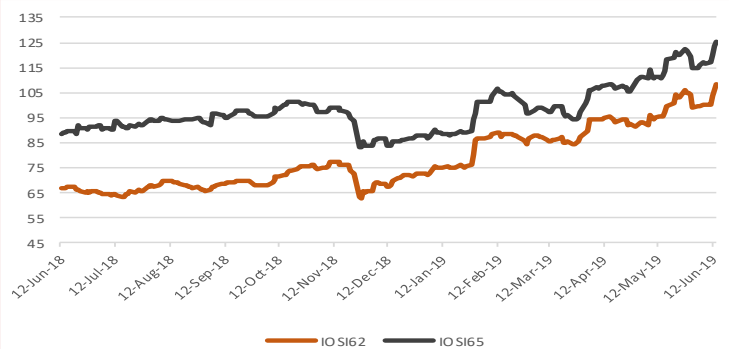
China Mines Concentrate Composite Index RMB/WT	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
	744.38	1.1%	551.00	744.38

<sup>1</sup> Exchange rate applied: RMB/USD = 6.8934 <sup>2</sup> Last 12 months <sup>3</sup> Since June 1  
<sup>4</sup> Weekly exchange rate applied: RMB/USD 6.8892

## 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 13th, 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	782	714	664	76.16	87.09	85.37	98.40	105.18	97.05	89.07
IOPI58	58% Fe Fines	569	583	600	637	688	630	575	57.99	75.22	77.49	86.39	93.14	85.66	76.91
IOPI65	65% Fe Fines	733	714	753	812	863	795	745	88.65	98.08	95.78	110.00	116.61	108.47	100.45

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

June 13th, 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	102.21	97.04	89.26	W. Australia - Qingdao	C5	7.15	-0.18	-2.48%	4.39	10.00
IOSI65	65% Fe Fines	102.56	97.22	106.75	115.53	118.80	112.36	103.46	Tubarao - Qingdao	C3	16.53	-0.14	-0.83%	11.61	24.76

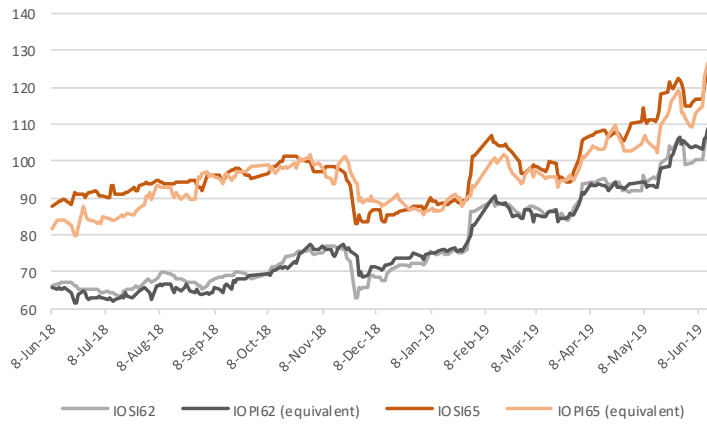
## IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending June 7th, 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	972	905	864	94.22	99.57	111.03	117.12	123.05	116.01	109.33

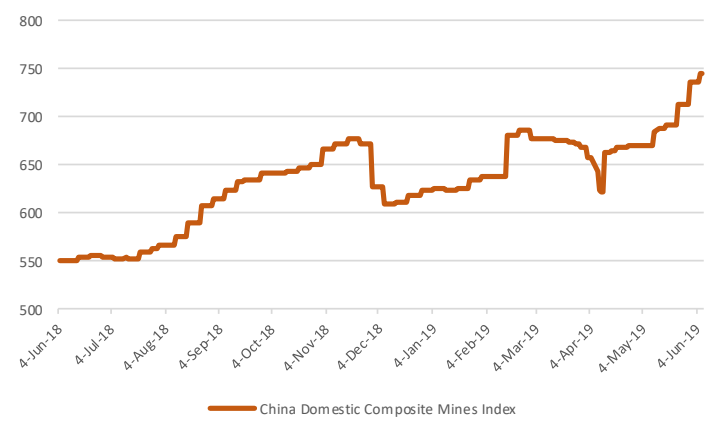
## IRON ORE INDEX PREMIUMS/DISCOUNTS

June 13th, 2019				PORT STOCK INDEX (RMB/WT)		June 13th, 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	-111	-13.75%	IOSI65	65% Fe Fines	17.15	15.84%				
IOPI65	65% Fe Fines	130	16.11%								

## IRON ORE INDEX COMPARISONS (USD/DMT)



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



## IRON ORE BRAND SPOT PRICE ASSESSMENTS

June 13th, 2019				June 13th, 2019			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IOSI62
Roy Hill	780	14	-27	Roy Hill	106.32	2.63	-1.98
SIMEC Fines	778	14	-29	SIMEC Fines	105.27	2.81	-3.03
PB Fines	788	14	-19	PB Fines	108.12	2.38	-0.18
Newman Fines	817	14	10	Newman Fines	109.72	2.10	1.42
MAC Fines	794	14	-13	MAC Fines	106.07	3.16	-2.23
Jimblebar Blended Fines	765	14	-42	Jimblebar Blended Fines	103.65	2.94	-4.65
Carajas Fines	951	14	144	Carajas Fines	125.12	2.05	16.82
Brazilian SSF	854	14	47	Brazilian SSF	113.92	2.30	5.62
Brazilian Blend Fines	838	14	31	Brazilian Blend Fines	112.42	2.17	4.12
RTX Fines	779	14	-28	RTX Fines	103.75	2.89	-4.55
West Pilbara Fines	776	14	-31	West Pilbara Fines	105.42	2.78	-2.88

June 13th, 2019			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	656	0	-40
FMG Blended Fines	695	0	-1
Robe River	655	0	-41
Western Fines	676	0	-20
Atlas Fines	668	0	-28
Yandi	720	0	24

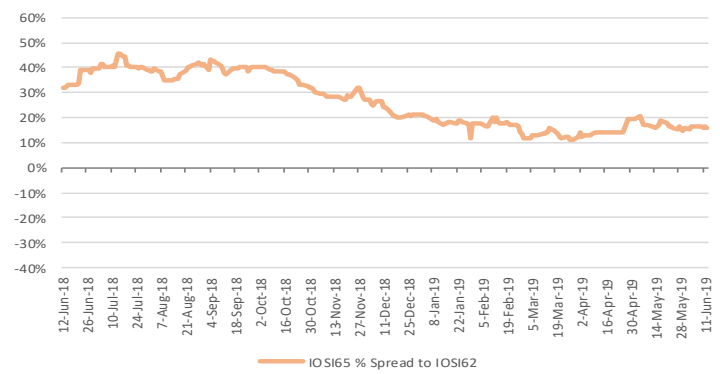
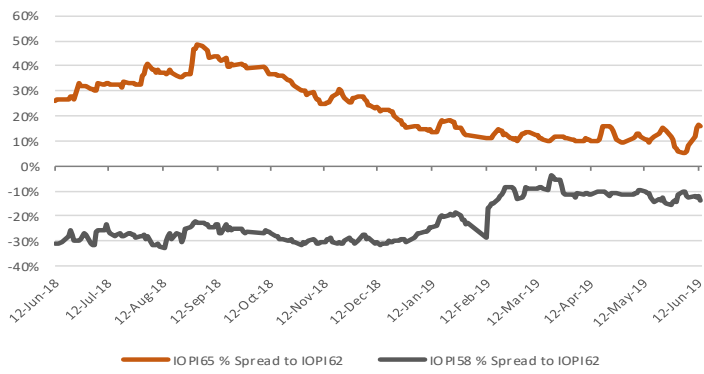
## IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	10.00	0.00	1% Fe	High Grade Fe 60 - 63%	1.50	-0.25	
	High Grade Fe 63 - 64%	22.00	0.00		High Grade Fe 63 - 64%	3.50	0.00	
	High Grade Fe 64 - 65%	22.00	0.00		High Grade Fe 64 - 65%	3.50	0.00	
	High Grade Fe 65 - 65.5%	22.00	0.00		High Grade Fe 65 - 65.5%	3.50	0.00	
	Low Grade Fe	10.00	0.00					
1% Alumina	High Fe Grade Al <2.25%	45.00	0.00	1% Alumina	High Fe Grade Al <2.25%	4.50	0.00	
	High Fe Grade Al 2.25-4%	6.00	0.00		High Fe Grade Al 2.25-4%	0.50	-0.25	
	Low Fe Grade Al <2.25%	68.00	0.00					
	Low Fe Grade Al 2.25-4%	33.00	0.00					
1% Silica	High Fe Grade Si <4%	15.00	0.00	1% Silica	High Fe Grade Si <4%	2.00	0.00	
	High Fe Grade Si 4-6.5%	11.00	0.00		High Fe Grade Si 4 - 6.5%	0.00	0.00	
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%	0.25	-0.25	
	High Fe Grade 0.115%<P<0.15%	2.00	0.00		High Fe Grade 0.115%<P<0.15%	1.00	0.25	
	Low Fe Grade 0.09<P<0.1%	6.00	0.00					

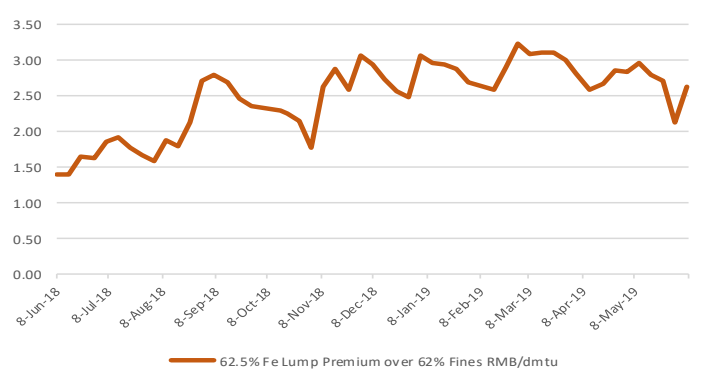
## Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

Port	Value	Change	Port	Value	Change	Port	Value	Change	Port	Value	Change
Bayuquan	-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	-35.00	0.00	Lianyungang	-5.00	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	-35.00	0.00	Lanqiao	0.00	0.00	Nantong	-35.00	0.00	Tianjin	-15.00	0.00

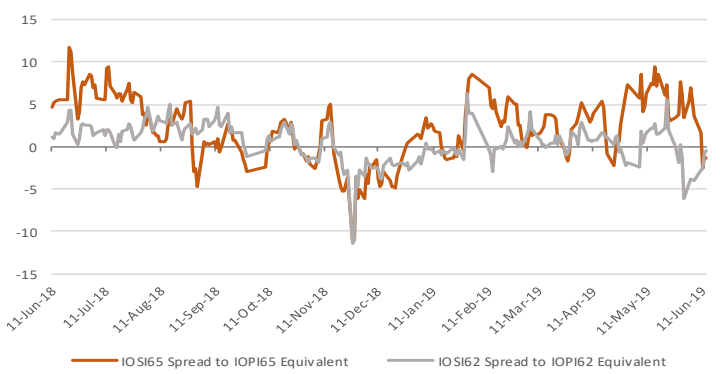
IRON ORE INDEX PREMIUMS/DISCOUNTS



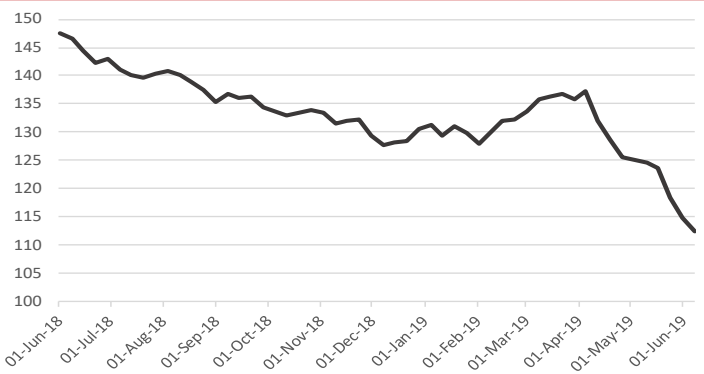
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



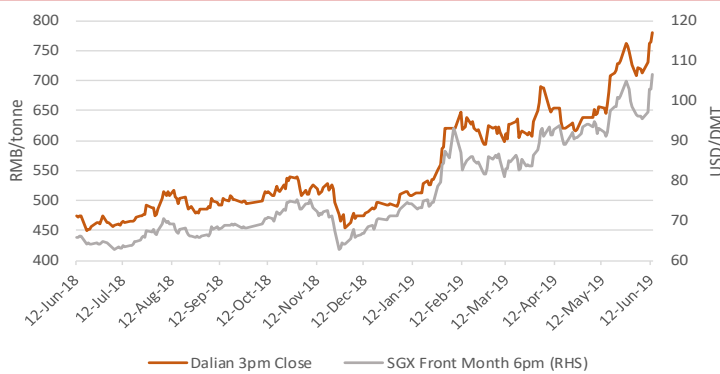
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

Week Ending June 7th, 2019				
Province	This week	Change %	Low <sup>2</sup>	High <sup>2</sup>
Jingtang	12.04	-7.03%	12.04	18.10
Qingdao	14.06	-9.11%	14.06	19.50
Caofeidian	16.27	4.36%	15.59	20.50
Tianjin	7.88	12.73%	6.69	10.48
Rizhao	12.87	-5.44%	12.87	18.97
<b>Total (35 Ports)</b>	<b>112.44</b>	<b>-2.10%</b>	<b>112.44</b>	<b>146.53</b>

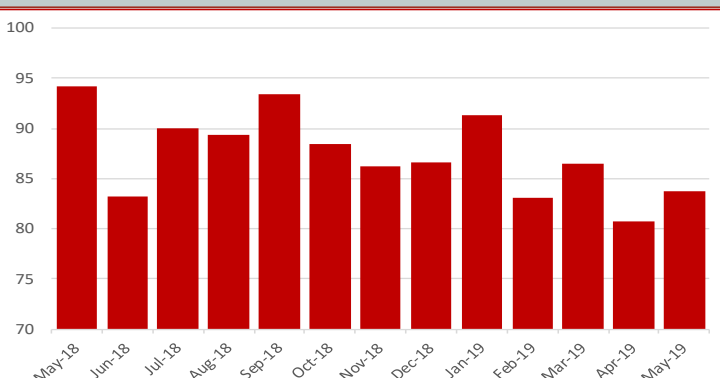
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	June 13th 3pm close			June 13th Feb 5.30 pm		
Contract	I1909	Change	Change %	Jul'19	Change	Change %
Closing Price	781.00	17.0	2.23%	106.52	3.71	3.61%
Vol traded ('000 lots)	203.50	-44.0	-17.78%	29.45	6.61	28.95%
Open positions ('000 lots)	182.25	9.8	5.69%	146.06	-0.34	-0.23%
Day Low	758.0	-3.0	-0.39%	101.84	0.69	0.68%
Day High	782.0	3.0	0.39%	106.64	3.49	3.38%

DRY BULK FREIGHT RATES (USD/MT)



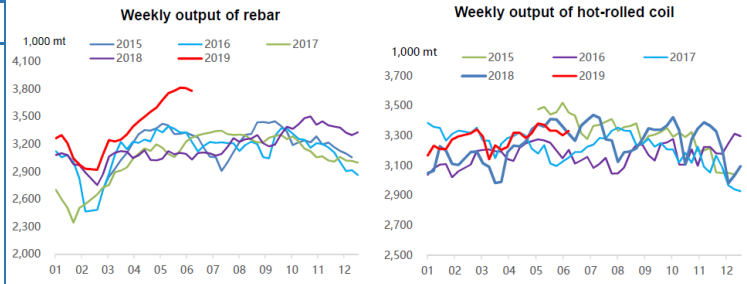
TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne

Product	7/6/2019	Change	Change %
ReBar HRB400 φ18mm	3,950.0	-40	-1.00%
Wirerod Q300 φ6.5mm	4,180.0	-50	-1.18%
HRC Q235/SS400 5.5mm*1500*C	3,840.0	-90	-2.29%
CRC SPPC/ST12 1.0mm*1250*2500	4,190.0	-30	-0.71%
Medium & Heavy Plate Q235B 20mm	3,970.0	-30	-0.75%
GI ST02Z 1.0mm*1000*C	4,600.0	-20	-0.43%
Colour Coated Plate	7,050.0	-50	-0.70%



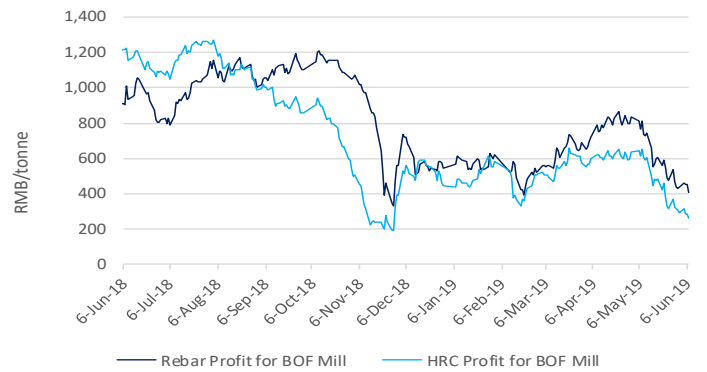
CHINESE STEEL MILL PROFITABILITY

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	99.70	-4.60	Mmi CFR Equivalent index for 1st Feb
Coke	2,210	0	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,210	-10	steel scrap (6mm) in Zhangjiagang, excl. tax
Billet Cost	3,273	-50	Q234, incl. tax
Rebar cost - Blast furnace	3,515	-51	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	405	-29	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,589	-51	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	261	-29	based on Shanghai prices, incl. tax

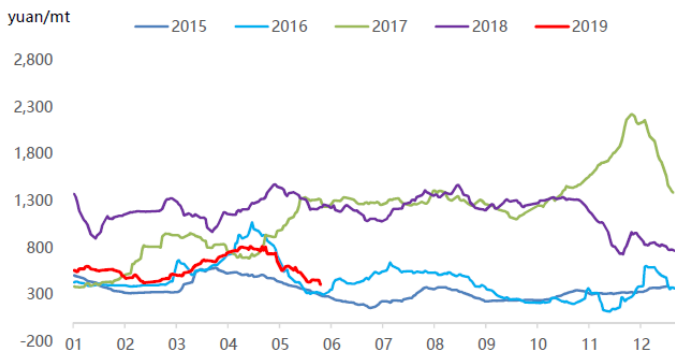
Note: 1. Costs in the table are calculated based on today's market prices and factored our management, sales, financial and depreciation fees.  
2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

CHINESE STEEL MILL PROFITABILITY

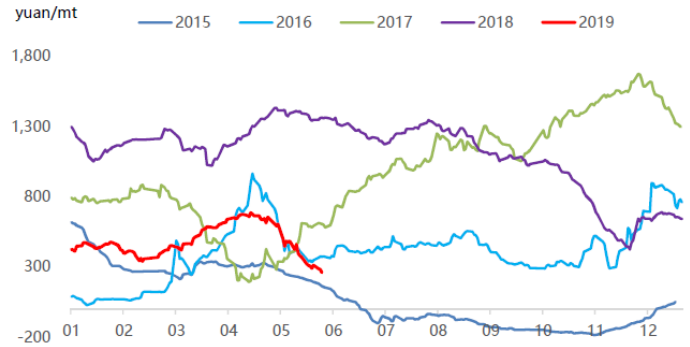


CHINESE STEEL MILL PROFITABILITY

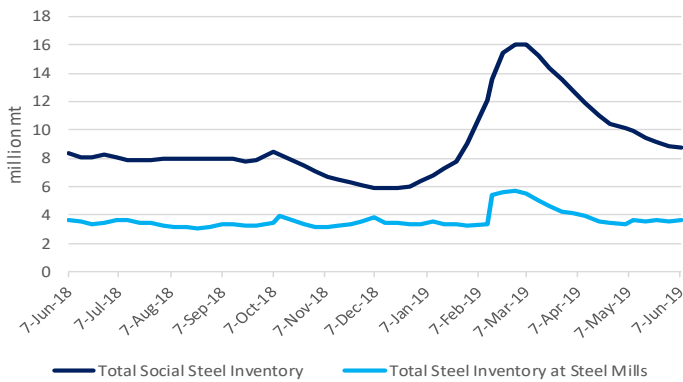
Rebar profits



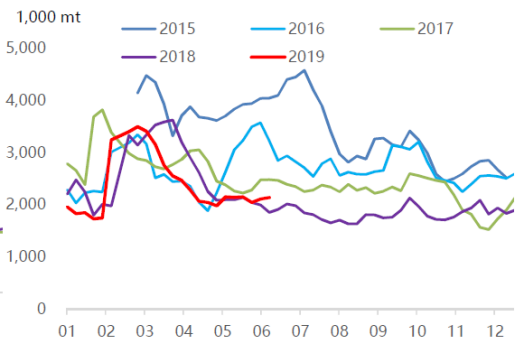
Hot-rolled coil profits



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 13th, 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	61.51%	2.35%	3.86%	0.101%	9.39%	PB Fines 62%	62.00%	2.60%	4.30%	0.090%	10.00%
Newman Fines	62.55%	2.31%	3.94%	0.086%	7.52%	Newman Fines	62.80%	2.20%	4.30%	0.080%	6.40%
MAC Fines	60.72%	2.28%	4.67%	0.081%	7.10%	MAC Fines	61.00%	2.70%	4.70%	0.110%	9.30%
Jimblebar Blended Fines	60.79%	3.03%	4.40%	0.114%	7.21%	Jimblebar Blended Fines	61.79%	2.67%	4.08%	0.115%	7.16%
Carajas Fines	65.57%	1.27%	1.40%	0.075%	8.53%	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 13th, 2019	Specifications applied for 58% brand assessments										
	Fe	Alumina	Silica	Phos	Moisture						
SSF	56.76%	3.06%	6.11%	0.054%	8.77%						
FMG Blended Fines	58.16%	2.68%	5.55%	0.062%	7.48%						
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	57.19%	1.76%	6.40%	0.046%	8.56%						

## 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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