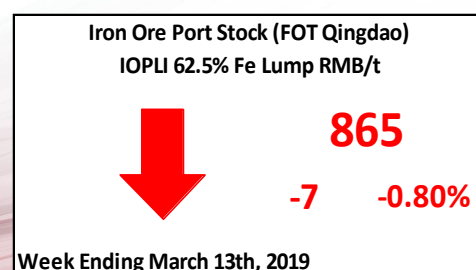
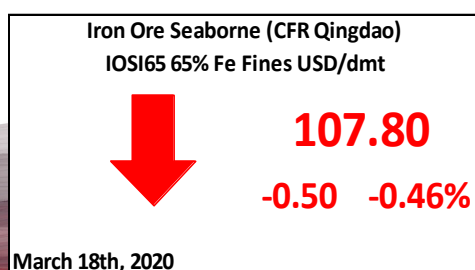
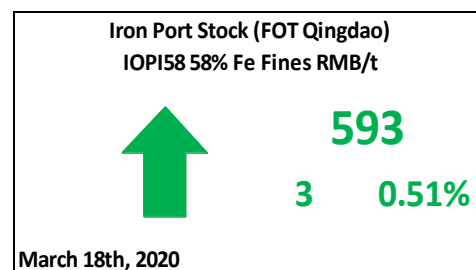
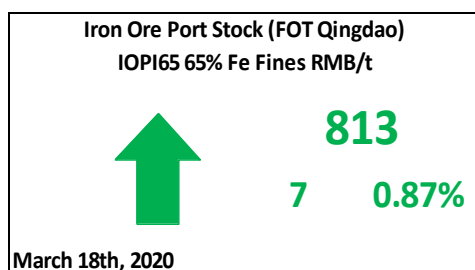
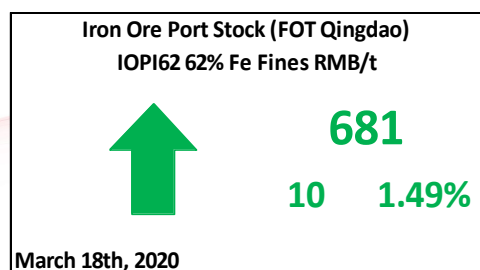


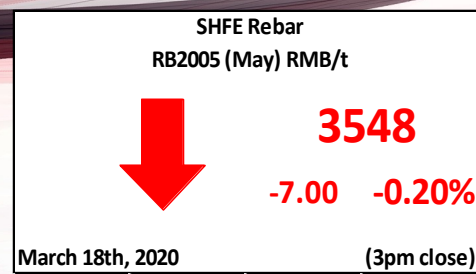
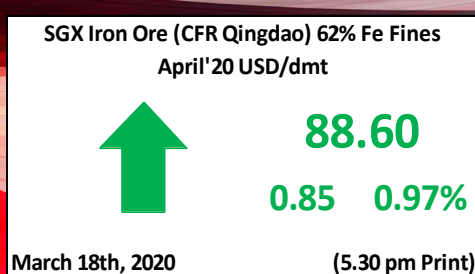
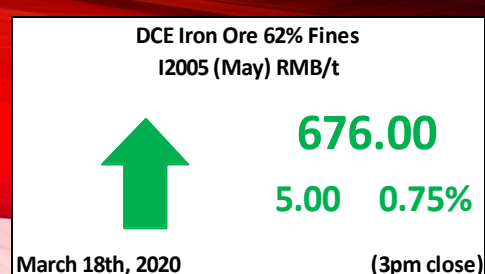


MMi Dashboard

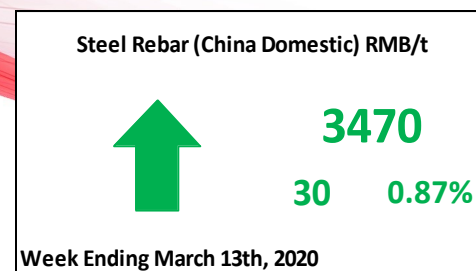
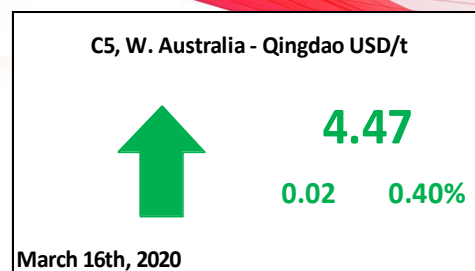
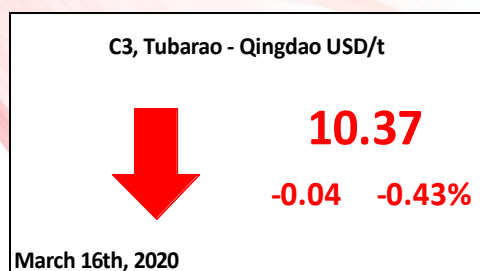
Iron Ore Price Indices



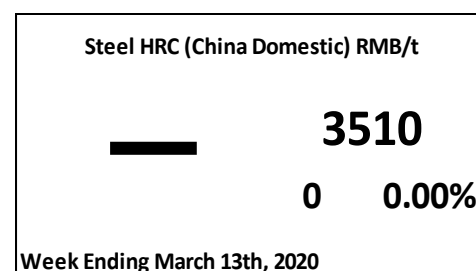
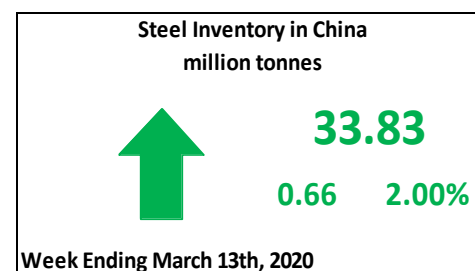
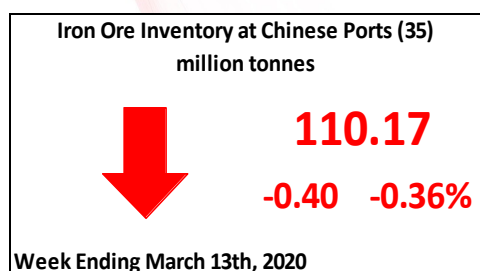
Exchange Traded Contracts



Freight Rates



Inventory Levels



IRON ORE PORT STOCK INDEX (IOPI)

March 18th, 2020		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne ¹						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²	Price	Change	Change %	MTD	YTD	Low ²	High ²
IOPI62	62% Fe Fines	681	10	1.5%	666	674	619	928	89.31	1.07	1.2%	88.13	89.34	81.37	126.12
IOPI58	58% Fe Fines	593	3	0.5%	580	579	531	823	78.13	0.16	0.2%	77.04	77.05	70.02	112.44
IOPI65	65% Fe Fines	813	7	0.9%	800	802	695	992	107.37	0.60	0.6%	106.51	106.90	91.81	135.34

IRON ORE SEABORNE INDEX (IOSI)

MARKET COMMENTARY

March 18th, 2020		CFR Qingdao, USD/dry tonne							Physical iron ore port stock quotes rose 5-10yuan/mt during the morning session. Some traders held prices firm, despite a volatile afternoon trading session and falling futures prices. PB fines in Shandong and Tangshan traded around 665-680yuan/mt and 675-680yuan/mt respectively. Based on feedback from some mills, large fluctuations in the futures market in the afternoon had them stay away from buying in large volumes. In addition, it is reported that the Malaysian government has requested Vale to cease its blended iron ore business in Malaysia and the center will be closed until the end of this month.						
Index	Fe Content	Price	Change	Change %	MTD	YTD	Low ²	High ²							
IOSI62	62% Fe Fines	91.05	0.30	0.33%	90.74	90.74	80.40	127.50							
IOSI65	65% Fe Fines	107.80	-0.50	-0.46%	107.04	105.72	91.20	137.95							

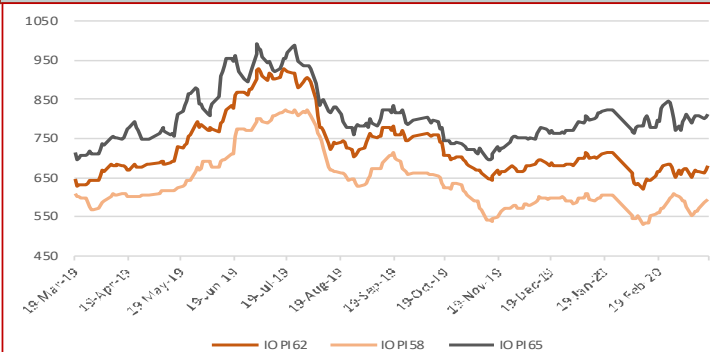
IRON ORE PORT LUMP INDEX (IOPLI)

Week Ending March 13th, 2019		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne ³						
Index	Fe Content	Price	W-o-W	Change %	MTD	YTD	Low ²	High ²	Price	W-o-W	Change %	MTD	YTD	Low ²	High ²
IOPLI62	62.5% Fe Lump	865	-7	-0.8%	869	854	763	1051	110.88	-1.04	-0.93%	110.40	108.35	93.24	133.81

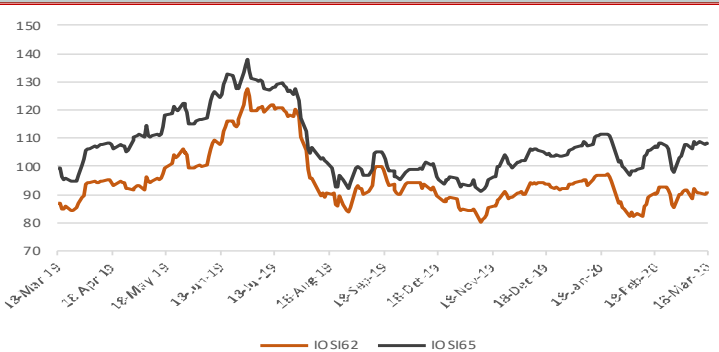
IRON ORE DOMESTIC CONCENTRATE SPOT PRICE ASSESSMENTS AND COMPOSITE INDEX

Week Ending March 13th, 2020				RMB/tonne (excluding tax) ³				USD/tonne (excluding tax) ³			
Province	Region	Product	Basis	This week	Change %	Low ²	High ²	This week	Change %	Low ²	High ²
Hebei	Hanxing	66% Fe Concentrate	Dry	818	1.1%	761	1032	117.55	0.49%	109.21	150.03
Hebei	Qian'an	65% Fe Concentrate	Dry	850	0.0%	735	960	122.15	-0.62%	109.45	139.35
Liaoning	Anshan	65% Fe Concentrate	Wet	640	0.0%	565	720	91.97	-0.62%	84.14	104.66
Shandong	Zibo	65% Fe Concentrate	Dry	880	1.7%	785	1040	126.46	1.10%	113.34	151.33
Week Ending March 13th, 2020				This week	Change %	Low ²	High ²	¹ Exchange rate applied: RMB/USD = 7.0328 ² Last 12 months ³ Weekly exchange rate applied: RMB/USD 6.9587			
China Mines Concentrate Composite Index RMB/WT				730.99	4.06%	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

March 18th, 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	666	674	674	87.30	89.84	94.23	86.23	88.13	89.34	89.34
IOPI58	58% Fe Fines	567	592	600	563	580	579	579	74.67	78.18	80.46	74.33	77.04	77.05	77.05
IOPI65	65% Fe Fines	723	764	808	797	800	802	802	95.29	100.90	108.54	105.84	106.51	106.90	106.90

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

FREIGHT RATES

March 18th, 2020		CFR Qingdao, USD/dry tonne							FREIGHT RATES - DRY BULK US\$/wet tonne						
Index	Fe Content	November	December	January	February	MTD	QTD	YTD	Route	Designation	Change	Change %	Low ²	High ²	
IOSI62	62% Fe Fines	85.83	92.64	93.85	87.46	90.74	90.74	90.74	W. Australia - Qingdao	C5	4.47	0.02	0.40%	4.28	11.42
IOSI65	65% Fe Fines	96.49	104.14	107.56	102.94	107.04	105.72	105.72	Tubarao - Qingdao	C3	10.37	-0.04	-0.43%	10.37	29.10

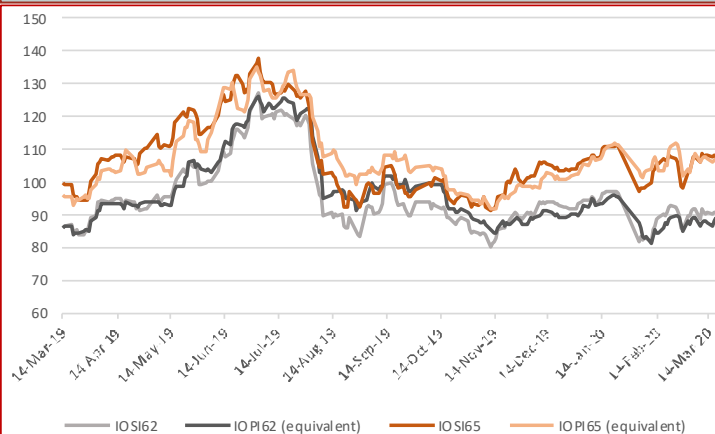
IRON ORE PORT LUMP INDEX MONTHLY, QUARTERLY AND YEAR-TO-DATE AVERAGES

Week Ending March 13th, 2019		FOT Qingdao (inc. 13% VAT), RMB/wet tonne							CFR Qingdao Equivalent (exc. 13% VAT), USD/dry tonne ¹						
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	869	854	854	98.44	97.89	108.99	106.19	110.40	108.35	108.35

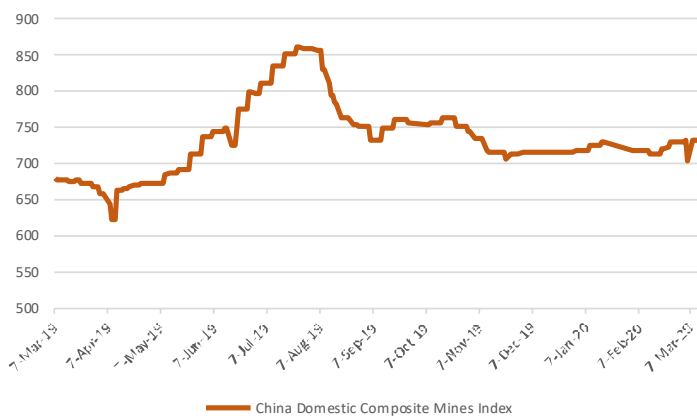
IRON ORE INDEX PREMIUMS/DISCOUNTS

March 18th, 2020		PORT STOCK INDEX (RMB/WT)		March 18th, 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	-88	-12.92%	IOSI65	65% Fe Fines	16.75	18.40%
IOPI65	65% Fe Fines	132	19.38%				

IRON ORE INDEX COMPARISONS (USD/DMT)



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



IRON ORE BRAND SPOT PRICE ASSESSMENTS

March 18th, 2020				March 18th, 2020			
PORT STOCK INDEX (RMB/WT)				SEABORNE INDEX (USD/DMT)			
	Price	Change	Diff to IOPI62		Price	Change	Diff to IO SI62
Roy Hill	640	10	-41	Roy Hill	86.12	0.25	-4.93
SIMEC Fines	620	10	-61	SIMEC Fines	82.80	0.25	-8.25
PB Fines	666	7	-15	PB Fines	90.65	0.25	-0.40
Newman Fines	681	10	0	Newman Fines	92.26	0.24	1.21
MAC Fines	656	10	-25	MAC Fines	86.05	0.75	-5.00
Jimblebar Blended Fines	613	1	-68	Jimblebar Blended Fines	79.10	0.38	-11.95
Carajas Fines	812	6	131	Carajas Fines	107.21	-0.51	16.16
Brazilian SSF	691	5	10	Brazilian SSF	92.61	-0.06	1.56
Brazilian Blend Fines	697	8	16	Brazilian Blend Fines	93.99	0.07	2.94
RTX Fines	614	2	-67	RTX Fines	85.25	0.38	-5.80
West Pilbara Fines	646	10	-35	West Pilbara Fines	84.32	0.25	-6.73

March 18th, 2020			
PORT STOCK INDEX (RMB/WT)			
	Price	Change	Diff to IOPI58
SSF	543	3	-50
FMG Blended Fines	582	3	-11
Robe River	553	1	-40
Western Fines	531	8	-62
Atlas Fines	576	4	-17
Yandi	610	8	17

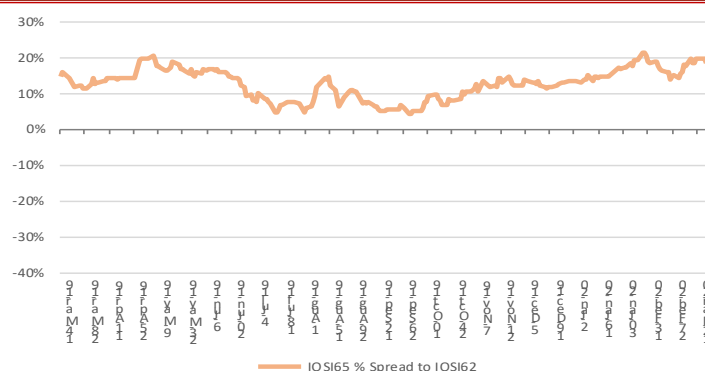
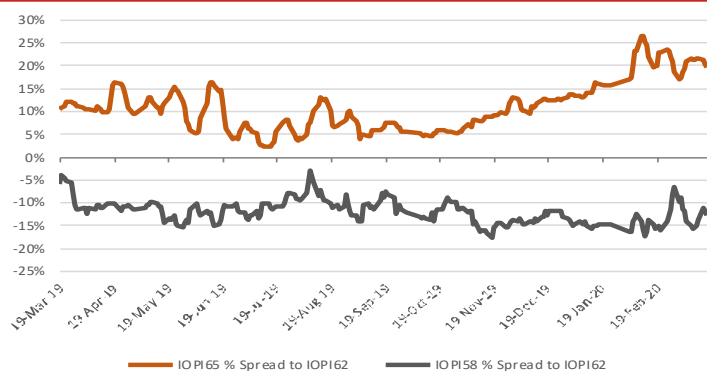
IRON ORE INDEX NORMALISATION DIFFERENTIALS

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%	7.00	0.00		High Grade Fe 63 - 64%	3.25	0.00
	High Grade Fe 64 - 65%	7.00	0.00		High Grade Fe 64 - 65%	3.25	0.00
	High Grade Fe 65 - 65.5%	7.00	0.00		High Grade Fe 65 - 65.5%	3.25	0.00
	Low Grade Fe	1.00	0.00	1% Alumina	High Fe Grade Al <2.25%	2.75	-0.25
1% Alumina	High Fe Grade Al <2.25%	48.00	-4.00		High Fe Grade Al 2.25-4%	0.50	0.00
	High Fe Grade Al 2.25-4%	2.00	1.00	1% Silica	High Fe Grade Si <4%	1.75	-0.25
	Low Fe Grade Al <2.25%	57.00	3.00		High Fe Grade Si 4 - 6.5%	0.75	0.00
	Low Fe Grade Al 2.25-4%	37.00	2.00	0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	0.50	-0.25
1% Silica	High Fe Grade Si <4%	28.00	0.00		High Fe Grade 0.115%<P<0.15%	0.25	0.25
	High Fe Grade Si 4-6.5%	26.00	0.00				
	Low Fe Grade	24.00	-3.00				
0.01% Phosphorus	High Fe Grade 0.09%<P<0.115%	6.00	3.00				
	High Fe Grade 0.115%<P<0.15%	17.00	0.00				
	Low Fe Grade 0.09%<P<0.1%	10.00	0.00				

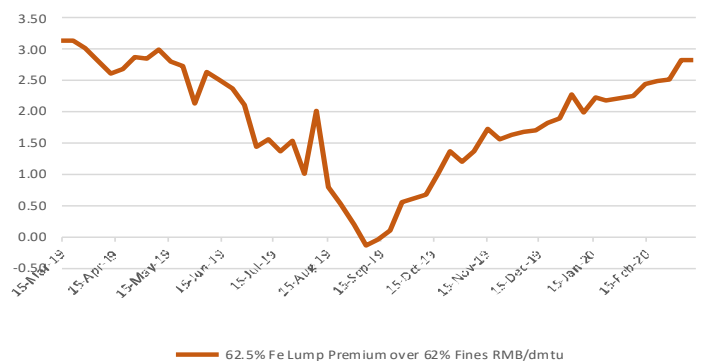
Port Stock Price Differentials to Qingdao Port for PB Fines (RMB/wet tonne)

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	Langqiao	0.00	0.00	Nantong	-20.00	0.00	Tianjin	-20.00	0.00

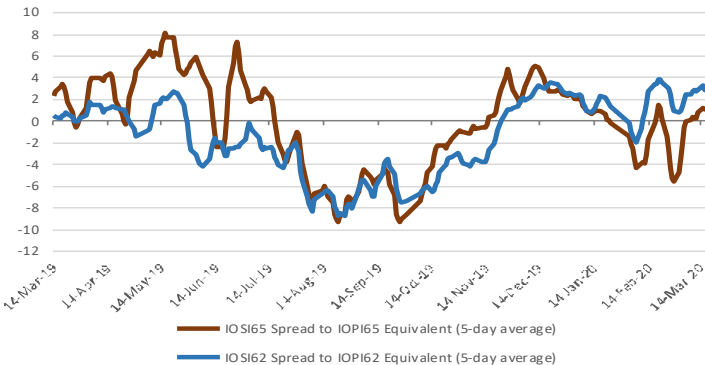
IRON ORE INDEX PREMIUMS/DISCOUNTS



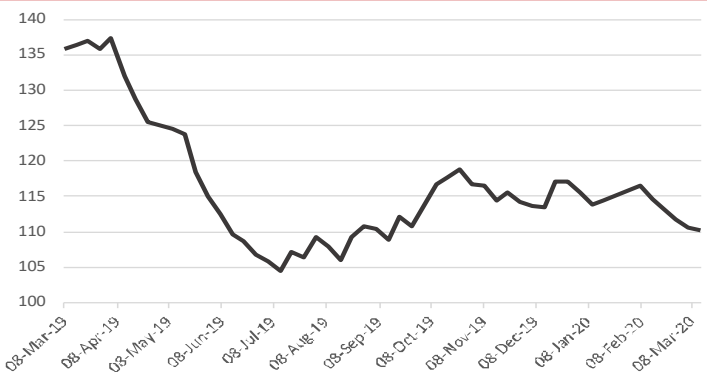
WEEKLY IRON ORE PORT STOCK LUMP PREMIUM (RMB/DMTU)



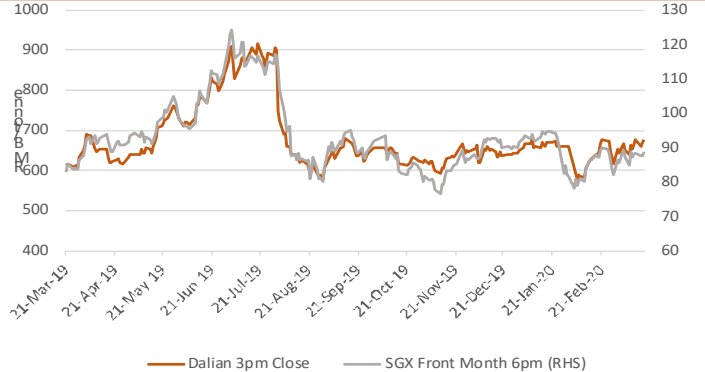
IRON ORE SEABORNE TO PORT STOCK PRICE SPREADS (USD/DMT)



TOTAL IRON ORE INVENTORIES AT CHINA PORTS (MILLION TONNES)



FUTURE TRADING—FRONT MONTH CLOSING PRICE



IRON ORE PORT INVENTORIES (MILLION TONNES)

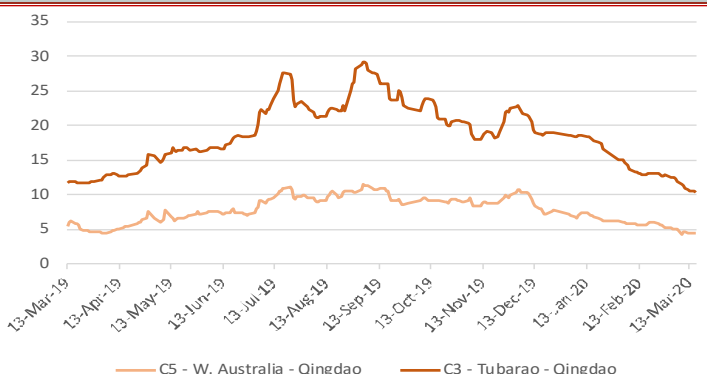
Week Ending March 13th, 2020

Province	This week	Change %	Low ²	High ²
Jingtang	14.19	-1.66%	10.80	17.00
Qingdao	13.37	-0.96%	12.38	19.01
Caofeidian	14.71	-5.28%	13.47	18.98
Tianjin	7.39	-1.86%	6.37	9.08
Rizhao	12.62	-1.56%	11.41	17.10
Total (35 Ports)	110.17	-0.36%	104.40	137.30

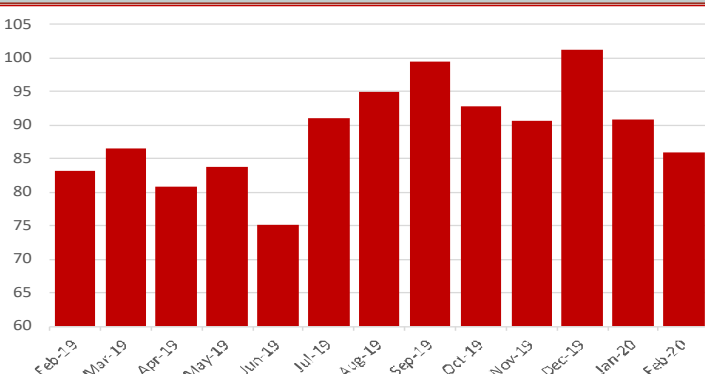
IRON ORE FUTURES CONTRACTS

Closing Date	DCE (RMB/WMT)			SGX (USD/DMT)		
	Mar 18th, 3.00 pm close			Mar 18th, 5.30 pm		
Contract	I2005	Change	Change %	Apr'20	Change	Change %
Closing Price	676.00	5.0	0.75%	88.60	0.85	0.97%
Vol traded ('000 lots)	155.89	56.0	56.09%	31.64	7.90	33.29%
Open positions ('000 lots)	61.53	0.20	0.33%	153.31	5.67	3.84%
Day Low	667.5	13.5	2.06%	87.48	2.29	2.69%
Day High	692.0	19.5	2.90%	91.52	2.85	3.21%

DRY BULK FREIGHT RATES (USD/MT)



TOTAL CHINA IRON ORE IMPORT VOLUMES (MILLION TONNES)



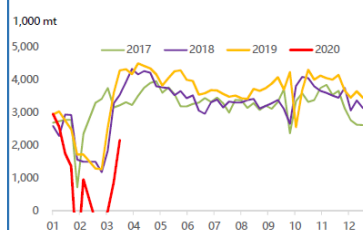
STEEL SPOT MARKET PRICES—CHINA

Steel Spot Market RMB/tonne

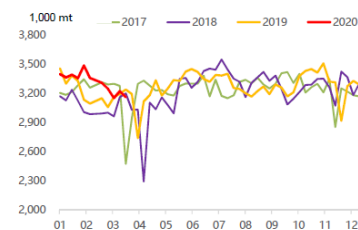
Product	13/3/2020	Change	Change %
ReBar HRB400 ϕ 18mm	3,470.0	30	0.87%
Wirerod Q300 ϕ 6.5mm	3,600.0	40	1.12%
HRC Q235/SS400 5.5mm*1500*C	3,510.0	0	0.00%
CRC SPCC/ST12 1.0mm*1250*2500	4,150.0	-40	-0.95%
Medium & Heavy Plate Q235B 20mm	3,650.0	-10	-0.27%
GI ST02Z 1.0mm*1000*C	4,340.0	-30	-0.69%
Colour Coated Plate	6,650.0	-100	-1.48%

CHINESE STEEL CONSUMPTION

Weekly consumption of rebar



Weekly consumption of hot-rolled coil



CHINESE STEEL MILL PROFITABILITY

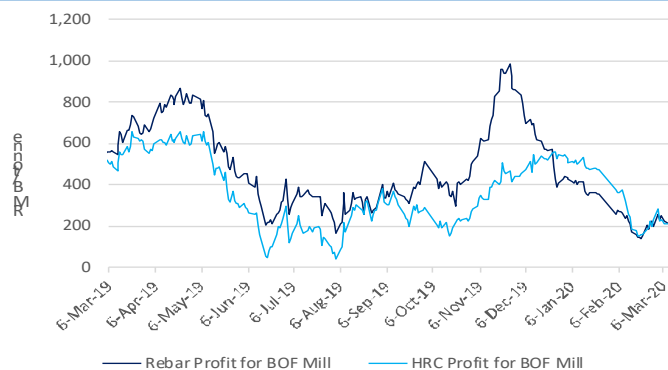
SMM Tracking of Steel Mill P&L - Rebar and Hot-rolled Coil (RMB/tonne)

Category	Price	Change (WoW)	Note
MMI (Fe 62%), USD/mt excluding tax	90.55	-1.20	Mmi CFR Equivalent index for 1st Feb
Coke	1,810	-50	2nd grade met coke, Tangshan, incl. tax
Steel Scrap	2,240	0	steel scrap (6mm) in Zhangjiagang, exl. tax
Billet Cost	2,943	-32	Q234, incl. tax
Rebar cost - Blast furnace	3,169	-34	calculated based on theoretical weight, incl. tax
Rebar profit - Blast furnace	311	84	based on Shanghai prices, incl. tax
Hot-rolled coil cost - Blast furnace	3,259	-32	based on actual weight, incl. tax
Hot-rolled coil profit - Blast furnace	225	16	based on Shanghai prices, incl. tax

Note: 1. Costs in the table are calculated based on today's market prices and factoring our management, sales, financial and depreciations fees.

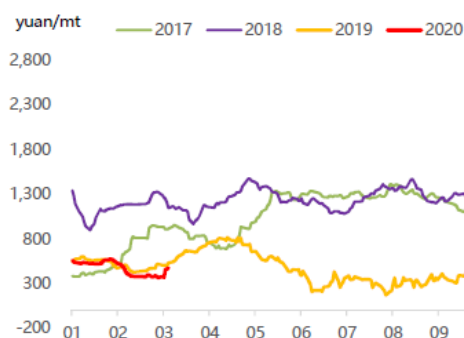
2. The cost refers to average cost in the industry based on SMM's survey of small, medium and large mills in China

CHINESE STEEL MILL PROFITABILITY



CHINESE STEEL MILL PROFITABILITY

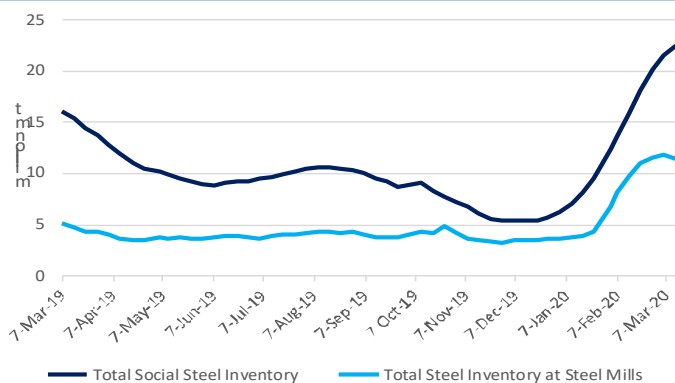
Rebar profits



Hot-rolled coil profits

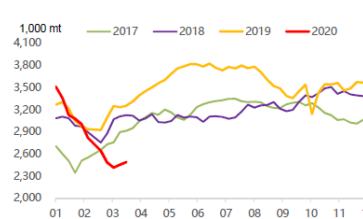


CHINESE STEEL INVENTORIES

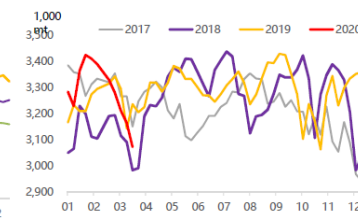


CHINESE STEEL PRODUCTION

Weekly output of rebar



Weekly output of hot-rolled coil



IRON ORE INDEX SPECIFICATIONS, COMPILATION RATIONALE AND DATA EXCLUSIONS

Iron Ore Index Specifications (Port and Seaborne)					Iron Ore Index Compilation Rationale and Data Exclusions
Fe %	65% Fe Fines	62% Fe Fines	58% Fe Fines	62.5% Fe Lump	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: www.mmiprices.com
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	
					</

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 18th, 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%	0.099%	9.31%	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	60.79%	2.33%	4.65%	0.075%	7.90%	MAC Fines	61.00%	2.70%	4.70%	0.110%	9.30%
Jimblebar Blended Fines	60.26%	3.13%	4.77%	0.115%	7.77%	Jimblebar Blended Fines	59.50%	3.70%	5.80%	0.135%	8.30%
Carajas Fines	65.18%	1.34%	1.67%	0.079%	7.98%	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 18th, 2020	Specifications applied for 58% brand assessments										
	Fe	Alumina	Silica	Phos	Moisture						
SSF	56.71%	3.08%	6.18%	0.061%	9.16%						
FMG Blended Fines	58.15%	2.68%	5.61%	0.059%	7.95%						
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%	1.56%	6.43%	0.035%	8.97%						

BLOOMBERG TICKERS

PORT STOCK INDICES			SEABORNE INDICES	
	FOT Qingdao (RMB/wet tonne)	CFR Qingdao Equivalent (USD/dry tonne)		CFR Qingdao (USD/DMT)
IOP162	IRCNQ001	IRCNQ004	IOS162	IRCN0034
IOP158	IRCNQ002	IRCNQ005	IOS165	IRCN0035
IOP165	IRCNQ003	IRCNQ006		
IOP162	IRCN0036	IRCN0037		

CONTACT US

MMi Singapore Office Details: Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7629 E: jarek@mmiprices.com
SMM Singapore Office Details: Level 28, Manulife Tower, 8 Cross Street Singapore. Tel: + 65 6850 7630 E: service.en@smm.cn
SMM Shanghai Office Details: 9th FL, Building 9, Lujiazui Software Park, No.20, Lane 91, Pudong, Shanghai Tel: +86 021 5155 0306 E: service.en@smm.cn

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