

## Valuations: Indian companies

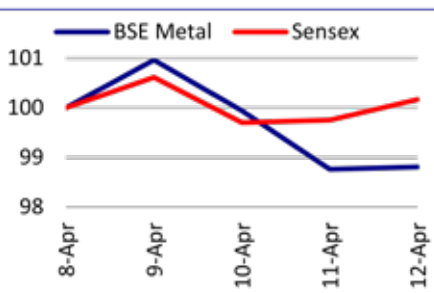
Company	Price (INR)	EV/EBITDA (x)		P/B (x) FY19E
		FY19E	FY20E	
<b>Steel</b>				
Tata Steel	534	6.0	6.9	1.0
JSW Steel	287	6.7	8.0	2.2
JSPL	181	7.0	6.5	0.6
SAIL	57	7.5	6.4	0.6
<b>Non-Ferrous</b>				
Hindalco	210	5.6	5.5	1.1
Nalco	56	2.9	4.8	1.0
Vedanta	184	6.7	5.5	1.2
Rain Ind.*	131	5.4	6.7	1.0
<b>Mining</b>				
Coal India	240	4.0	4.1	7.2
HZL	280	9.5	7.7	3.5
NMDC	104	3.8	5.6	1.2

Note: Detailed table on pg 25 Source: MOSL

## Valuations: Global companies

	Price	EV/EBITDA (x)		P/B (x) CY18
		CY18	CY19	
<b>Mining</b>				
BHP-Billitc	AUD 39.58	6.4	6.4	na
FMG	AUD 8.07	4.7	4.7	na
Rio Tinto	AUD 100.5	5.6	6.1	na
Vale	USD 51.48	4.4	5.0	1.5
Teck Resou	USD 25.21	4.5	5.0	0.8
Anglo Ame5Bp	2209.5	4.7	5.1	na
<b>STEEL</b>				
Arcelor Mi5EUR	20.055	4.2	4.1	0.5
Posco	k KRW 269	4.5	4.3	0.5
US Steel	USD 16.74	3.4	3.4	0.7
Nucor	USD 58.54	6.2	6.4	1.8
JFE	JPY 1935	6.9	6.8	na
Gerdau	BRL 15.01	5.5	5.2	1.1
Angang	CNY 5.68	5.4	5.2	0.8
<b>Ali - Smelting</b>				
Alcoa	USD 28.29	3.6	3.4	1.0
Hydro	NOK 37.35	6.3	4.7	0.9
Rusal	HKD 3.37	8.6	7.4	1.2

## BSE Metals Index v/s Sensex



Source: Bloomberg

Note: Indexed to 100 on 8 Apr 2019

Investors are advised to refer through important disclosures made at the last page of the Research Report.

## Metal Prices

	CMP	change since						
		12-Apr	%	5-Apr	%	31-Mar	%	1-Jan
<b>STEEL</b>								
TMT- Mumbai (INR/ton)	36,900	0	37,000	0	37,000	1	36,700	
HRC- Mumbai (INR/ton)	42,500	1	42,000	1	42,000	-1	43,000	
HRC (USD/ton) fob CIS	508	0	508	-1	515	13	450	
<b>METALLICS</b>								
Sponge iron - Raipur (INR/ton)	19,500	-2	19,800	-2	19,800	-8	21,200	
Pig iron - Raipur (INR/ton)	27,400	0	27,400	0	27,500	-5	28,900	
Iron ore spot (USD/ton) cfr China	88	3	86	7	82	24	71	
Coking coal (USD/ton) fob Aus.	205	0	206	-1	207	-7	219	
Shred. scrap (USD/ton) Rotterdam	284	-4	295	-5	298	3	276	
<b>ALUM.</b>								
LME Spot (USD/ton)	1,844	-1	1,864	-3	1,900	-1	1,870	
Indian prices (INR '000/ton)	149	0	149	-1	151	15	130	
LME inventories ('000 ton)	1,082	-2	1,105	-4	1,129	-15	1,271	
<b>ZINC</b>								
LME Spot (USD/ton)	3,010	1	2,969	0	3,000	20	2,511	
Indian prices (INR '000/ton)	231	0	230	11	208	32	175	
LME inventories ('000 ton)	52	4	50	0	52	-60	129	
<b>COPPER</b>								
LME Spot (USD/ton)	6,490	1	6,419	0	6,485	9	5,965	
Indian prices (INR '000/ton)	439	-1	442	0	437	8	405	
LME inventories ('000 ton)	192	-3	198	14	169	46	132	
<b>OTHERS</b>								
Gold (INR/10gms)	31,673	-1	31,930	0	31,601	0	31,531	
Sliver (INR/1kg)	37,235	-1	37,650	0	37,326	-3	38,270	
Lead Spot LME (USD/ton)	1,910	-3	1,973	-6	2,022	-9	2,090	
Brent crude (USD/bbl)	71.6	2	70.3	5	68.4	33	53.8	
<b>MISC.</b>								
INR/USD	69.2	0	69.2	0	69.4	-1	69.6	
BDI	726	2	714	5	689	-43	1,271	

## Indian steel prices stable; alumina prices down ~8%

- **Indian steel:** Long product (TMT Mumbai) prices were broadly unchanged WoW. Sponge iron prices were ~2% lower, while scrap prices also declined ~2% WoW. Iron ore prices were unchanged WoW. Pellet prices were ~2% higher WoW. Domestic HRC prices were ~1% higher WoW. Export price offers were unchanged, while import offers were higher.
- **Raw materials:** Iron ore prices (China CFR) were largely flat WoW. Thermal coal prices were unchanged WoW. Coking coal prices were slightly lower. China's pellet import prices were ~1% higher WoW. Chinese graphite electrode prices increased ~2% WoW.
- **Europe:** HRC prices were 1% lower WoW. CIS HRC export prices were unchanged. Rotterdam scrap prices were down ~4% WoW.
- **China steel prices:** Chinese HRC and rebar prices were slightly higher WoW. Export prices for rebar and HRC increased ~1% WoW.
- **Base metals:** Aluminum (cash LME) prices were down ~1% WoW. Alumina prices decreased ~8% WoW. Copper (cash LME) prices were up ~1% WoW. Zinc (cash LME) prices increased ~1% WoW. Lead (cash LME) prices were down ~3% WoW. Brent crude prices were up ~2% WoW.

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**Ferrous**

HRC prices were 1.2% higher at INR42,500/t

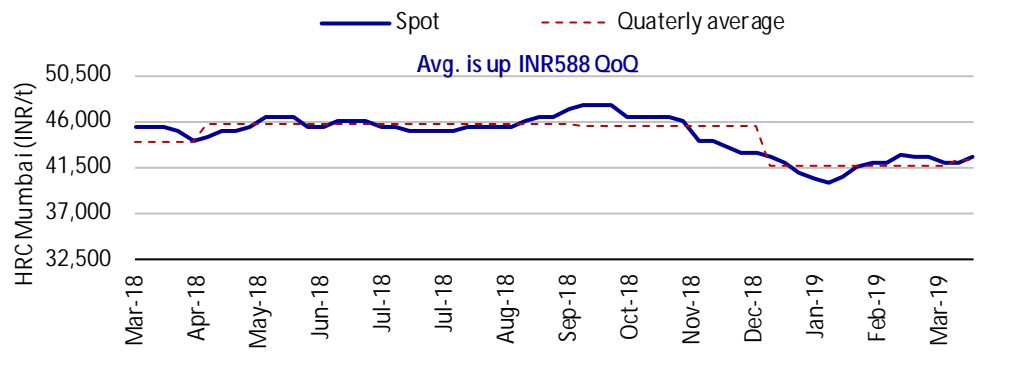
Long products (TMT Mumbai) prices were 0.3% lower WoW at INR37,000/t.

Sponge iron prices were 1.5% lower at INR19,500/t.

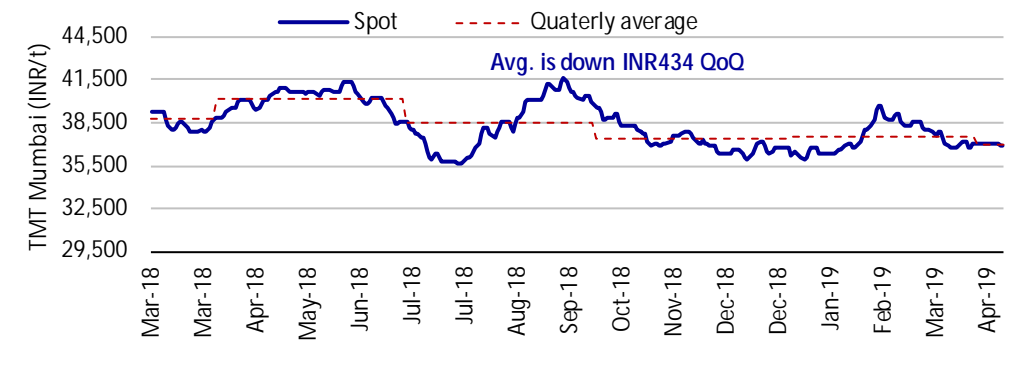
**Ferrous**

**INDIAN DOMESTIC MARKET**

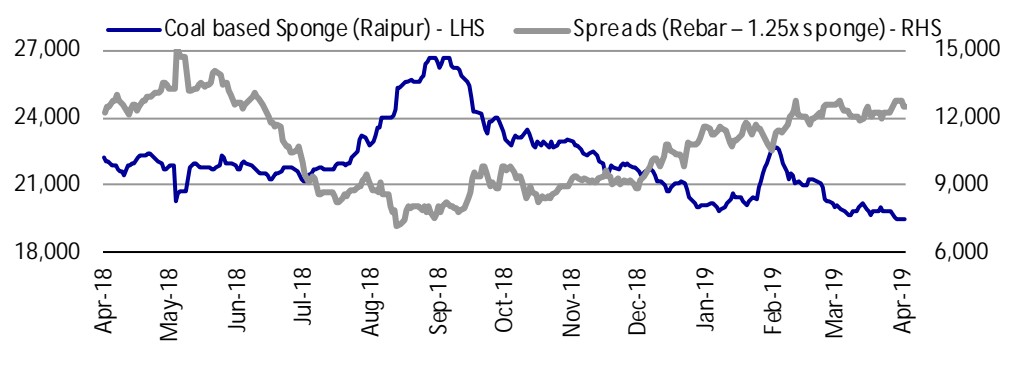
**HRC prices (INR/T, excl. GST)**



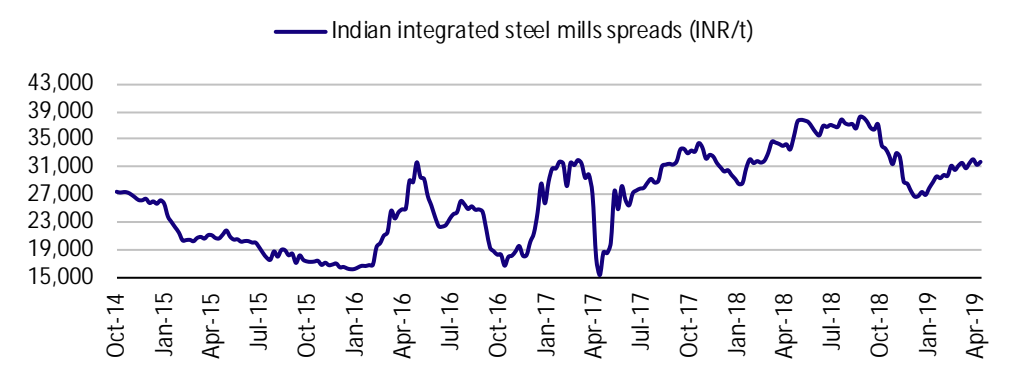
**Rebar prices (INR/T, excl. GST)**



**Sponge iron (made from lumps) prices & spreads to Rebar (INR/T, excl. GST)**



**India: Integrated steel mills spreads (Import parity HRC – 1xcoking coal)**



Source: SteelMint, WSA, MOSL

**Ferrous**

Scrap prices were down 1.9% WoW to INR25,200/t.

Iron ore lump prices were unchanged WoW.

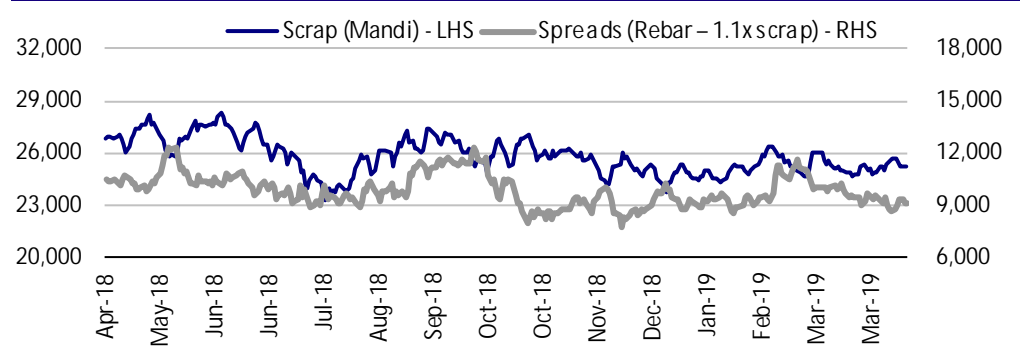
Iron ore fines prices were unchanged WoW.

Pellet prices increased 1.9% WoW to INR5,250/t.

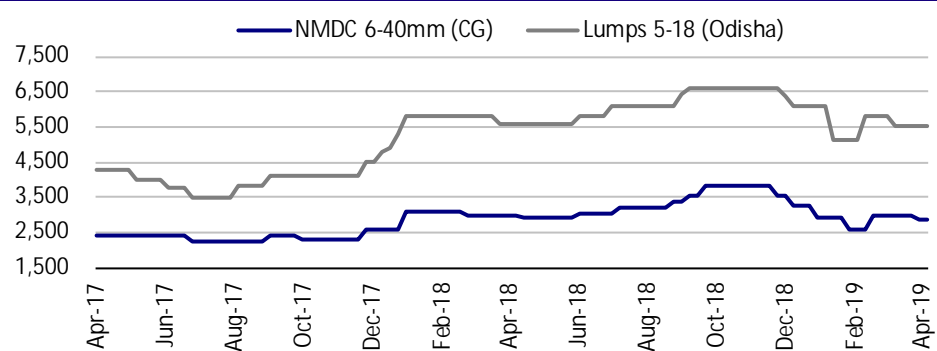
**Ferrous**

**INDIA**

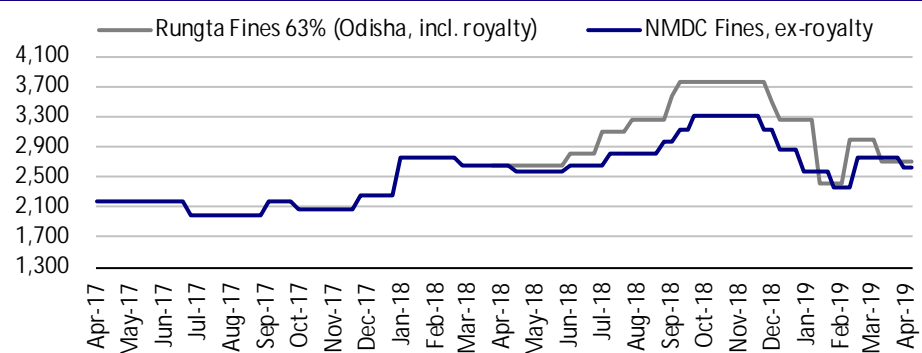
**Scrap Mandi & spreads to Rebar (INR/t)**



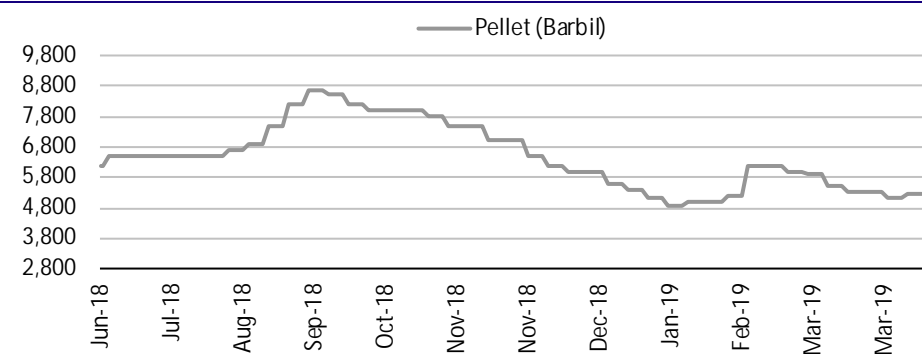
**Iron ore lumps (INR/t)**



**Iron ore fines (INR/t) ex mine**



**Pellet (Barbil) INR/t**

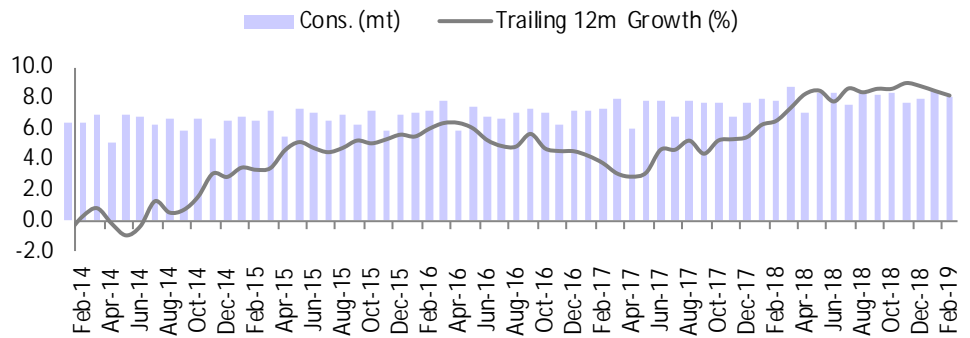


Source: SteelMint, WSA, MOSL

India steel demand grew 3.9% YoY in February 2019.

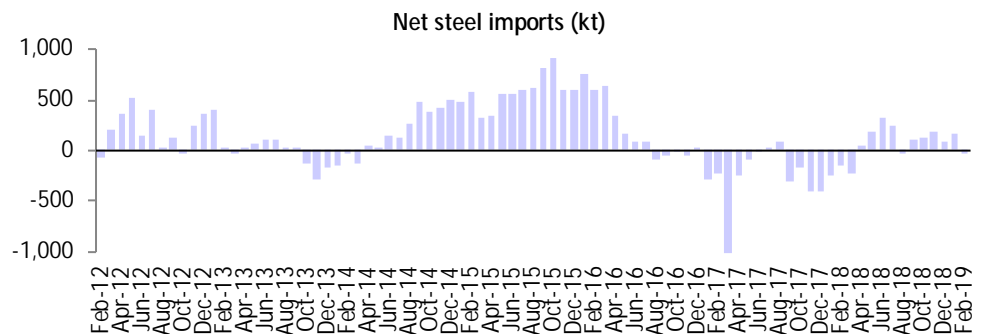
India Monthly steel trends

Steel consumption (mt) and growth (trailing 12-month) YoY %



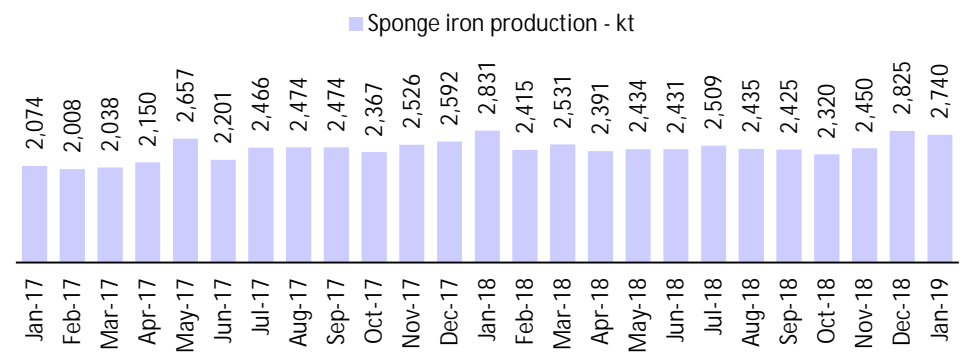
India was a marginal net exporter of steel in February 2019.

Steel imports and exports - kt



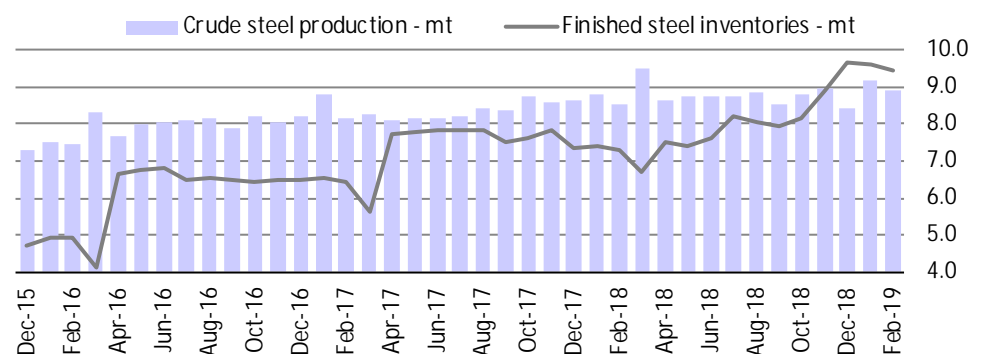
Sponge iron production was down ~ 3% YoY to 2.74mt in January 2019.

Sponge iron production - kt



Crude steel production was up 4.8% YoY in February 2019. Inventories lowered 0.2mt MoM to 9.4mt

Crude steel production & finished steel inventories - mt

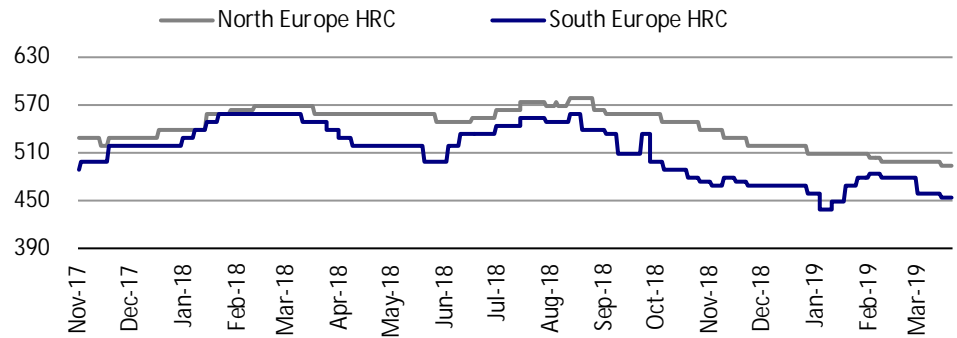


Source: JPC

European Union

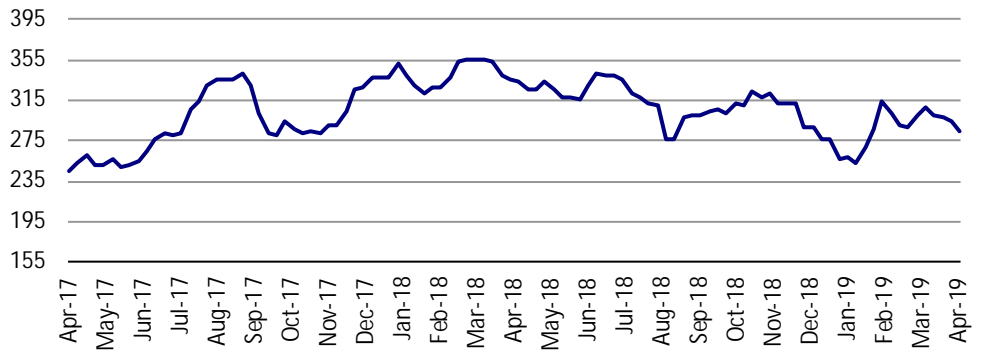
Europe HRC steel prices were 1% lower WoW.

European HRC prices (EUR/ton)



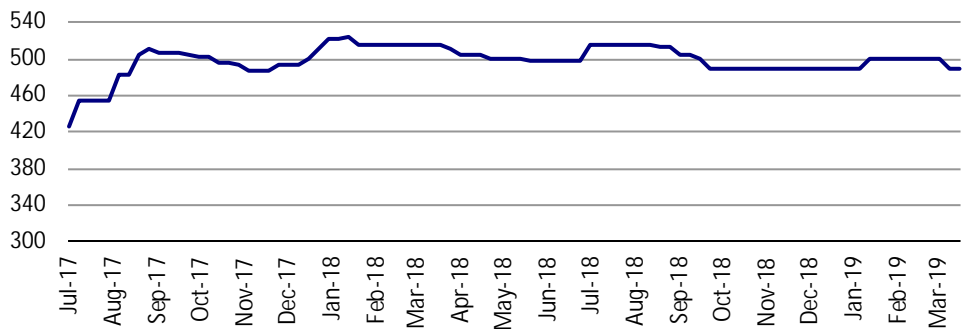
Rotterdam scrap prices were down 4% WoW to USD284/t.

Shredded scrap prices (USD/t) fob Rotterdam



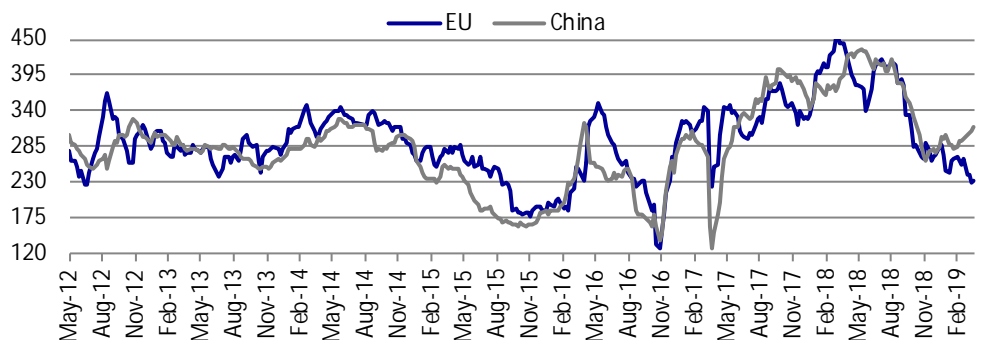
South Europe wire rod prices were flat WoW.

European wire rods southern region (Euro/t)



China product spreads were slightly higher WoW.

Spreads (HRC-1.6xiron ore-0.7xcoking coal) - (USD/t)

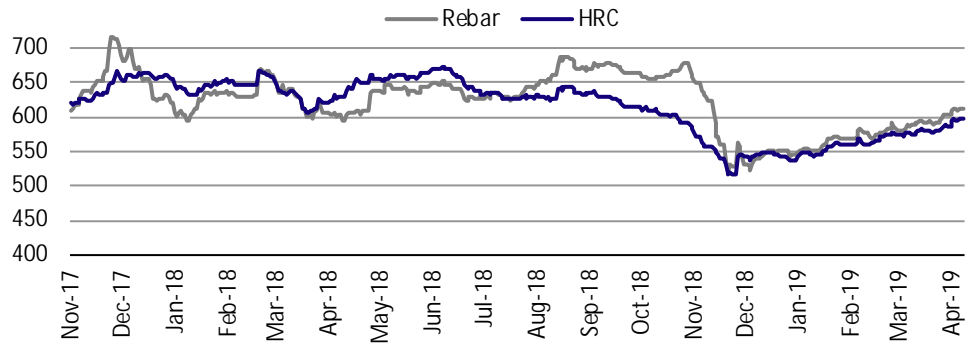


Source: Bloomberg, WSA, MOSL

China

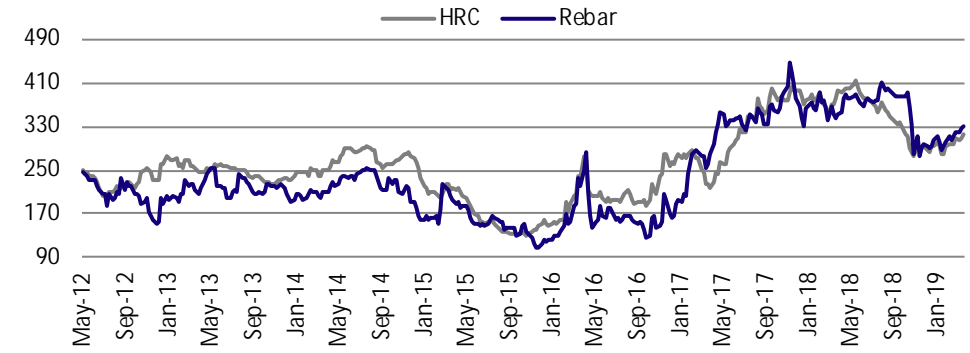
Chinese local rebar and HRC prices were slightly higher WoW.

China domestic prices (USD/ton)



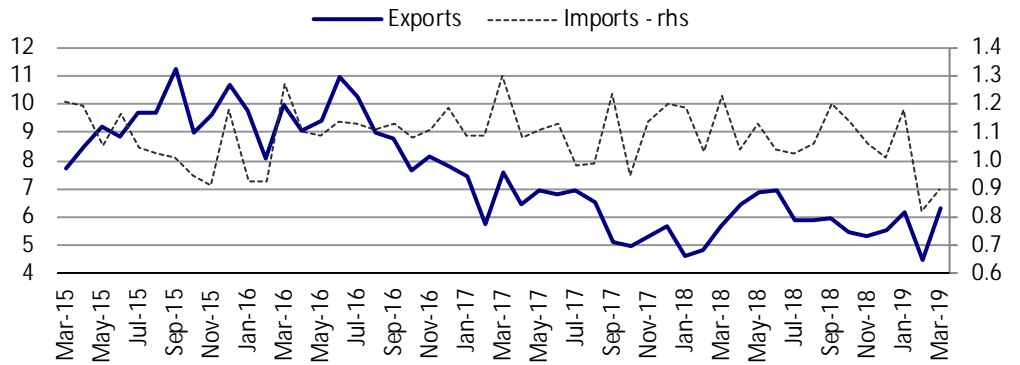
Chinese steel product Rebar and HRC spreads were higher ~2% WoW.

Steel spreads (Steel price - 1.6x iron ore - 0.55x coke) for Chinese producers



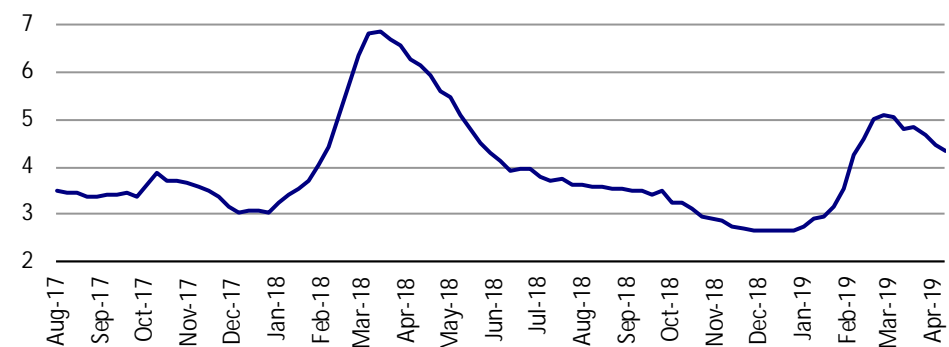
Chinese steel exports were higher ~12% YoY to 6.3mt in March 2019.

Steel trade (m ton)



Steel inventories in China were at 4.3mt.

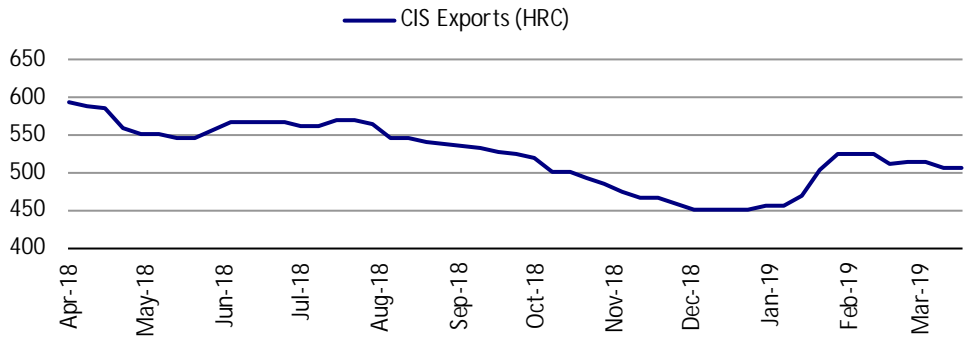
Steel inventories in main China cities (m tons)



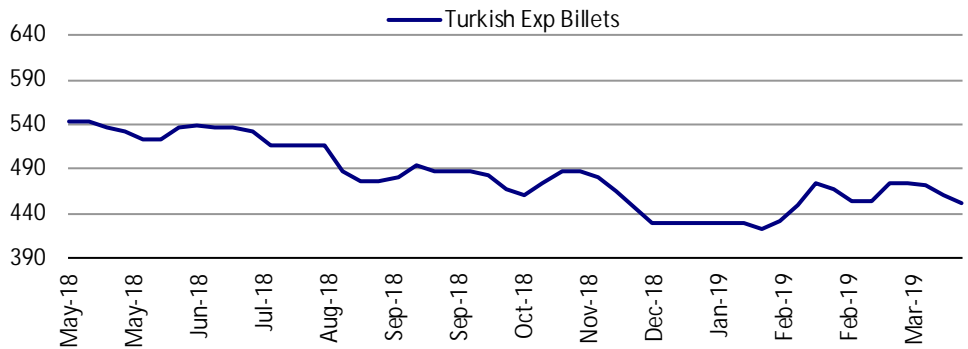
Other regions

CIS export HRC prices were flat WoW at USD508/t.

CIS HRC export prices (USD/ton) fob basis

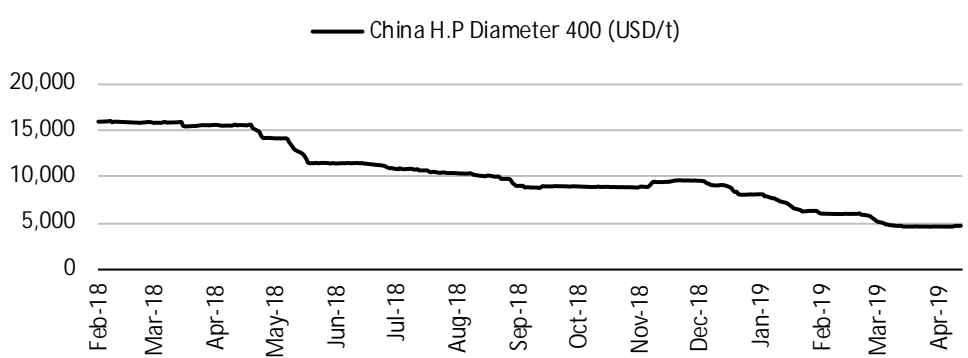


Turkish export billets (USD/ton)

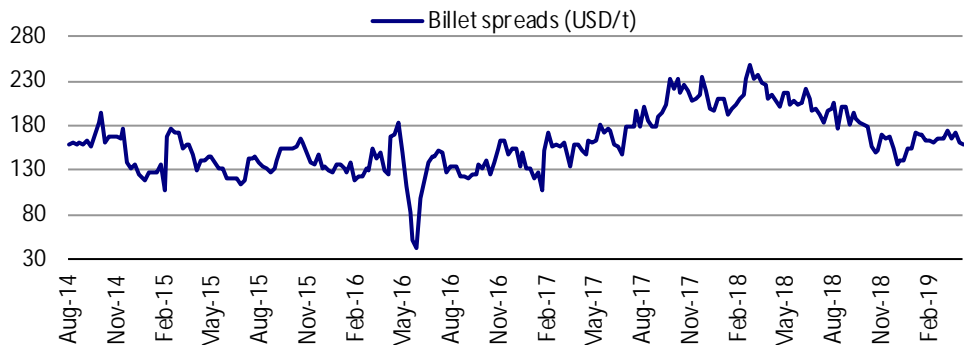


Electrode prices in China for High Power Diameter 400 (USD/ton)

Prices were 1.8% higher WoW.



EAF spreads (Turkish steel billet price – Rotterdam scrap prices) in USD/t



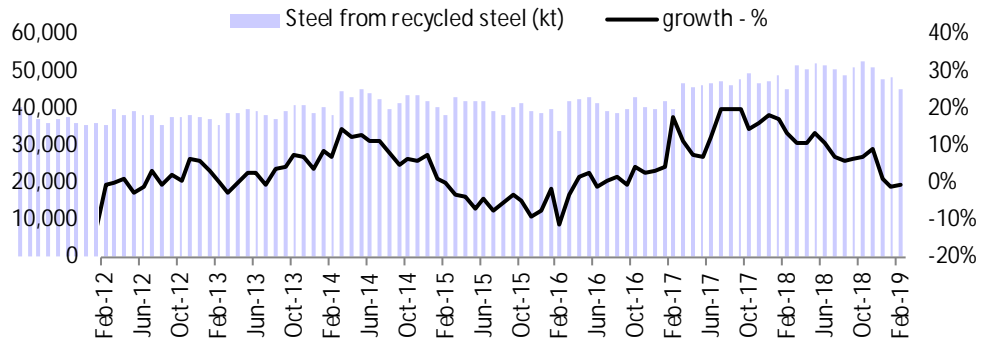
Source: WSA, Bloomberg, MOSL



Other regions

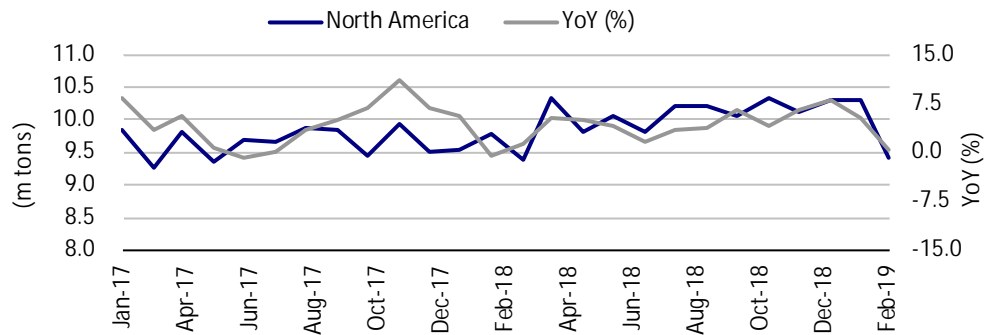
Global steel production from recycled steel decreased 0.5% YoY in February 2019.

Global steel production from recycled steel - kt (Crude steel prod – BF production\*0.96)



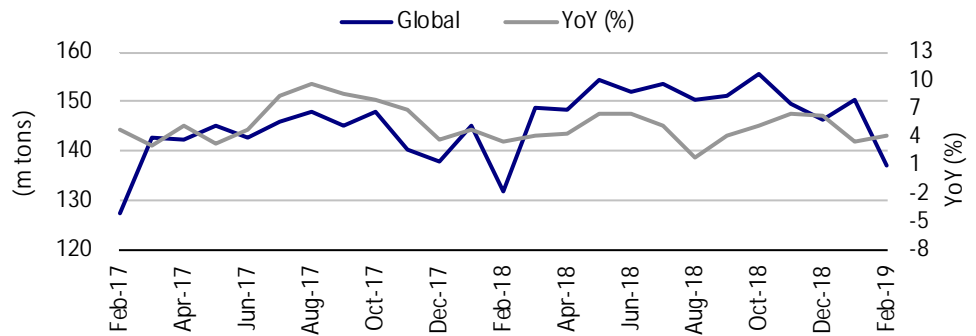
US steel production increased 0.2% YoY to 9.4mt in February 2019.

North America: Monthly crude steel production



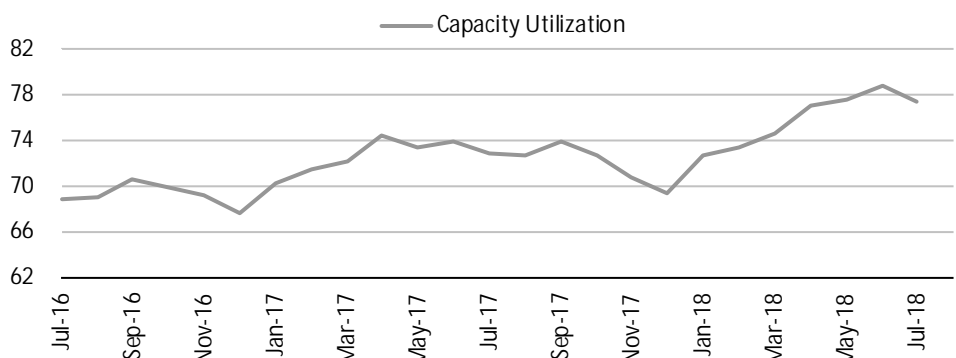
Global crude steel production increased 4.1% YoY to 137.3mt in February 2019.

Global: Monthly crude steel production



Capacity utilization improved 460bps YoY to 77.5% in July 2018.

Global: Monthly crude steel capacity utilization

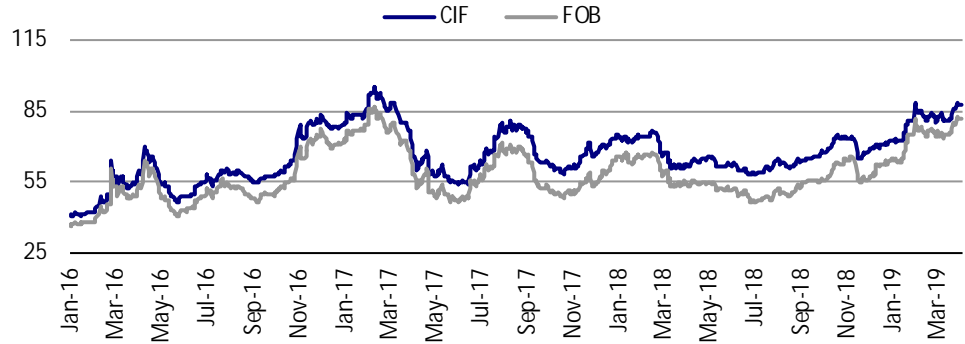


Source: Bloomberg, WSA, MOSL

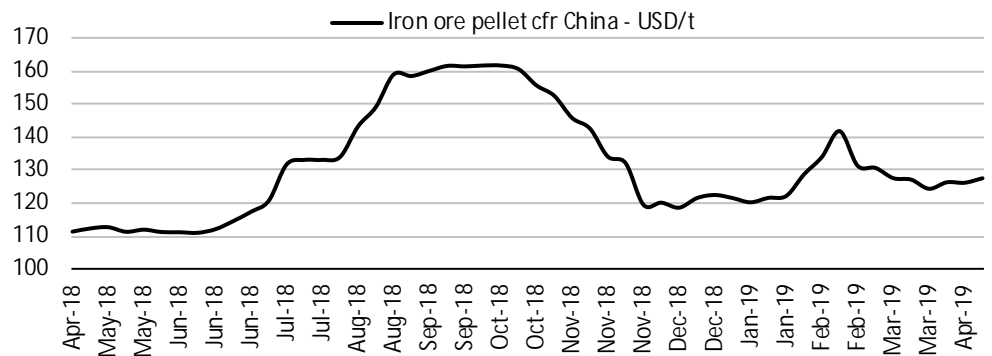
Iron ore (China cfr) prices were largely flat WoW.

Steel raw materials

Import price of 62% grade iron-ore fines in China (USD/ton)

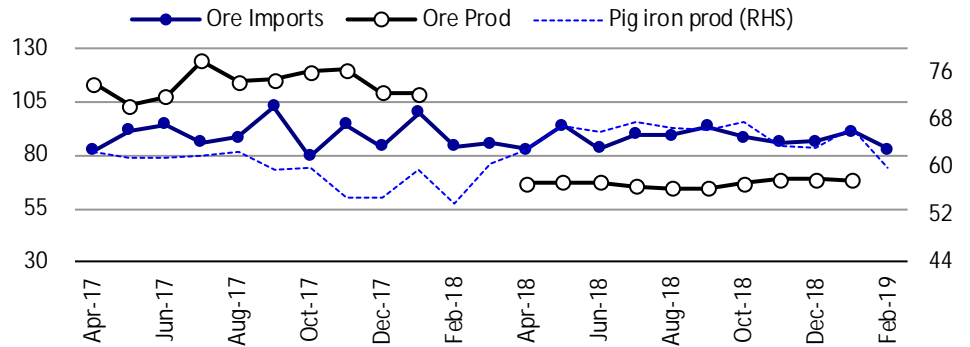


Pellet China cfr (USD/ton)



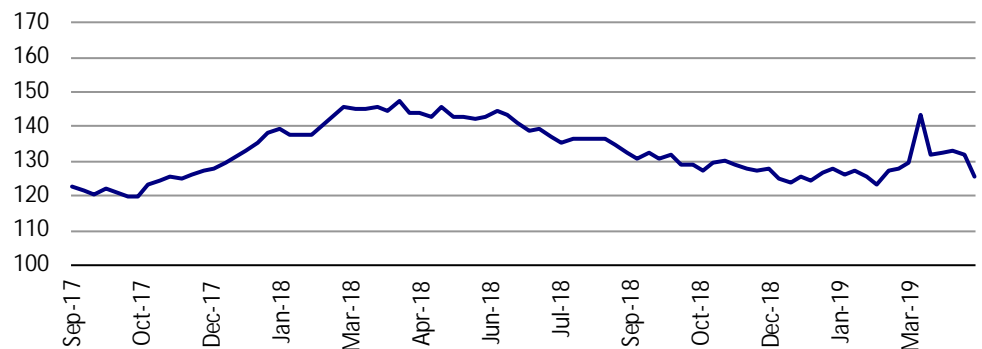
China iron ore imports decreased 1.4% YoY to 83.1mt in February 2019.

China iron-ore production and imports (m tons)



China iron ore inventories were lower 5% WoW to 125.5mt.

China's iron-ore inventories (mt)

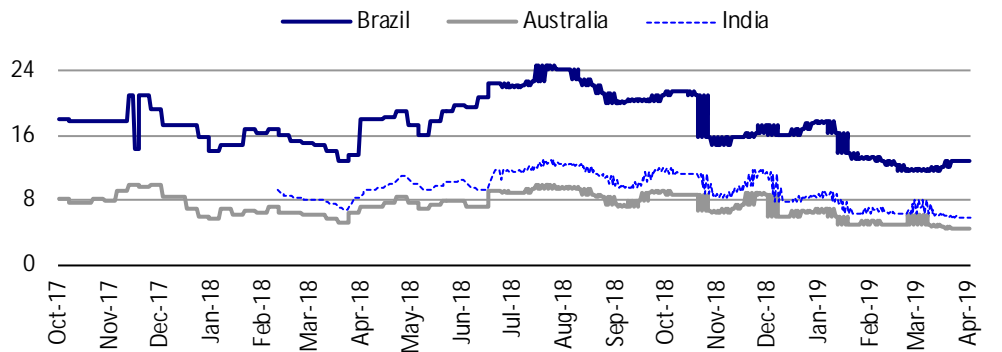


Source: Bloomberg, MOSL

Steel raw materials

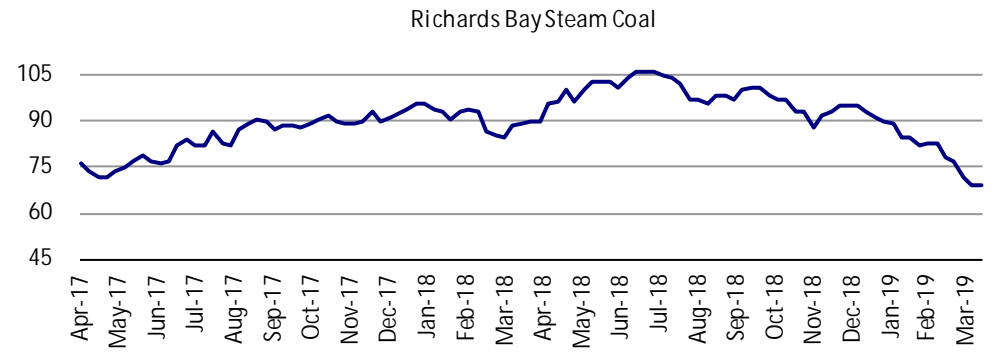
Freight rates to China (USD/ton)

Freight rates were unchanged WoW.



Coal price index

Richards Bay thermal coal prices were stable at USD69/t

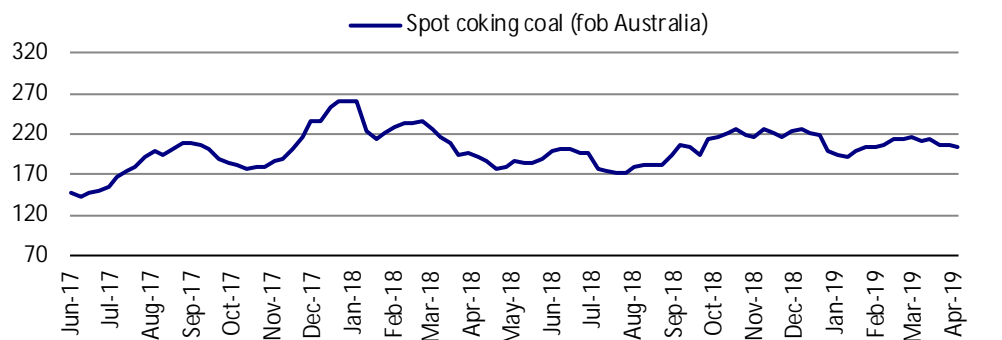


Coke price index (fob China)



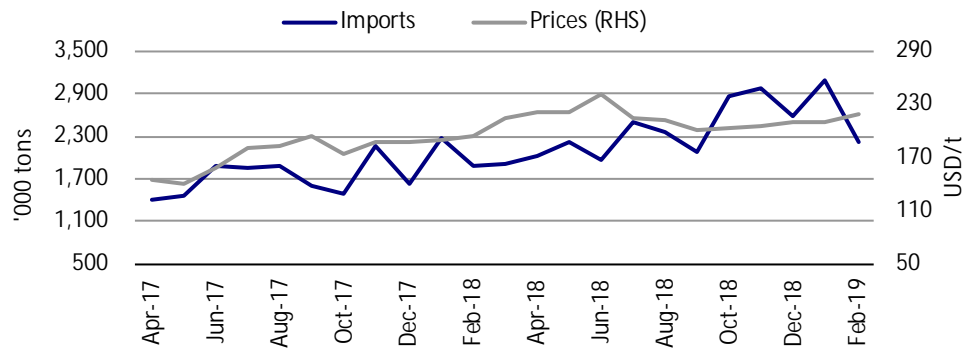
Coking coal (USD/t)

Coking coal prices were slightly lower WoW.

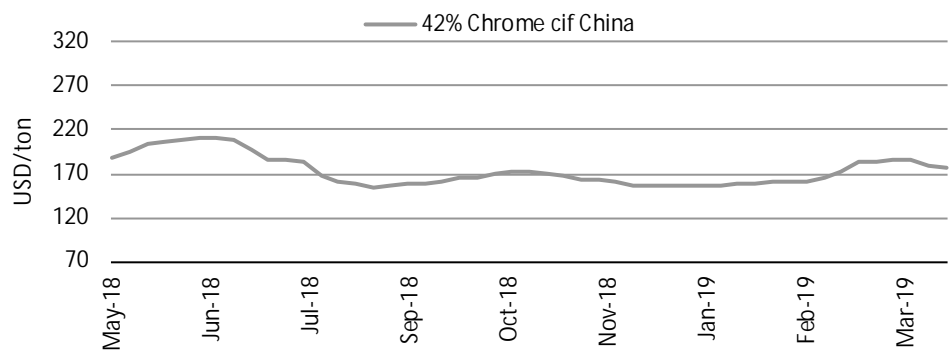


Ferro alloys

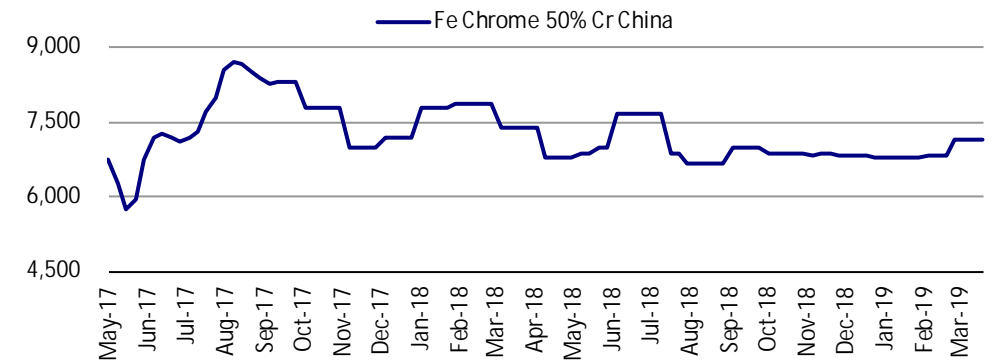
China's imports of manganese ore and concentrate



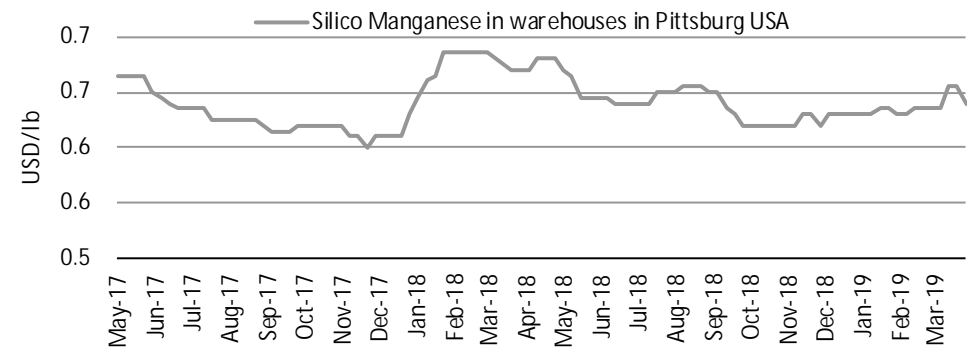
Chrome ore FOB spot prices



Ferro chrome CIF prices (CNY/t)



Silico Manganese prices



Source: Bloomberg, MOSL

Non-ferrous

Aluminum (cash LME) was down ~1% WoW to USD1,844/t.

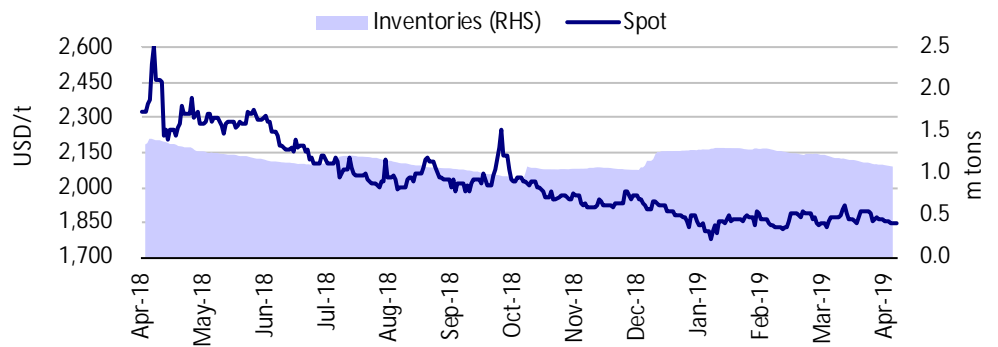
Global aluminum production was up 5.9% YoY to 5.13mt in Aug 2018.

LME and SHFE arbitrage is unfavorable.

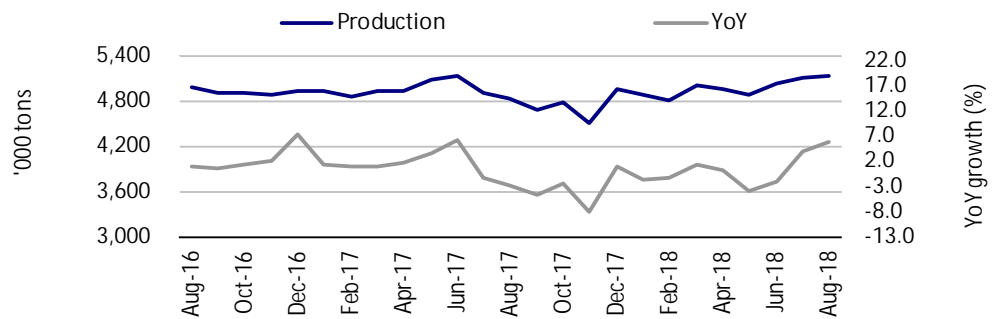
Non-ferrous

Aluminum

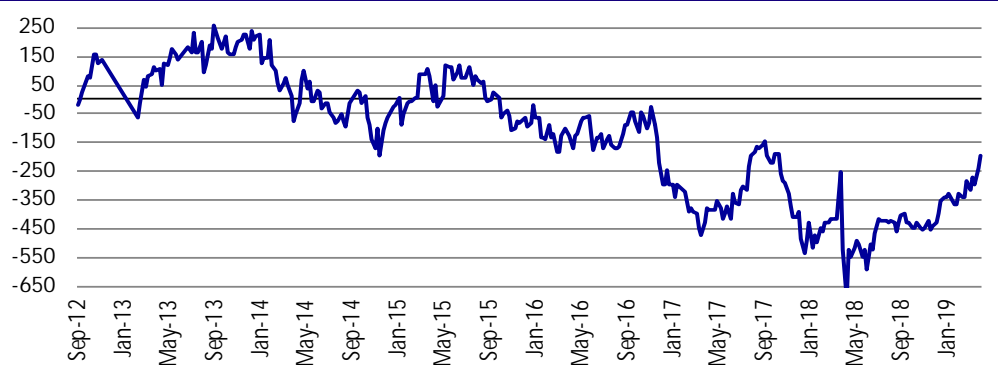
LME inventories and spot prices



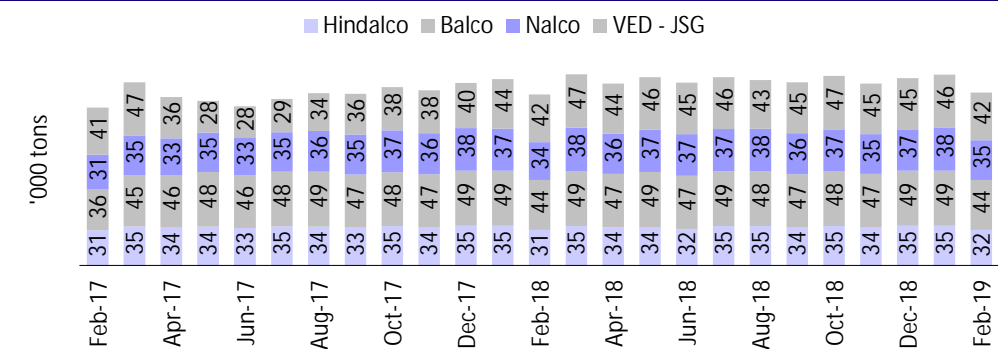
Global primary aluminum monthly production and YoY growth



Aluminum: SHFE Vs LME arbitrage (USD/T)



India: Company-wise primary aluminum monthly production

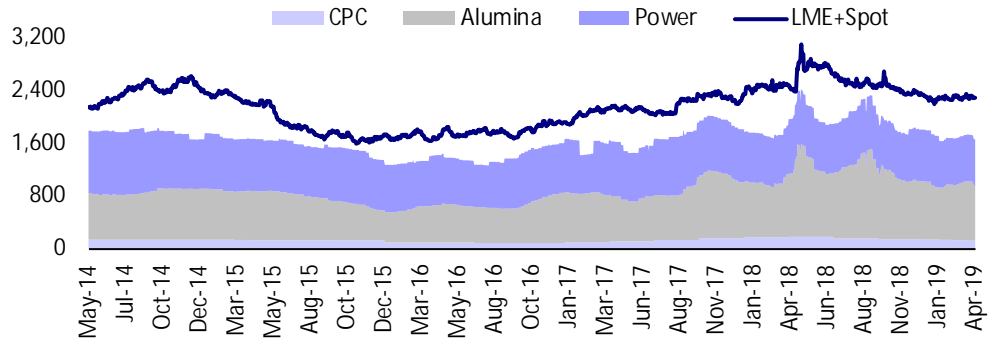


# Non-ferrous

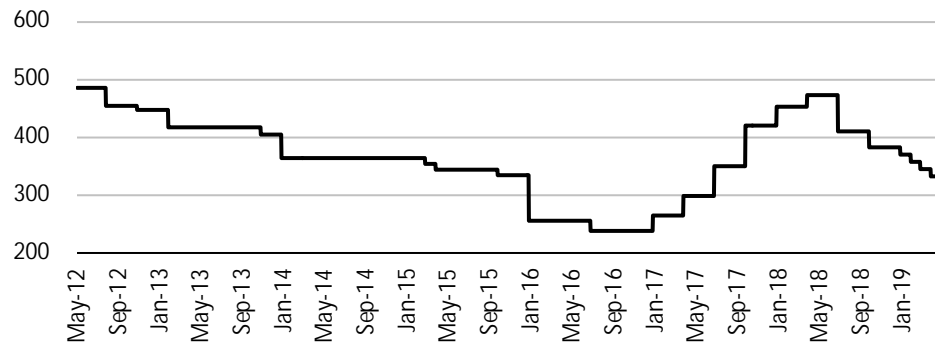
## Aluminum

Aluminum raw material and power cost for marginal producer in USA (USD/t)

All-in-aluminum was at USD2,291/t.

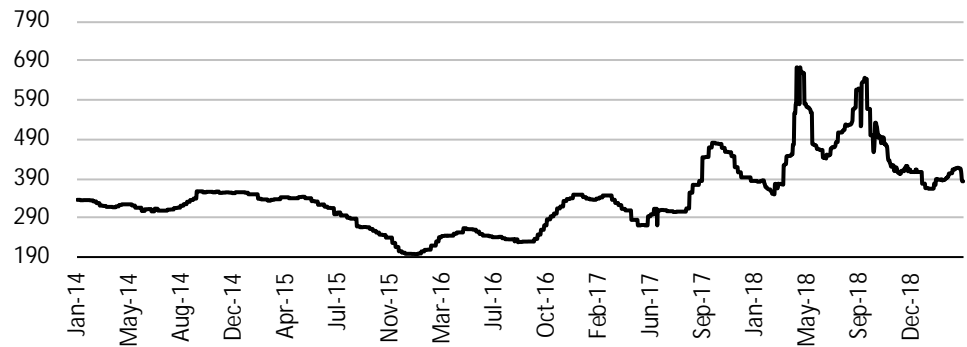


## CPC US (USD/t)

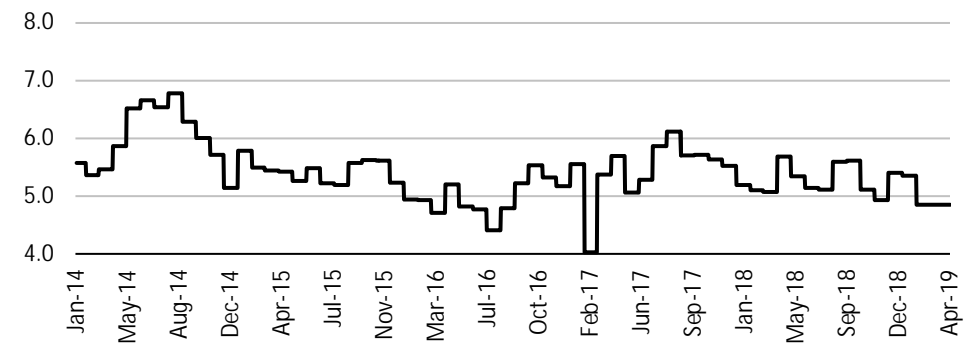


## Alumina (USD/t)

Alumina was at ~USD383/t.



## Industrial Power US (Louisiana) per mwh

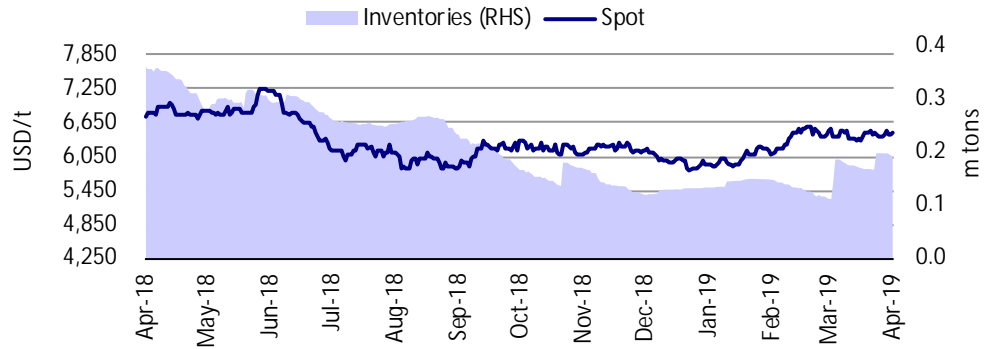


Source: Bloomberg, Industry, MOSL

# Non-ferrous

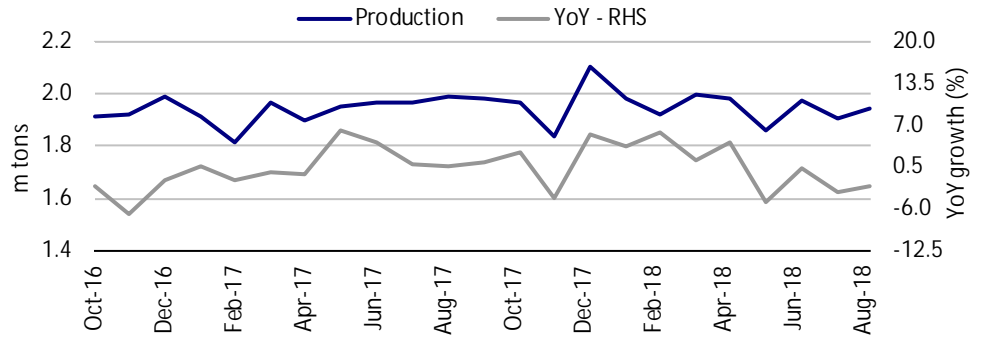
## Copper LME inventories and prices

Copper (cash LME) prices were up 1% WoW to USD6,490/t.

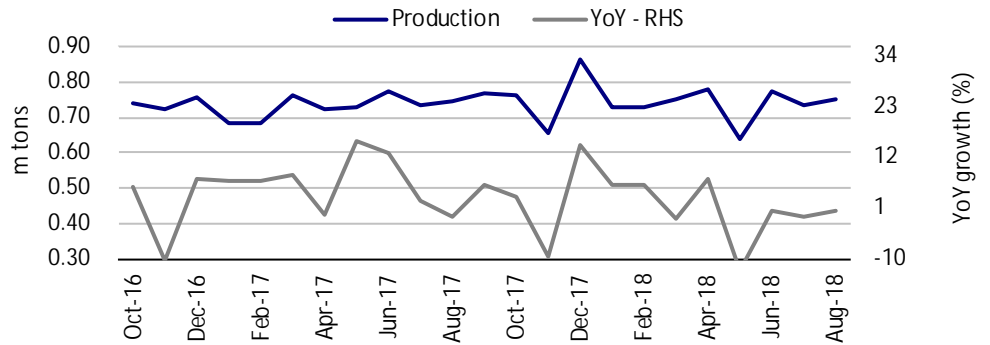


## Global refined copper monthly production and YoY growth

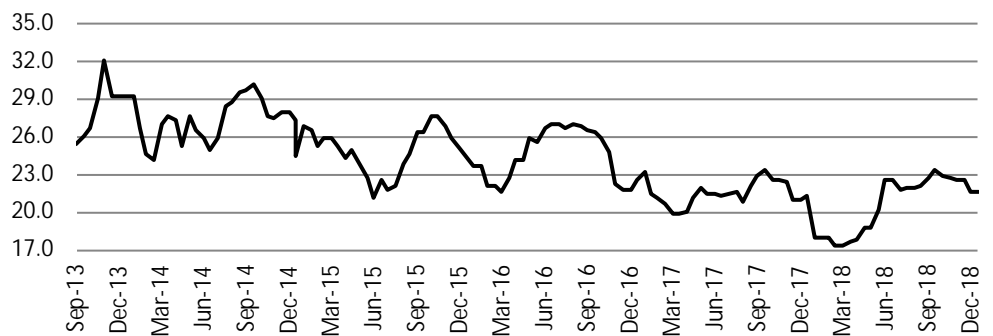
Global copper production declined 2.5% YoY to 1.943mt in Aug 2018.



## China: Refined copper monthly production and YoY growth



## Copper: Spot TCRC (USc/lb)

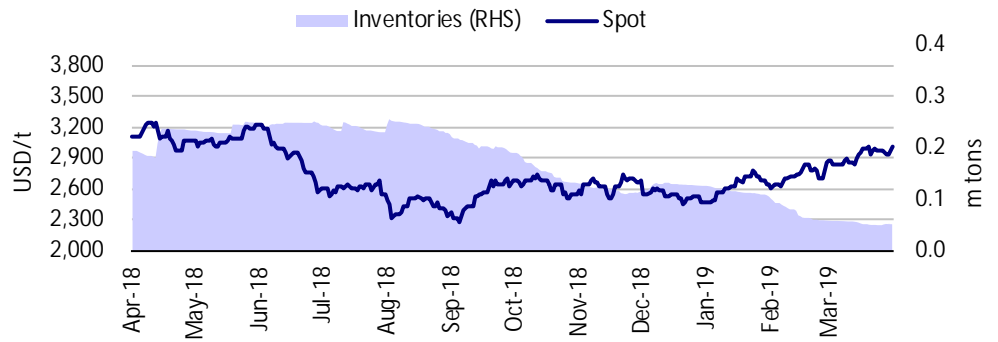


# Non-ferrous

## Zinc

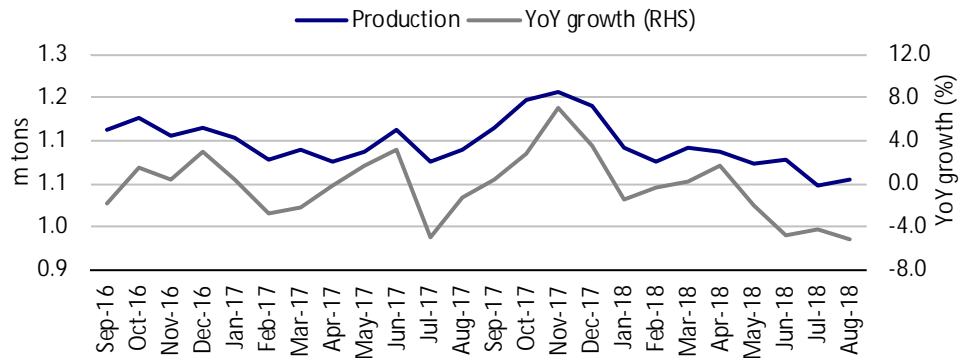
### LME inventories and prices

Zinc (cash LME) was up~1% WoW to USD3,010/t

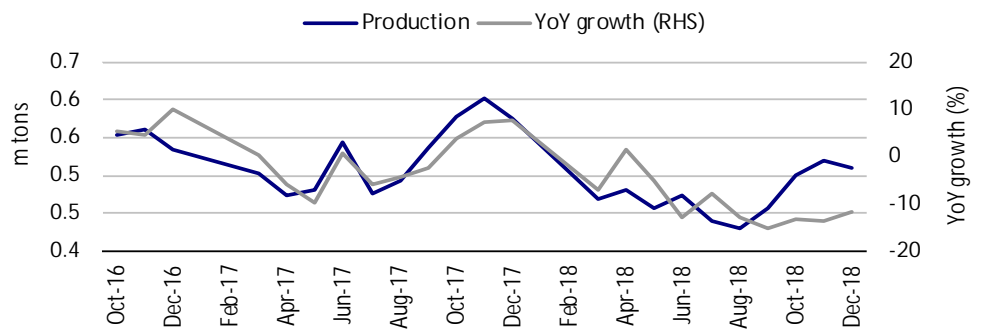


### Global refined zinc monthly production and YoY growth

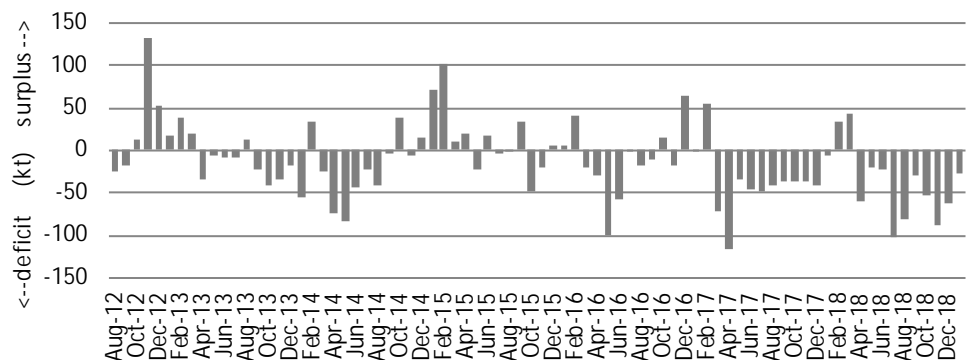
Global zinc production declined 5% YoY to 1.067mt in Aug 2018.



### China: Refined zinc monthly production and YoY growth



### Zinc: Global metal surplus (deficit) – kt



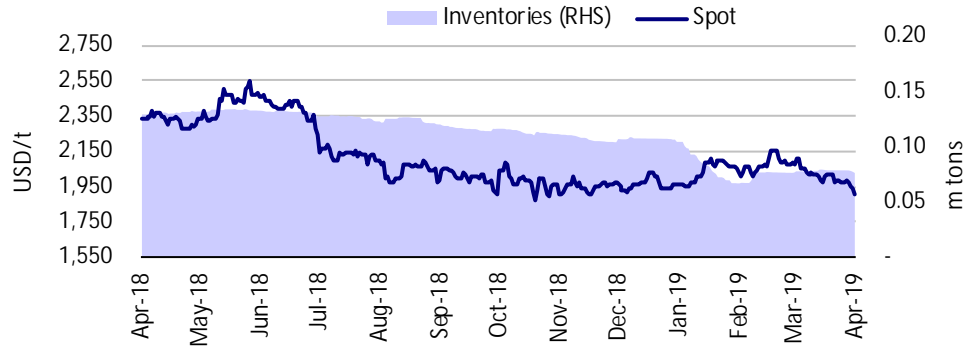


# Non-ferrous

## Lead

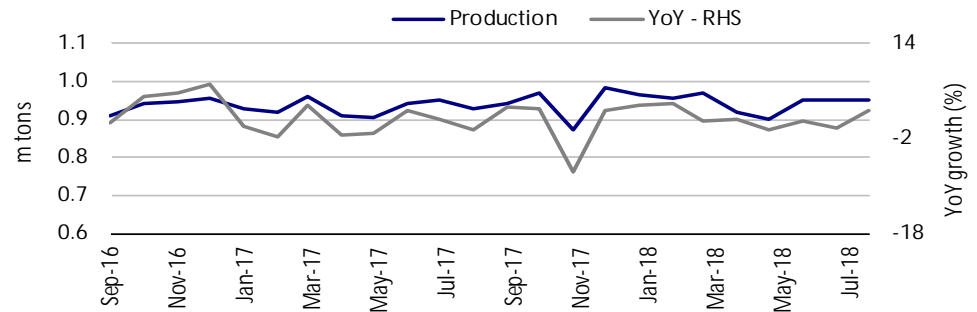
### LME inventories and prices

Lead (cash LME) was down 3.2% WoW to USD1,910/t.

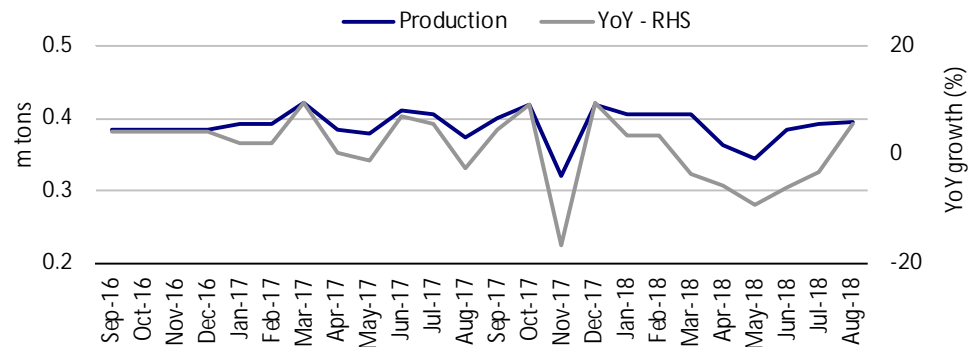


### Global refined lead monthly production and YoY growth

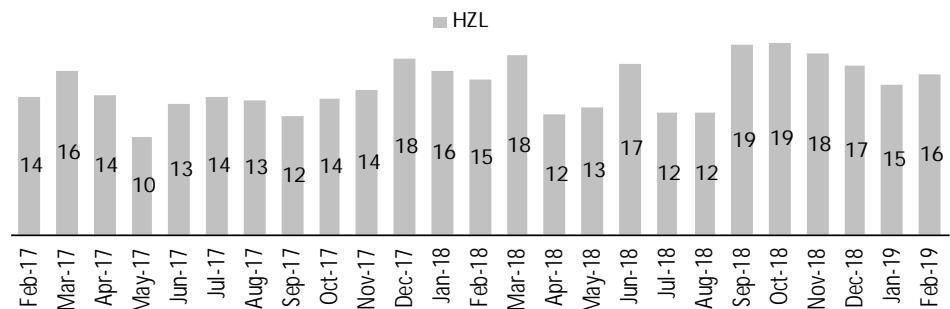
Refined lead production increased 2.7% YoY to 951kt in Aug 2018.



### China: Refined lead monthly production and YoY growth



### India: Company-wise refined lead monthly production

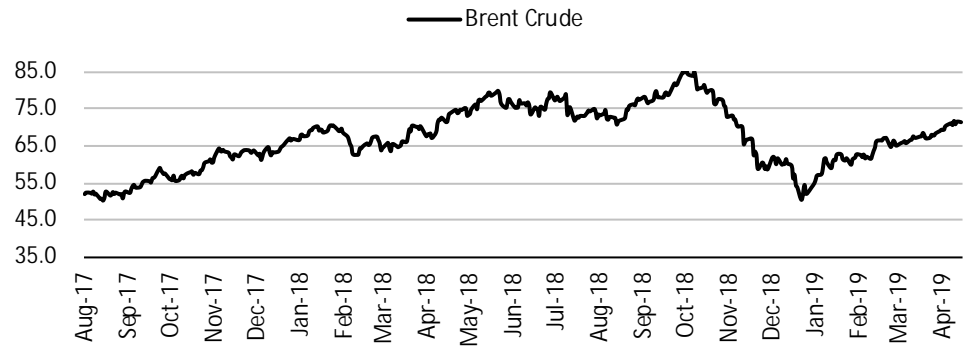


Source: Bloomberg, MOSL

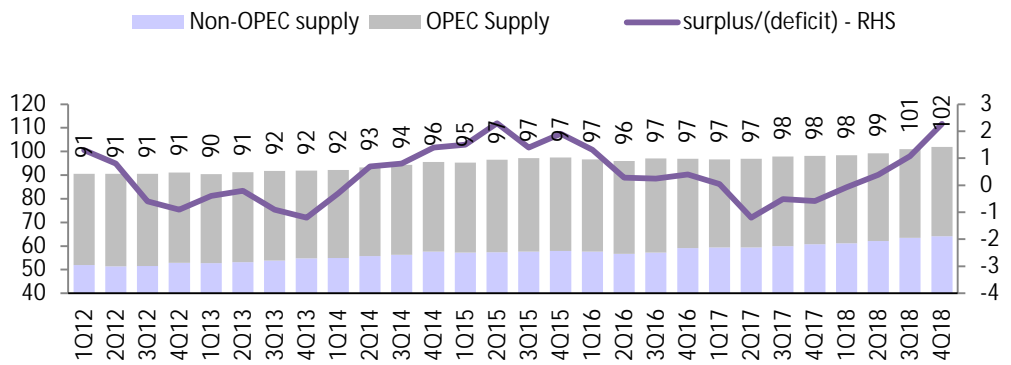
# Crude Oil

Brent (crude oil) was up ~2% WoW to USD71.6/bbl.

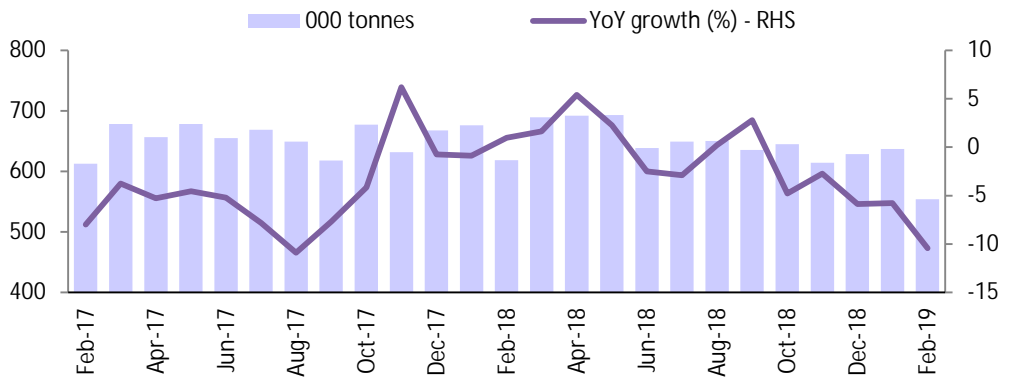
Brent crude oil price (USD/bbl)



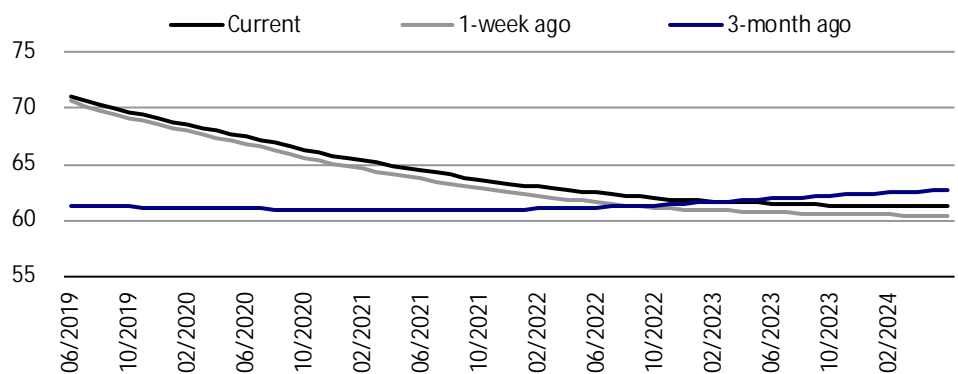
Global crude oil quarterly supply & surplus/(deficit) - mbpd



Crude oil production by Private/JVs in Rajasthan ('000 tonnes)



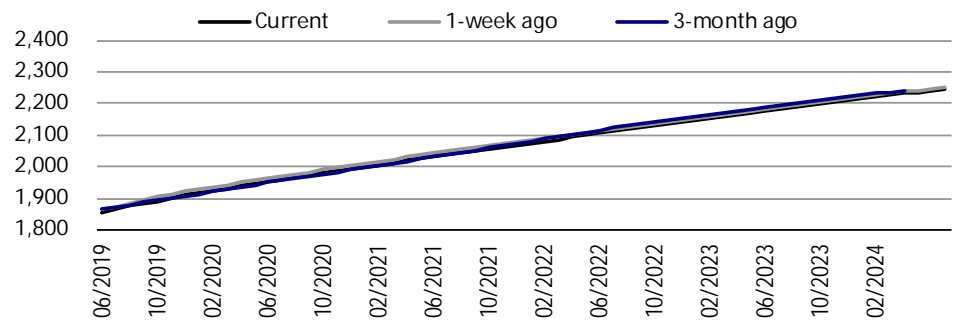
Crude oil futures (USD/bbl)



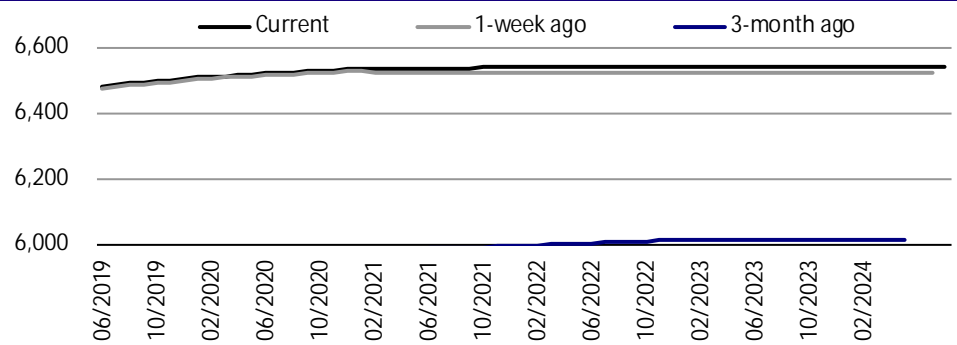
Source: Bloomberg, MOSL

## Commodity forward curves

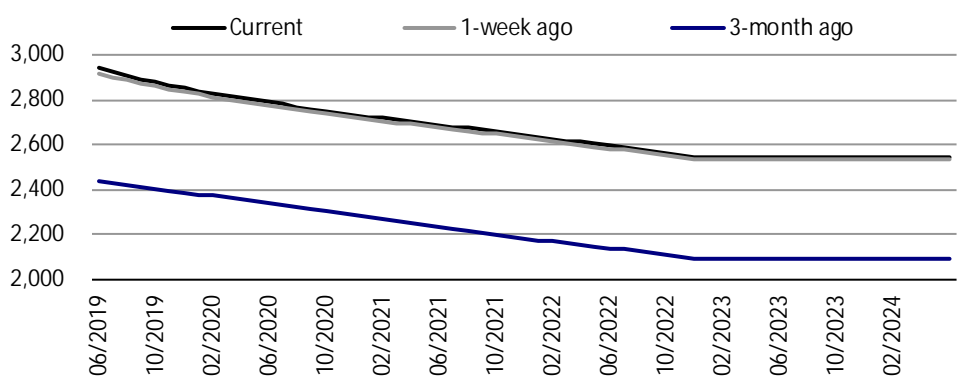
LME aluminum (USD/ton)



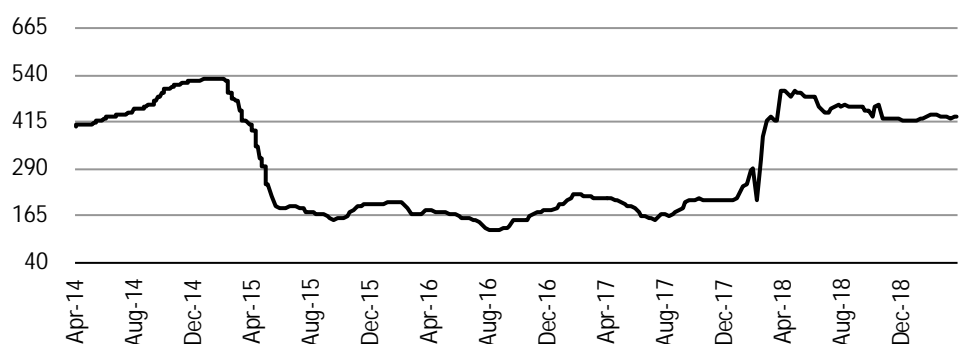
LME copper (USD/ton)



LME zinc futures (USD/ton)



Aluminum metal US spot premium (USD/ton)

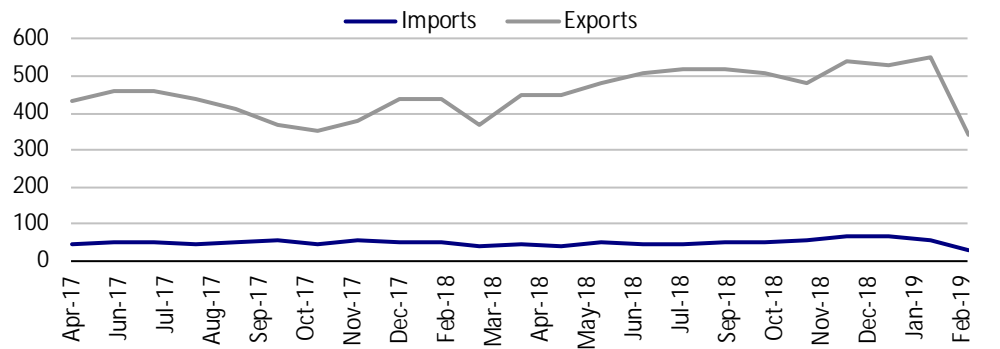


Source: Bloomberg, MOSL

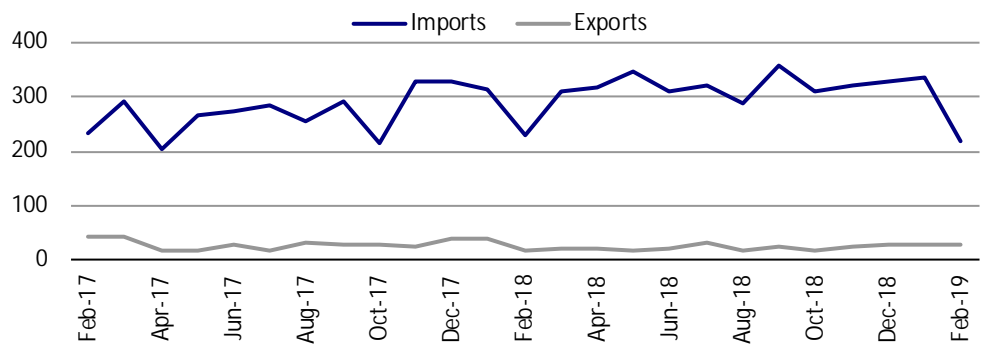
## China non-ferrous trade data

Aluminum exports were down 8% YoY to 340kt in February 2019.

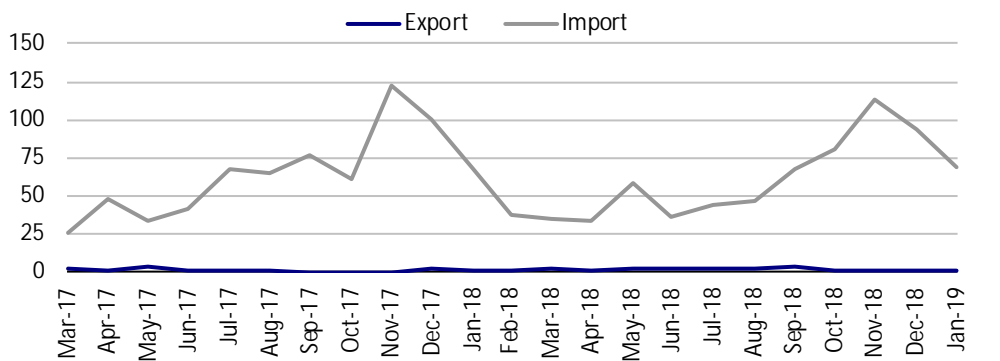
China's aluminum trade ('000 tons)



China's refined copper trade ('000 tons)

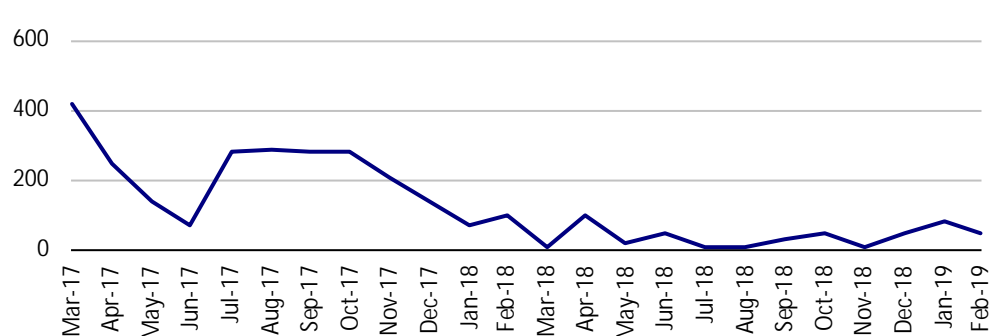


China's refined zinc trade ('000 tons)



China's alumina imports ('000 tons)

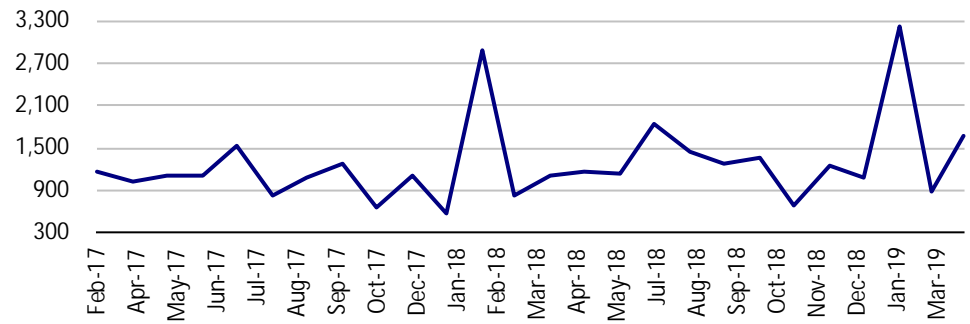
Chinese alumina imports decreased 50% YoY to 50kt in February 2019.



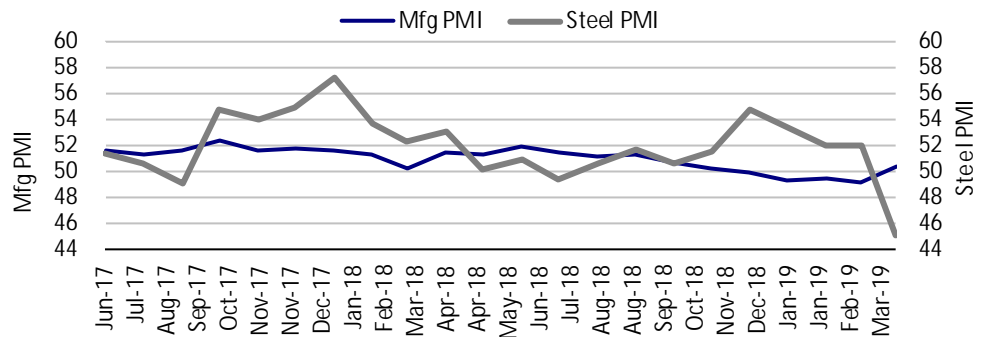
Source: Bloomberg, MOSL

## Key indicators

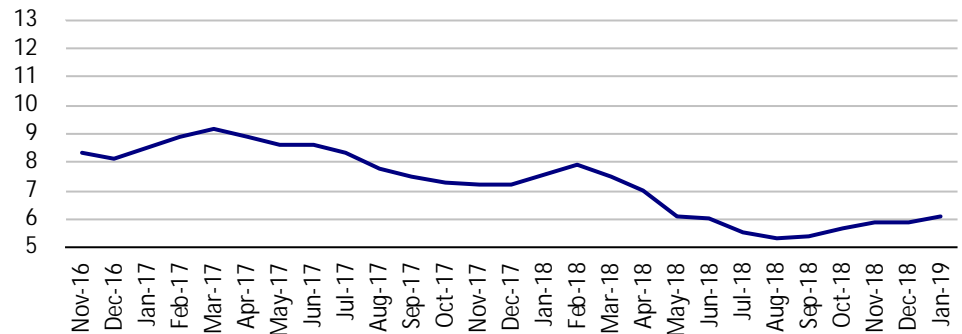
China new loan growth (Yuan b)



China: PMI

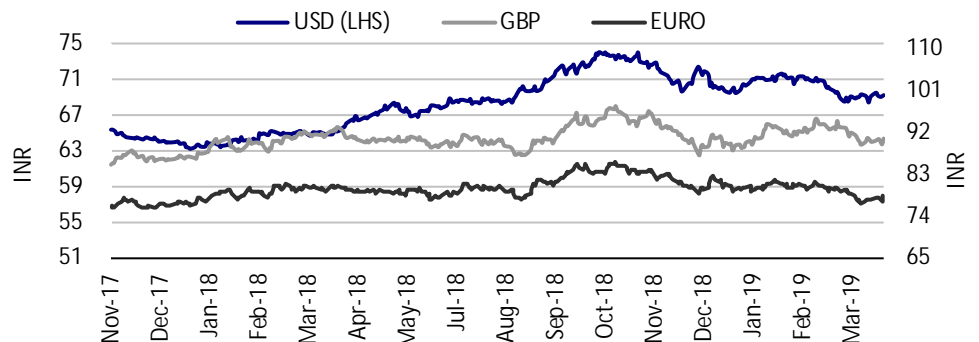


China: Fixed asset investment growth (%)



Fixed asset investment growth was at 6.1% YoY in January 2019.

Currency movement with respect to the rupee

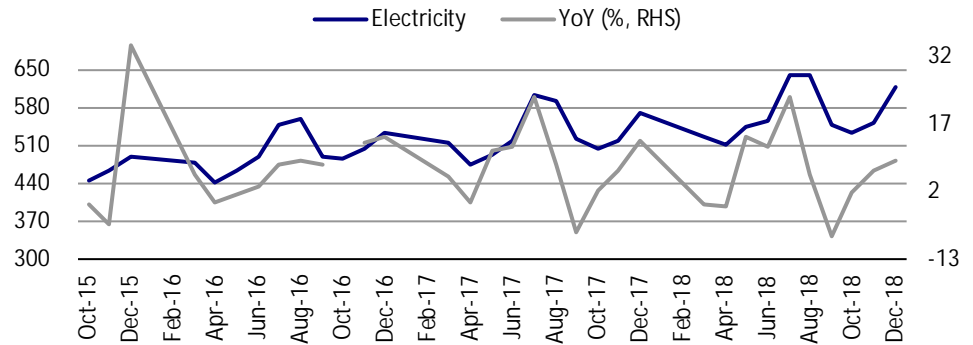


Source: Bloomberg, MOSL

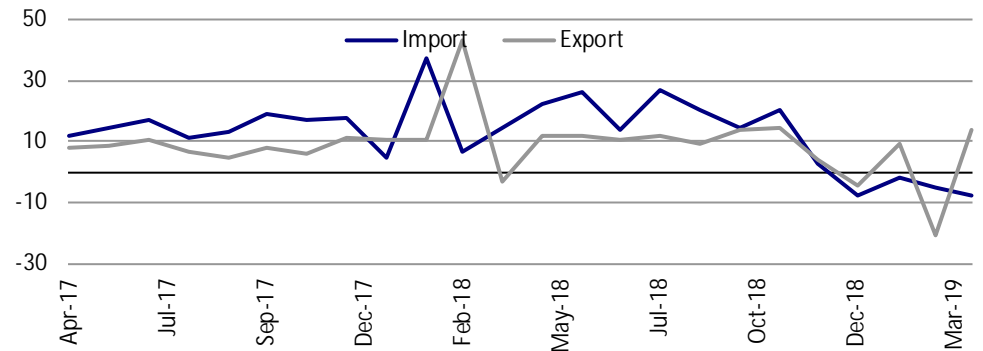
## Key indicators (Contd...)

China electricity generation increased 8.8% YoY in Dec 2018.

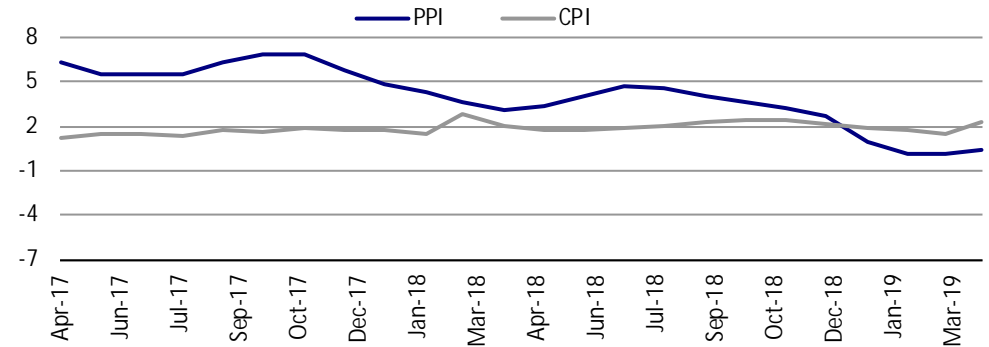
China Energy Production: Electricity (b kwh)



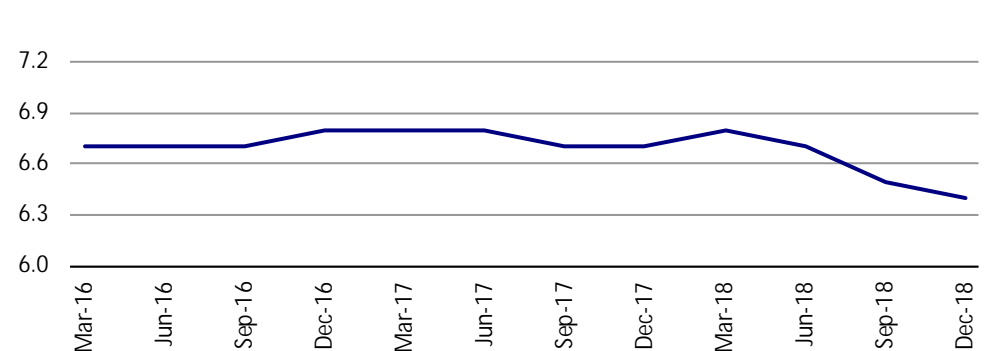
China Monthly Trade YoY (%)



China Price Index YoY (%)



China GDP YoY (%)

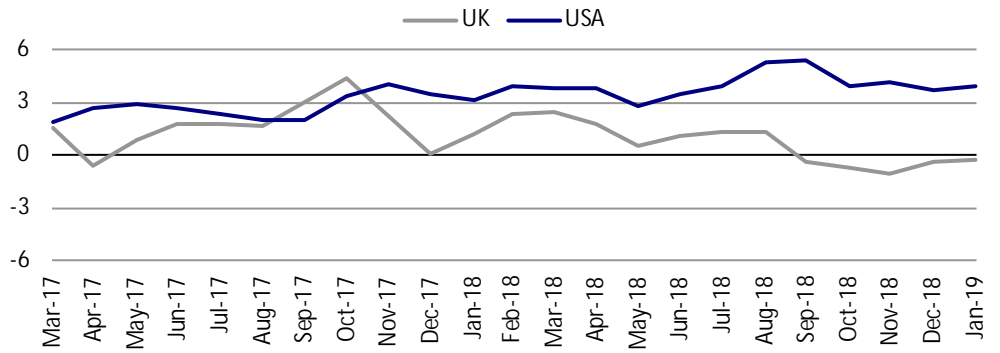


China's GDP growth was 6.4% in 3QCY18.

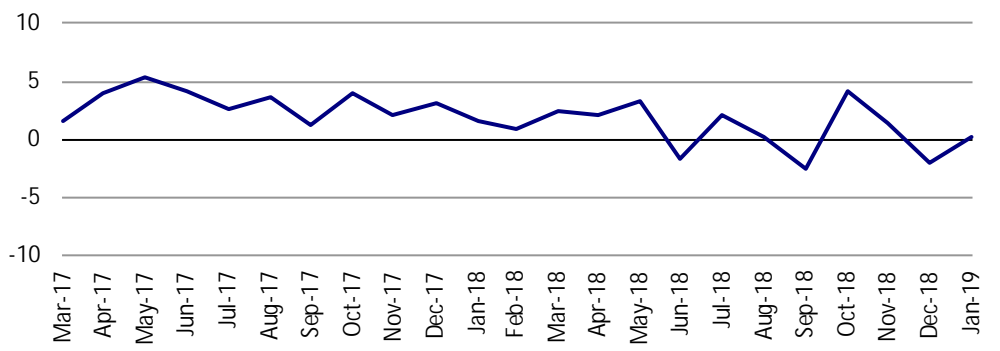
Source: Bloomberg, MOSL

# Industrial production growth

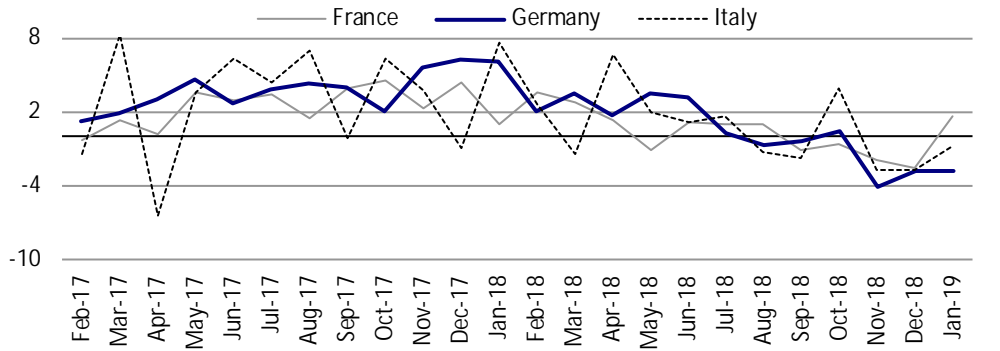
The UK and the USA (%)



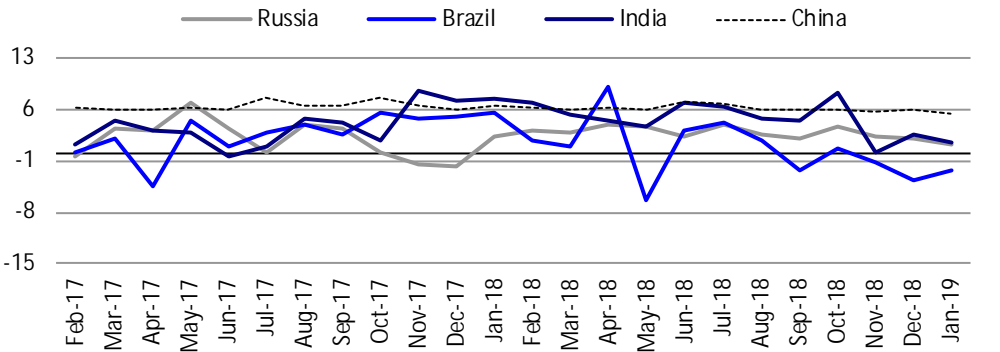
Japan (%)



European Union (%)



BRIC (%)



Source: Bloomberg, MOSL

## Stock exchange announcements

**Hindalco:** Hindalco reported a spillage in the red mud (bauxite residue) storage area connected to its alumina plant at Muri, Jharkhand. The company highlighted that operations have been temporarily suspended to assess the situation.



## Metals Valuation Matrix

### Valuations: Indian Companies

	Rating	Price (INR)	MCAP (USD M)	EPS			P/E (x)		EV/EBITDA (x)		P/B(x)	
				FY18	FY19E	FY20E	FY19E	FY20E	FY19E	FY20E	FY19E	FY20E
<b>Steel</b>												
Tata Steel	Sell	534	7,488	69.5	88.7	72.0	6.0	7.4	6.0	6.9	1.0	1.1
JSW Steel	Buy	287	10,002	23.4	30.6	21.2	9.4	13.5	6.7	8.0	2.2	2.0
JSPL	Buy	181	2,396	-8.5	2.3	3.8	78.7	48.3	7.0	6.5	0.6	0.6
SAIL	Neutral	57	3,400	0.3	5.0	6.1	11.5	9.4	7.5	6.4	0.6	0.6
<b>Non-Ferrous</b>												
Hindalco	Buy	210	6,262	18.9	25.7	26.3	8.2	8.0	5.6	5.5	1.1	1.0
Nalco	Buy	56	2,066	5.1	8.8	5.7	6.3	9.7	2.9	4.8	1.0	1.1
Vedanta	Sell	184	7,875	20.4	12.9	16.0	14.3	11.5	6.7	5.5	1.2	1.1
Rain Ind.*	Buy	131	635	23.7	20.4	13.7	6.4	9.5	5.4	6.7	1.0	0.9
<b>Mining</b>												
Coal India	Buy	240	21,875	19.2	27.4	29.0	8.7	8.3	4.0	4.1	7.2	6.6
Hindustan Zinc	Neutral	280	17,111	21.1	18.6	22.1	15.0	12.7	9.5	7.7	3.5	3.0
NMDC	Buy	104	5,964	13.1	15.4	10.7	6.8	9.7	3.8	5.6	1.2	1.2

\*CY reporting

Source: MOSL

### Valuations: Global Companies

Company	BBG CODE	Currency	PRICE	MCAP (US\$ M)	PE (x)		EV/EBITDA(x)		P/BV (x)
					CUR YR	NXT YR	CUR YR	NXT YR	CY18
<b>Mining</b>									
BHP-Billiton	BHP AU	AUD	40	136,863	14.5	14.4	6.4	6.4	na
FMG	FMG AU	AUD	8	17,854	8.2	8.2	4.7	4.7	na
Rio Tinto	RIO AU	AUD	101	105,746	12.3	13.8	5.6	6.1	na
Vale	Vale US	USD	51	70,064	7.1	8.1	4.4	5.0	1.5
Teck Resources	TCK US	USD	25	14,401	9.1	10.2	4.5	5.0	0.8
Anglo American	AAL LN	GBp	2,210	37,404	10.0	11.4	4.7	5.1	na
<b>STEEL</b>									
Arcelor Mittal	MT NA	EUR	20	22,990	6.3	6.1	4.2	4.1	0.5
Posco	005490 KS	k KRW	269	20,613	7.9	7.5	4.5	4.3	0.5
US Steel	X US	USD	17	2,902	6.7	6.5	3.4	3.4	0.7
Nucor	NUE US	USD	59	17,830	10.3	10.2	6.2	6.4	1.8
JFE	5411 JT	JPY	1,935	10,816	7.2	7.9	6.9	6.8	na
Gerdau	GGBR4 BZ	BRL	15	6,278	9.8	9.3	5.5	5.2	1.1
Angang	000898 CH	CNY	6	6,078	7.9	8.2	5.4	5.2	0.8
<b>Ali - Smelting</b>									
Alcoa	AA US	USD	28	5,248	18.1	11.0	3.6	3.4	1.0
Hydro	NHY NO	NOK	37	9,106	17.4	10.4	6.3	4.7	0.9
Rusal	486 HK	HKD	3	6,510	3.8	3.3	8.6	7.4	1.2
<b>Ali - Rolled</b>									
Arconics	ARNC US	USD	21	9,383	12.7	10.8	6.4	5.9	na
Constellium	CSTM US	USD	9	1,201	7.9	6.0	5.6	5.1	102.7

## Metals Stock Performance

Among large-cap companies, JSPL was the best relative performer.

Among mid-cap companies, Jai Balaji was the best relative performer over one month.

### Metals stock performance on absolute and relative basis (%)

Months	Absolute Perf (%)				Relative Perf to Sensex (%)			
	1	3	6	12	1	3	6	12
<b>Steel</b>								
Tata Steel	1.8	11.1	-8.5	-10.8	-1.4	3.8	-20.0	-24.5
SAIL	3.4	8.7	-14.7	-22.9	0.2	1.3	-26.3	-36.6
JSW Steel	-1.9	-1.1	-23.8	-7.0	-5.2	-8.5	-35.3	-20.7
JSPL	6.0	20.9	-0.4	-25.6	2.7	13.6	-11.9	-39.3
NMDC	-7.0	14.3	-5.3	-14.0	-10.3	7.0	-16.8	-27.7
<b>Non-ferrous</b>								
Vedanta	3.2	-5.7	-15.6	-36.4	-0.1	-13.1	-27.1	-50.1
Hindustan Zinc	2.1	1.6	1.0	-10.4	-1.2	-5.7	-10.5	-24.1
Nalco	1.9	-11.6	-16.8	-27.1	-1.4	-18.9	-28.3	-40.8
Hindalco	3.3	3.0	-7.6	-9.8	0.0	-4.4	-19.1	-23.4
<b>Mid Caps</b>								
Monnet Ispat	-3.7	-30.2	-36.7	-61.7	-6.9	-37.6	-48.2	-75.4
Godawari	-15.4	-5.9	-43.0	-56.5	-18.7	-13.2	-54.5	-70.1
Sarda Energy	-6.9	14.9	-5.7	-35.3	-10.2	7.6	-17.3	-49.0
Tata Sponge	1.2	-7.8	-6.5	-34.3	-2.1	-15.2	-18.0	-48.0
Adhunik Metaliks	22.5	2.6	-4.2	-42.6	19.2	-4.7	-15.8	-56.3
Bhushan Steel	13.6	-7.9	23.9	-23.4	10.3	-15.3	12.3	-37.1
Jai Balaji	70.0	91.7	131.4	150.7	66.7	84.3	119.9	137.0
Rain Industries	17.2	11.7	-21.8	-63.3	13.9	4.3	-33.3	-76.9
Prakash Industries	-5.5	-7.8	-22.2	-55.5	-8.8	-15.2	-33.8	-69.1
<b>SENSEX</b>	3.3	7.4	11.5	13.7	-	-	-	-

### Global Metals stock performance on absolute basis (%)

	Absolute Perf (%)					
	1week	1month	3 months	6 months	7 months	12 months
<b>Mining</b>						
Rio Tinto	2.3	14.4	22.9	30.9	27.2	27.2
BHP Billiton	0.9	7.2	19.4	14.0	33.5	33.5
Vale	-1.1	1.5	-8.1	-10.8	1.2	1.2
FMG	3.7	23.8	76.6	119.9	81.3	81.3
Anglo American	1.1	10.6	22.2	35.2	32.3	32.3
<b>Steel</b>						
US Steel	-15.6	-18.0	-20.2	-40.4	-53.3	-53.3
Nucor	-3.5	-0.9	3.6	-4.1	-5.5	-5.5
Arcelor Mittal	0.3	4.2	3.3	-19.0	-23.6	-23.6
Angang	-2.4	1.2	13.3	1.2	-13.2	-13.2
Posco	-2.2	7.0	4.1	-1.1	-16.3	-16.3
JFE Holdings	-2.5	1.3	7.6	-24.3	-12.4	-12.4
Nippon	-2.2	2.1	5.0	-13.3	-13.7	-13.7
Thyssen Krupp	-3.8	2.7	-21.8	-37.5	-42.4	-42.4
Voest Alpine	-0.6	7.8	4.7	-21.5	-32.7	-32.7
Gerdau	-5.4	-0.3	-7.4	-5.6	-19.2	-19.2
<b>Aluminium</b>						
Alcoa	-4.3	-0.5	-2.4	-21.5	-48.1	-48.1
Rusal	0.3	-9.4	30.6	60.5	53.9	53.9
Chalco	-2.6	7.4	29.7	0.9	-30.7	-30.7

Among global mining companies, FMG was the best relative performer over one week.

Among global steel majors, Arcelor Mittal was the best relative performer.

Among the global aluminum, Rusal was the best relative performer

## NOTES

## Explanation of Investment Rating

### Investment Rating

BUY	Expected return (over 12-month) >=15%
SELL	< - 10%
NEUTRAL	> - 10% to 15%
UNDER REVIEW	Rating may undergo a change
NOT RATED	We have forward looking estimates for the stock but we refrain from assigning recommendation

\*In case the recommendation given by the Research Analyst becomes inconsistent with the investment rating legend, the Research Analyst shall within 28 days of the inconsistency, take appropriate measures to make the recommendation consistent with the investment rating legend.

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Vedanta Ltd

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