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Commodity price monitor July -20

Prepared for ACMA

Strictly private and confidential

August 2020





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Commodity trend dashboard

Commodity trend dashboard Quarter-on-Quarter changes (1/2)-Rolling view

Commodity	Region	Q-o-Q Up	Q-o-Q Down
Iron & Steel			
Iron Ore	International	14%	
	Domestic low grade		
	Domestic high grade		
PigIron	International	8%	
	Domestic		0% 🔻
Stainless steel	Domestic	1%	
	Domestic	0%	
Wire rod	International	4% 🔺	
	Domestic	5%	
Steel Billets	International	6% 🔺	
	Domestic	2%	
Hot-rolled coils	International	8% 🔺	
	Domestic		-3% 🔻
Cold-rolled coils	International		0% 🔻
	Domestic		-2% 🔻
Steel Scrap	Domestic		-100% 🔻
EN8	Domestic	2%	
20MnCr5	Domestic	2%	
Ferro-alloys			
Ferro titanium	International	N/A	
Ferro chrome	International	1% 🔺	
	Domestic		-1% 🔻
Ferro molybdenum	International	N/A	
Ferro vanadium	International	N/A	
Ferro silicon	International	5% 🔺	
	Domestic		-13% 🔻

Calendar Year 19-20: Q vs. Q update

ND: Not disclosed by the source

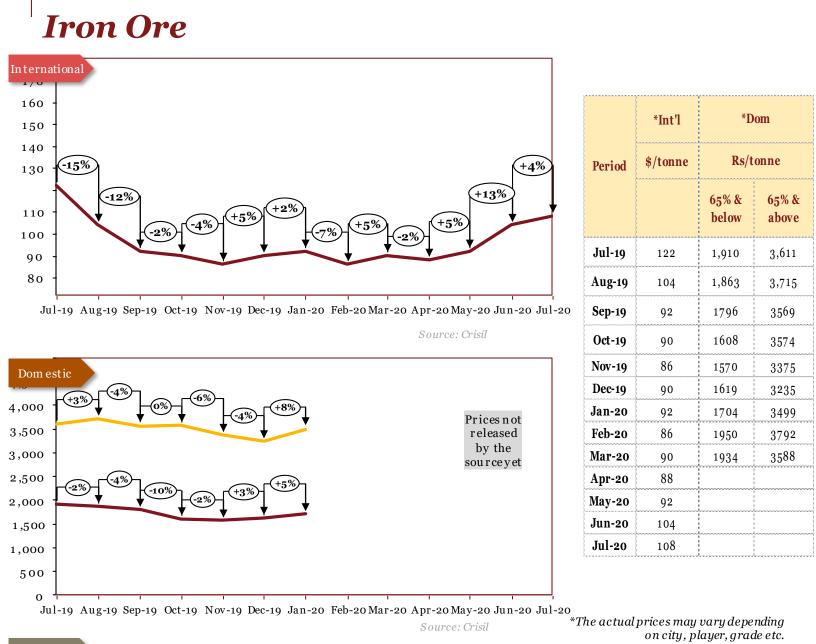
Commodity trend dashboard Quarter-on-Quarter changes (2/2)- Rolling view

Commodity	Region	Q-o-Q Up	Q-o-Q Down
Base Metals			
Aluminum	International	9.8%	
	Domestic	4%	
Copper	International	19%	
	Domestic	19%	
Zinc	International	10%	
	Domestic	11%	
Lead	International	9% 🔺	
	Domestic	8%	
Nickel	International	9% 🔺	
	Domestic	3%	
Tin	International	10.8%	
	Domestic	N/A	
Magnesium	International	N/A	
Precious Metals			
Platinum	International	9% 🔺	
Palladium	International	2%	
Rhodium	International	4% 🔺	
Polymers			
Low density polyethylene (LDPE)	International	N/A	
	Domestic	4%	
Polypropylene (PP)	International	N/A	
	Domestic	4%	
Rubber	Domestic	4%	
Currency Exchange			
Dollar	International		-1% 🔻
Pound	International	3% 🔺	
Euro	International		-1% 🔻
Yen	International		-1%

Calendar Year 19-20: Q vs. Q update

Iron & Steel

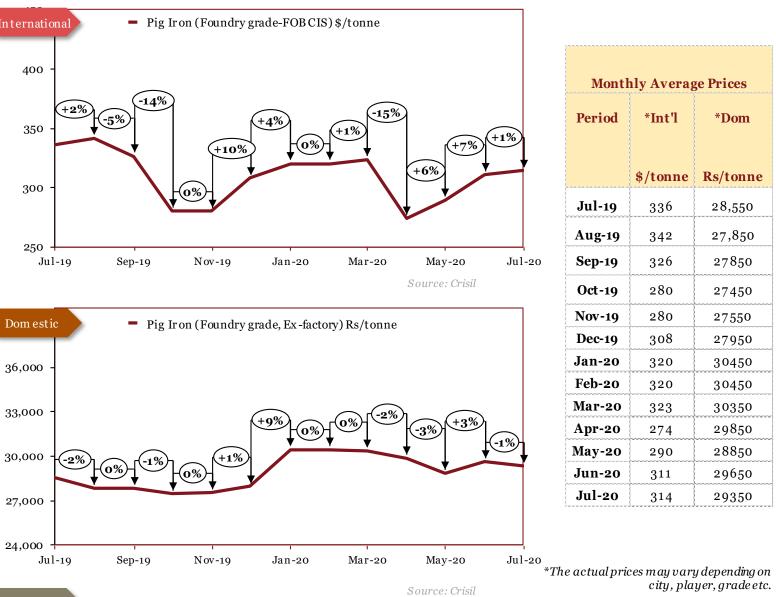
Iron	Iron & Steel 8		
1	IronOre	9	
2	Pig Iron	10	
3	Wire Rod	11	
4	Steel Billets	12	
5	Hot-Rolled (HR) Coils	13	
6	Cold-Rolled (CR) Coils	14	
7	Steel Scrap (Heavy Melting)	15	



Outlook

In November, international prices continued to fall over import restrictions in China as well as oversupply in the market. Domestically, prices continued their decline. In December, international prices rose as capacity at the Vale mine was capped for safety reasons. Domestically, prices rose on a slow recovery in auto and construction sectors. In January, international prices rose slightly thanks to renewed optimism in China, despite the effects of the coronavirus epidemic toward the end of the month. Domestically, price recovery continued. In February, international prices declined thanks to the coronavirus epidemic in China hurting local demand. In March, international prices rose as Chinese factories resumed production in parts of the country unaffected by the COVID-19 pandemic. In April, international prices declined slightly amid the COVID-19 pandemic, but were supported by low production in Brazil and Australia, alongside steady Chinese demand. In May, prices rose as production was disrupted in Brazil and the Vale as the spread of COVID-19 positive cases caused disruptions. Chinese demand continued to boost the segment. In June and July, international prices showed strong recovery due to pent-up demand and supply concerns as economies returned to regular volume levels.

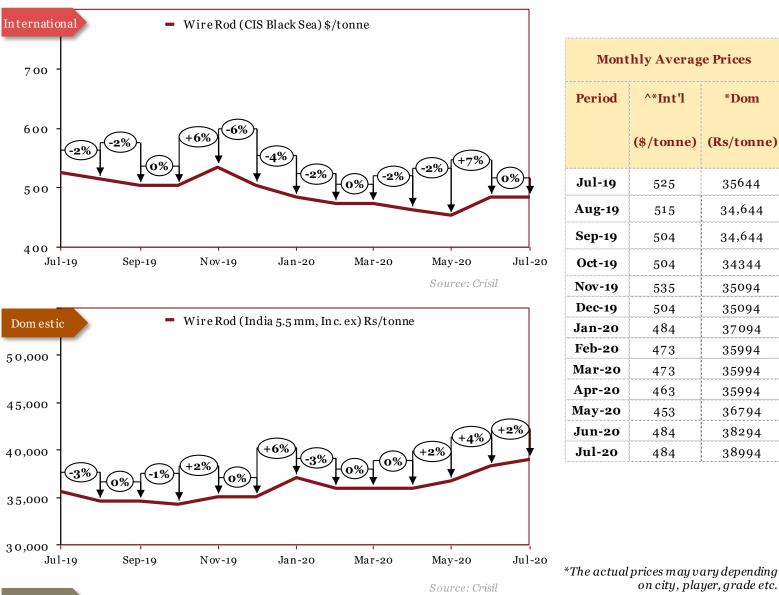
Pig Iron



Outlook

In November, international as well as domestic prices remained constant due to stable market conditions. In December, international prices rose owing to higher scrap prices, alongside strong Chinese demand. Domestic prices rose simultaneously. In January, prices continued to rise, with strong demand in China in the early part of the month. Domestic prices rose simultaneously. In February, international as well as domestic prices remained stable. In March, international prices were largely stable as the growth in Chinese demand following the reopening of factories cancelled out the decline in the rest of the world. Domestically prices declined as the COV ID-19 pandemic shut down production at factories. In April, international prices fell as lockdown measures caused global industrial demand to fall precipitously. Domestic prices rose as Chinese demand form foundries, partly as a result of the auto industry being shut down. In May, international prices rose as Chinese demand continued to improve, while domestic prices slid further. In June and July, international as well as domestic prices rose due to higher Iron Ore prices.

Wire Rod

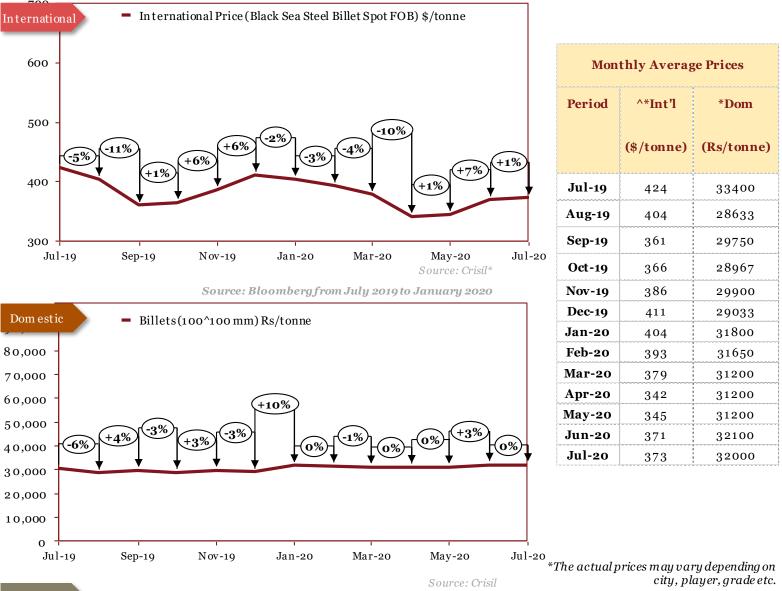


Outlook

In India, weakening manufacturing led to a decrease in dem and for wire rod. In September, the lowering cost of ferrous scrap, along with weak dem and led to a comedown in international prices, while prices remained stable in India. In October, international prices remained stable, while domestic prices fell on weak industrial dem and. In November, international as well as domestic prices rose due to higher scrap prices. In December, international prices fell due to lower rebar prices and weak demand while domestic prices remained constant due to stable market conditions. In January, international prices fell on an oversupply of steel in the market, while domestic prices rose after the government imposed country-specific duties on specific markets. In February, international prices declined as the coronavirus lockdown decimated Chinese demand. Domestically, prices fell on reduced demand. In March, prices remained unchanged. In April, international prices declined owing to lower demand from factories. Domestically prices remain unchanged. In May, internal prices fell slightly, domestic prices picked up on the resumption of industrial activity. In June, prices rose internationally as well as domestically, owing to higher demand from producers. In July, prices stabilized globally while rising slightly domestically.

 $^{
m Prices}$ have been retrospectively revised by the source due to change in base year

Steel Billets



Outlook

In September, international prices fell on account of weak demand, while rising costs for finished long steel products and semi finished materials led to a rise in prices in India. From October to December, International prices began to recover on account of higher demand due to higher scrap prices. In October, domestic prices fell due to weak demand for rebar. In November, domestic prices rose on account of rising seaborne scrap prices. In December, domestic prices fell due to weak demand for steel products like rebar. In January, international prices fell marginally while domestic prices rose on the back of renewed investment in infrastructure and growth in the automobile industry. In February, domestic prices remained consistent due to stable market conditions. In February, domestic prices remained stable. In March, domestic prices declined owing to a weaker rupee and the impact of the COV ID-19 pandemic. In April, international prices fell on account of declining demand on account of lockdown measures, while remaining stable domestically. In May, international prices remained stable following the large decline in April, while domestic prices were unchanged. In June, international as well as domestic prices rose due to higher input costs as well as a rise in demand. In July, international prices rose slightly whilst domestic prices remained constant.

 $^{\Lambda}$ International prices changed due to change in the grade

Hot-Rolled (HR) Coils International HR Coils (FOB Black Sea) \$/tonne 700 **Monthly Average Prices** Period *Int'l ·19% 600 ·29 (\$/tonne) (Rs/tonne) +15% 500 +4% 4% Jul-19 501 400 Aug-19 496 Sep-19 453 300 Jul-19 Sep-19 Nov-19 Jan-20 Mar-20 May-20 Jul-20 Oct-19 405 Source: Crisil Nov-19 389 Dom est ic HR Coils (India 14G-2mm) Rs/tonne Dec-19 448 50,000 Jan-20 485 Feb-20 490 Mar-20 480 45,000 Apr-20 389 May-20 368 40,000 +3% Jun-20 400 +3% Jul-20 416 35,000 30,000 Jul-19 Sep-19 Nov-19 Jan-20 Mar-20 May-20 Jul-20 Source: Crisil

*The actual prices may vary depending on city, player, grade etc.

Outlook

In January, international prices rose thanks to strong demand and high input prices domestic prices continued to rise due to stronger performance from the infrastructure and automobile sectors. In February, international prices saw a deceleration due to the impact of the coronavirus. Domestic prices continued to rise as domestic infrastructure spending and production continued to recover. In March, international prices fell due to uncertainty in the market around the COVID-19 pandemic. Domestic prices declined thanks to the national lockdown initiated to contain the COVID-19 pandemic. In April, prices declined as the COVID lockdown shut industries around the world, while domestic prices stayed stable. In May, international prices declined considerably while domestic prices continued to correct downwards, as producers faced up to a weak economy, limited industrial demand, with most major projects remaining on hold. In June, international prices rose due to higher demand and higher input costs, whereas domestic prices fell on weak local demand. In July, international prices continued to rise, while domestic prices remained constant.

^*Dom

39550

38,050

36850

35150

36150

37150

38900

39800

39200

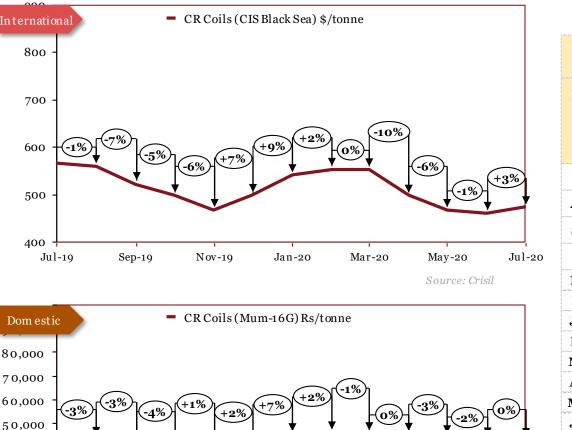
39200

38450

37250

37250

Cold-Rolled (CR) Coils



Jan-20

Monthly Average Prices				
Period	*Int'l	^*Dom		
	(\$/tonne)	(Rs/tonne)		
Jul-19	566	45250		
Aug-19	560	43750		
Sep-19	523	42550		
Oct-19	498	40850		
Nov-19	467	41150		
Dec-19	498	42150		
Jan-20	541	45150		
Feb-20	554	46150		
Mar-20	554	45550		
Apr-20	498	45550		
May-20	467	44350		
Jun-20	461	43350		
Jul-20	474	43350		

*The actual prices may vary depending

on city, player, grade etc.

Outlook

0 + Jul-19

40,000 30,000 20,000 10,000

In September, international as well as domestic CR prices continued to decline, mirroring HR prices. In October, international prices fell, mirroring HR coil price decreases. Domestic prices fell owing to weak demand in the automobile sector. In November, international prices fell in line with the fall in the prices of HR Coils, while domestic prices rose on account of increased infrastructure spending. In December, international prices rose mirroring HR Coil prices, while domestic prices rose on the backs of international rate increases. In January, both international and domestic prices rose in conjunction with hot-rolled coil prices. In February, international and domestic prices rose in accordance with HR Coil prices. In March, international price growth was halted and prices remained unchanged due to uncertainty around the COVID-19 pandemic, Domestic prices fell concurrently with HR Coil prices. In April, international prices declined on account of COVID-induced shutdowns. In May, prices declined in line with HR Coil prices. In June, international prices declined slightly on weak demand, while domestic prices declined, mirroring the decline in HR coil prices. In July, prices rose internationally on stronger demand, while domestic prices remained constant.

May-20

Source: Crisil.

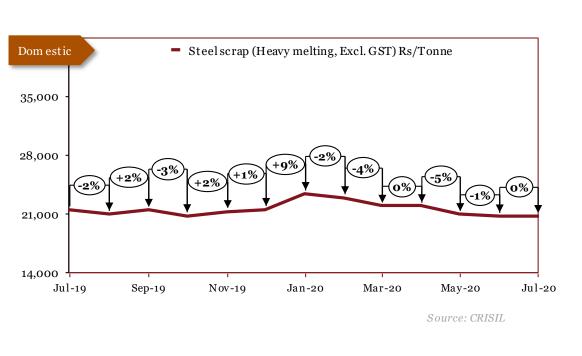
Jul-20

Mar-20

Sep-19

Nov-19

Steel Scrap (Heavy Melting)



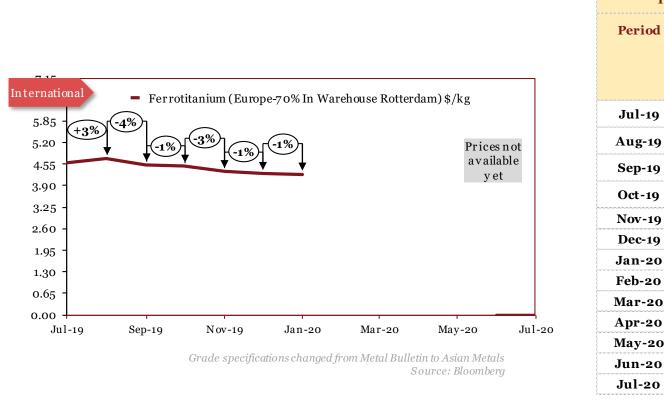
Monthly Average Prices	
Period *Dom	
	(Rs/Tonne)
Jul-19	21550
Aug-19	21,050
Sep-19	21,550
Oct-19	20,850
Nov-19	21350
Dec-19	21550
Jan-20	23450
Feb-20	23000
Mar-20	22000
Apr-20	22000
May-20	21000
Jun-20	20800
Jul-20	20800

*The actual prices may vary depending on city, player, grade etc.

Outlook

In July, scrap prices decreased due to a sustained slowdown in demand along with competition from better quality scrap imports. In August, ov ersupply in the spot market ensure prices continued to fall. In September, dom estic prices began to inch up due to stronger sentiment follow ing the stabilisation of international prices. In October, the prices returned to decreasing, due to weak demand and un certainty around the trade war. In November, prices rose on account of increased public spending. In December, prices rose owing to stronger steel demand in the market. In January, dom estic prices rose strongly owing to higher demand for steel, buoy ed by the performance of the infrastructure and automotive sectors. In February, prices corrected as sentiments were weakened by the spread of the coronav irus. In Mar ch, prices declined as the national lockdown shut all factory production across the country. In April, dom estic prices remained constant. In May, dom estic prices declined as traders reduced orders due to logistical concerns during the lockdown. In June, dom estic prices declined on the back of continued weak demand and oversupply in the market, while in July, prices remained constant.

Ferro-alloys	Ferro-al	lloys	16
1°erro-uttogs	8	Ferro titanium	17
	9	Ferro chrome	18
	10	Ferro molybdenum	19
	11	Ferro vanadium	20
	12	Ferro silicon	21
	13	EN8 Alloy Steel (Forging)	22
	14	Stainless Steel	23
	15	20MnCr5 Alloy Steel (Forging)	24



Ferro titanium

*The actual prices may vary depending on city, player, grade etc.

Monthly Average Prices

^*Int'l

(\$/kg)

4.60

4.72

4.51

4.48

4.34

4.28

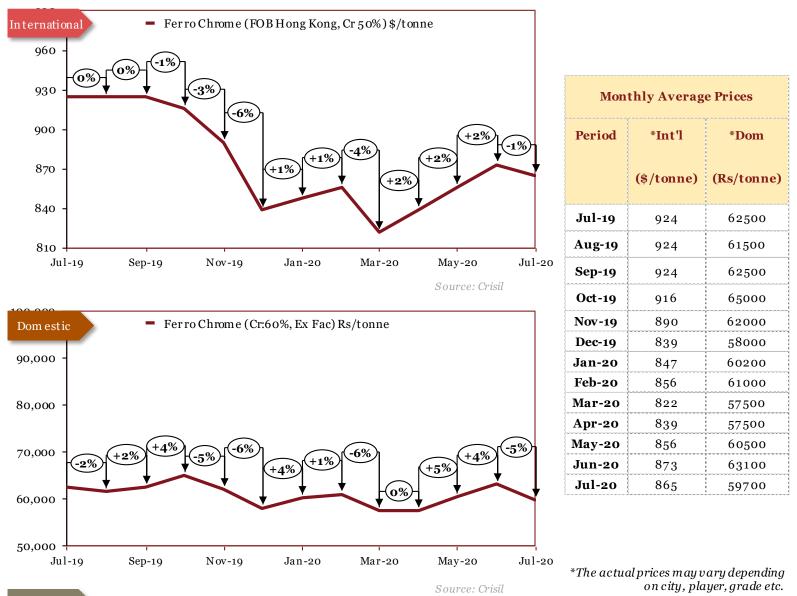
4.25

Outlook

In October 2018, high-volume sales to Europe from Russia dragged down prices. From November 2018, ferrotitanium prices have witnessed consistently declining trend owing to unfavourable market conditions which has continued till February 2019. In March, ferrotitanium prices increased owing to increased demand and potentially reduced supply from one major supplier. In April, increasing trend in prices continued. In May, supply worries from a major producer in UK forced prices to continue an upward trend. In June, prices trended marginally downward due to fears of weakening demand from the European steel market. In July, poor demand from major markets such as Europe pushed prices down significantly. In August, the price rose thanks to growing demand. In September, international prices fell owing to week demand in the European steel market following a weak summer. In October, international prices fell due to weak European demand. In November, international prices kept falling due to unfavourable market conditions. In December, prices remained fairly steady, with a slight decline. In January, the downward trend in prices continued on muted demand.

 $^{\Lambda} International \, prices \, changed \, due \, to \, change \, in \, grades \, at \, the \, source$

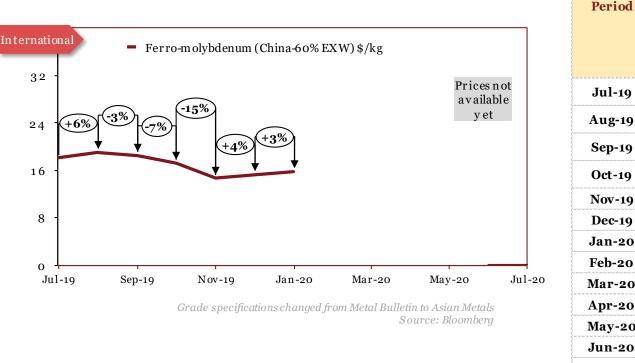
Ferro chrome



Outlook

In December, international prices fell due to weak demand in Europe and oversupply in China. Domestic prices fell due to cheaper Chinese competition. In January international prices remained fairly stable following months of decline while domestic prices rose following production cuts. In February, international prices rose marginally after the Chinese New Year holiday and the coronavirus lockdown led to a tightening of supply. Domestic prices decelerated as sentiments were weakened by the coronavirus outbreak. In March, international as well as domestic prices were hurt by bearishness in the stainless steel market caused by the COVID-19 crisis and its containment measures. In April, international prices rose as Chinese factories reopened, while South African mines were shut, reducing supply. Domestic prices remained stable. In May, prices rose globally as South African mines continued to face logistical challenges from lockdown measures, while Chinese demand continued to be strong. In June, international prices rose due to greater demand from China, while domestic prices rose in tandem. In July, international prices declined slightly, while domestic prices fell on weaker demand.

Ferro molybdenum



 Jan-20
 16

 Feb-20
 16

 Mar-20
 16

 Apr-20
 10

 Jun-20
 10

 Jul-20
 10

Monthly Average Prices

*^Int'l

(\$/kg)

17

19

18

17

15

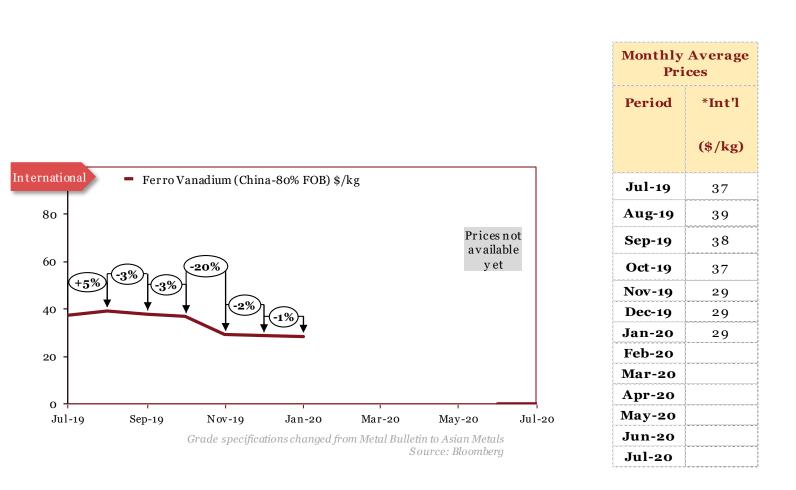
15

*The actual prices may vary depending on city, player, grade etc.

Outlook

In September, prices remained stable. Prices increased in October 2018. Prices witnessed declining trend since November 2018, following the price movements in other ferro-alloys. In February 2019, declining trend was reversed. In March, prices increased owing to demand growth. In April, increasing trend in prices continued. In May, stable market conditions resulted in stable prices. In June, prices decreased due to easing demand from major steel producers such as China. In July, prices increased due to limited availability of raw materials such as molybdenum concentrate. Strong sentiment spilt into the Molybdenum market, with a rise in raw material price raising prices overall. In August, international prices rallied after a shortage of supply in China led to a growth in the Chinese domestic market. In September, international prices fell on the back of rigid demand in the market. In October, prices continued to fall through the quarter due to weak metal demand and weak demand in the ferro-alloys market. In November, prices continued to fall as producers sold their stocks at discounts and demand was affected by weak demand for stainless steel. In December, molybdenum prices slowly began to stabilise after months of decline. In January, prices rose on the backs of strong industrial demand from automotive and other industries.

^International prices changed due to change in grades at the source



Ferro vanadium

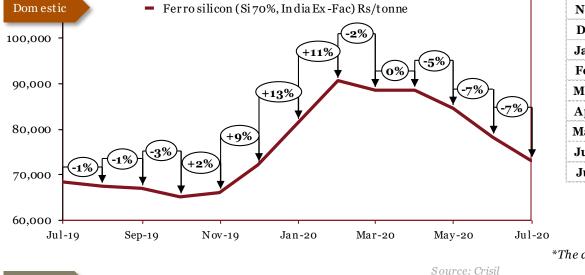
*The actual prices may vary depending on city, player, grade etc.

Outlook

Prices remained unchanged in February 2019 due to stable market conditions. In March, prices remained unchanged due to stable market conditions. In April, prices increased due to strong demand from Chinese market, which in turn can be partly attributed to increase in demand arising from the implementation of new rebar manufacturing standards in China. In May, prices continued to decline due to sluggish demand from the European automotive sector. In June, prices continued to fall sharply due to weak summer demand in China & Europe. In July, Ferro Vanadium prices decreased marginally due to almost stable market conditions compared to June. In August, there was an increase in price boosted by improving demand. In September, prices internationally fell on account of a strong Chinese market dissuading foreign importers, with a large gap between Chinese and European prices. In October, prices continued to decrease as European producers worked to offload excess inventory in a time of weak demand. In November, international prices fell due to a sudden increase in Chinese production. In December, prices continued to fall due to vanadium being substituted with niobium, along side slow enforcement of new rebar regulations in China. In January prices fell minimally on stable market conditions.

Ferro silicon





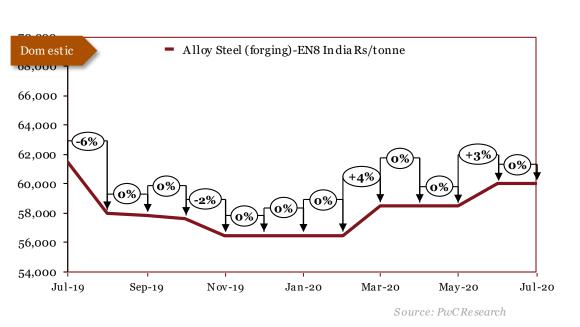
Monthly Average Prices				
Period	*Int'l	*Dom		
	(\$/tonne)	(Rs/tonne)		
Jul-19	1,242	68,400		
Aug-19	1,180	67,400		
Sep-19	1,152	66,900		
Oct-19	1,145	65100		
Nov-19	1145	66,100		
Dec-19	1145	72,100		
Jan-20	1180	81600		
Feb-20	1180	90600		
Mar-20	1132	88600		
Apr-20	1097	88600		
May-20	1076	84600		
Jun-20	1132	78300		
Jul-20	1152	73050		

*The actual prices may vary depending on city, player, grade etc.

Outlook

In December, international prices remained constant on account of stable market conditions, while domestic prices rose due to shortage of supply with sellers, caused partly by declining output from Bhutan. In January, international prices rose due to supply constraints in China whilst domestic prices rose on the back of a shortage of charcoal in factories causing production problems. In February, international prices remained stable while domestic prices continued to rise aggressively due to continued raw material shortage in Bhutan. In March, international prices fell as trading activity declined on the back of the COV ID-19 crisis, Domestic demand was similarly hurt by lockdown measures. Domestic prices have been hurt by the lack of in-person trading caused by the COV ID-19 lockdown. In April, international prices fell on account of the decline in industrial activity. Domestic prices remained stable. In May, prices declined as demand from steelmakers remained weak, while domestic producers began to cut capacity on poor economic environment. In June and July, international prices picked up as industries reopened across Europe and China, particularly in the solar energy space. In June and July, domestic prices declined on weak demand.

EN8 Alloy Steel (Forging)



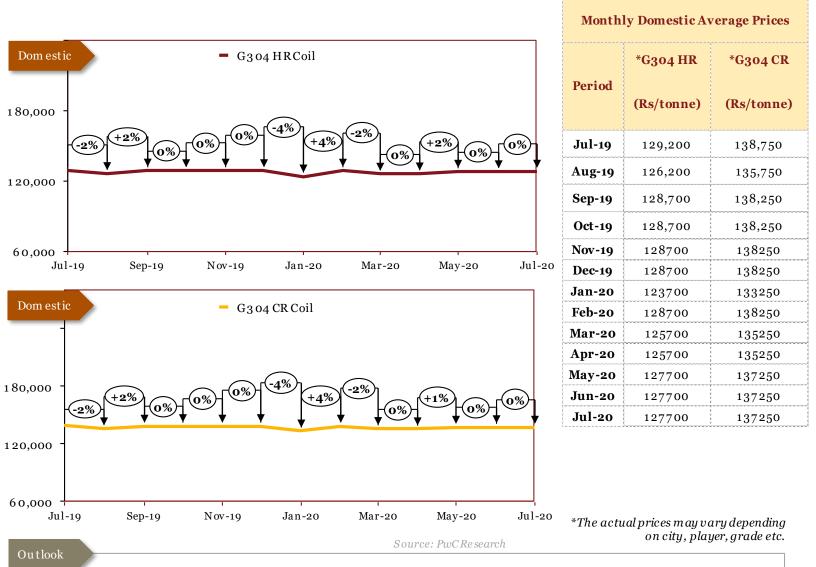
Monthly Average Prices	
Period	*Dom (Rs/tonne)
Jul-19	61,500
Aug-19	58,000
Sep-19	57,875
Oct-19	57,625
Nov-19	56500
Dec-19	56500
Jan-20	56500
Feb-20	56500
Mar-20	58500
Apr-20	58500
May-20	58500
Jun-20	60000
Jul-20	60000

*The actual prices may vary depending on city, player, grade etc.

Outlook

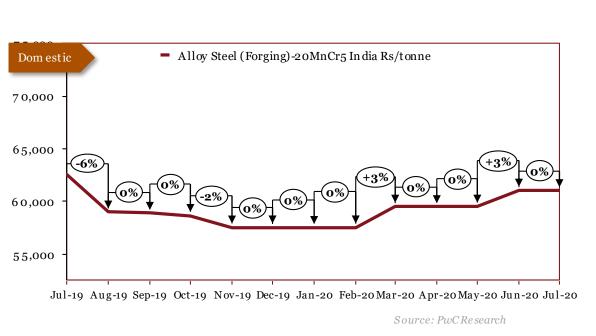
In January 19, prices continued with declining trend. In February, declining trend continued. In March, prices remained unchanged due to stable market conditions. In April, market conditions remained unchanged, reflecting in the prices for the month. In May, market conditions continued to remain unchanged resulting in stable prices. In June, prices remain unchanged once again, stemming from stable market conditions. In July, prices declined marginally due to a lower growth forecast in India. In August, global prices fell due to the fall in the price of Nickel. In September, domestic prices remained unchanged due to stable market conditions. In October, the prices remained constant. In November prices declined due to a difficult demand environment caused by the struggles of the automotive and manufacturing sectors. In December, prices remained constant on stable market conditions. In January, prices remained unchanged thanks to stable market conditions. In February prices remained stable. In March, domestic prices rose thanks to higher demand and improved industrial activity prior to the national lockdown. In April, prices remained stable. Prices remained stable in May. In June, prices rose as industries reopened across the country. In July, prices were unchanged.





In April, prices continued to decline. In May, prices declined marginally due to weak Nickel prices. In June, prices declined due weak demand scenario and fall in price of inputs such as ferro-alloys. In July, prices increased as producers cut down supply and costs of vital inputs, such as coking coal, increased. In August, global prices fell on weak demand and high inventories. In September, international prices rose owing to skyrocketing Nickel prices. This increase was mirrored by domestic prices. In October, prices remained stable domestically and internationally. In November, domestic as well as international prices continued to remain unchanged. In December, international and domestic prices remained unchanged on stable market conditions. In January, prices fell due to an excess of supply over demand in the market. In February, international as well as domestic prices corrected to their long term December levels. In March, domestic prices fell as the COV ID-19 pandemic rocked industrial activity all around the world. In April, international and domestic prices remained stable. In May, prices nose marginally despite a weak demand environment both in India and globally. In June and July, prices remained stable and unchanged.

20MnCr5 Alloy Steel (Forging)



Monthly Average Prices		
	*Dom	
Period	(Rs/tonne)	
Jul-19	62,500	
Aug-19	59,000	
Sep-19	58,875	
Oct-19	58,625	
Nov-19	57500	
Dec-19	57500	
Jan-20	57500	
Feb-20	57500	
Mar-20	59500	
Apr-20	59500	
May-20	59500	
Jun-20	61000	
Jul-20	61000	

*The actual prices may vary depending on city, player, grade etc.

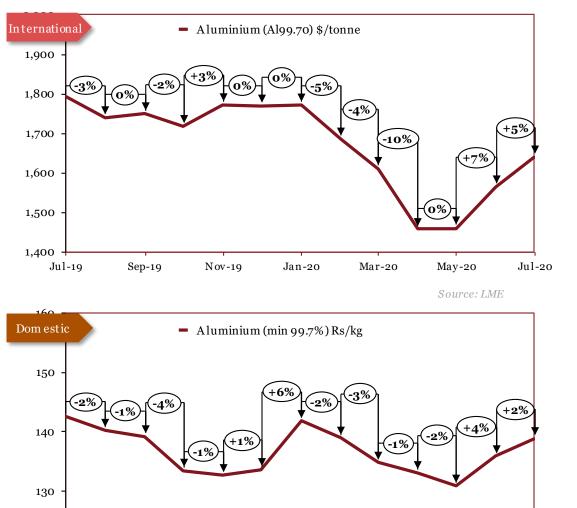
Outlook

In November, prices fell due to muted demand. Prices fell in line with other steel products. In January 2019, prices continued with declining trend. In February, prices remained unchanged due to stable market conditions. In March, prices remained unchanged due to stable market conditions. In April, market conditions remained unchanged, reflecting in the prices for the month. In May, market conditions continued to remain unchanged resulting in stable prices. In June, prices continued to hold stable. In July, prices declined marginally due to a lower growth forecast in India. In August, prices continued to fall, owing to weakening demand and oversupply of inventory. In September, domestic prices managed to stay constant as the auto slowdown was followed by a large decrease in production. In October, prices remained stable. In June, prices remained unchanged. In January, prices remained unchanged thanks to stable market conditions. In February prices remained stable. In March, prices rose on stronger industrial activity and demand prior to the COVID-19 lockdown. In April, prices remained stable. In May, prices remained stable. In June, prices rose on account of the gradual unlocking of the economy. In July, prices remained stable.

Base Metals

Base M	etals	25
16	Aluminium	26
17	Copper	27
18	Zinc	28
19	Lead	29
20	Nickel	30
21	Tin	31
22	Magnesium	32

Aluminium



Jan-20

Monthly Average Prices						
	*Int'l	*Dom				
Period	(\$/tonne)	(Rs/kg)				
Jul-19	1,793	142				
Aug-19	1,741	140				
Sep-19	1,749	139				
Oct-19	1,718	133				
Nov-19	1772	133				
Dec-19	1770	134				
Jan-20	1771	142				
Feb-20	1685	139				
Mar-20	1611	135				
Apr-20	1457	133				
May-20	1460	131				
Jun-20	1564	136				
Jul-20	1639	139				

*The actual prices may vary depending

on city, player, grade etc.

Outlook

120 | Jul-19

In November, international prices were up following trade negotiations between the US and China, while domestic prices continued to suffer from weak demand. In December, international prices remained unchanged, whilst domestic prices rose slightly on improved sentiment and economic conditions. In January, international prices remained unchanged, while domestic prices rose In January, international prices fell sharply as the coronavirus had a major impact on Chinese demand, which was reflected on domestic prices as well. In March, international prices declined due to oversupply in the market by Chinese producers, while domestic prices fell thanks to weaker local demand. In April, international prices declined on account of declining demand from producers. Domestic prices fell on account of the COVID-19 lockdown. In May, prices remained stable internationally, but continued to decline in the domestic market, as inventories built up and players worked towards lowering the production cost on it. In June and July, international as well as domestic prices began to clim b upwards on pent-up demand, after bottoming out for months during lockdown.

May-20

*Source updated in July 2019

Source: MCX*

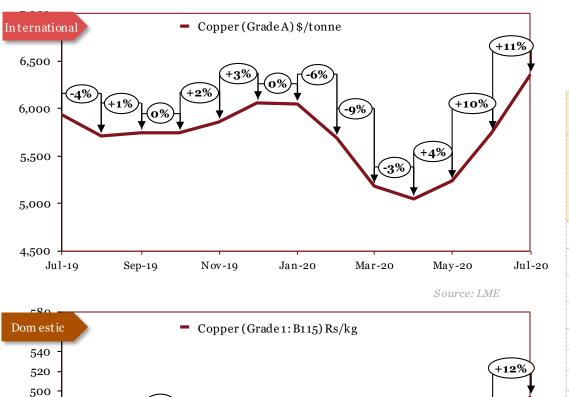
Jul-20

Mar-20

Sep-19

Nov-19

Copper



Monthly Average Prices							
	*Int'l	*Dom					
Period	(\$/tonne)	(Rs/kg)					
Jul-19	5,939	445					
Aug-19	5,708	444					
Sep-19	5,745	449					
Oct-19	5,742	440					
Nov-19	5859	438					
Dec-19	6062	440					
Jan-20	6049	444					
Feb-20	5686	430					
Mar-20	5179	403					
Apr-20	5048	397					
May-20	5234	407					
Jun-20	5742	443					
Jul-20	6354	494					

*The actual prices may vary depending

on city, player, grade etc.

Outlook

480

460 440

420 -400 -380 -360 -340 -Jul-19

In October, international prices remained unchanged despite uncertainty around the trade war, whilst domestic prices fell due to weak manufacturing demand. In November, prices rose internationally thanks to hopes of a US-China trade deal, while remaining stable domestically. In December, international prices rose on positive sentiment about a US-China trade deal, while domestic prices remained stable. In January, international prices remained unchanged whereas domestic prices rose mildly thanks to better macro-economic sentiment. In February, international prices fell as markets reacted to the coronavirus outbreak in China, and domestic prices followed suit. In March, international prices declined on account of the COV ID-19 pandemic, and domestic prices similarly fell as a result of the national lockdown. In April, international and domestic prices continued their downward trajectory on account of the COV ID-19 crisis. In May, prices rose after months of downturn on the hopes of an economic revival and the slow removal of lockdown measures in India and abroad. In June and July, international as well as domestic prices rose aggressively, due to supply disruptions in South America and greater optimism in the global economic recovery.

9%

+3%

May-20

Source: MCX

Jul-20

2%

Mar-20

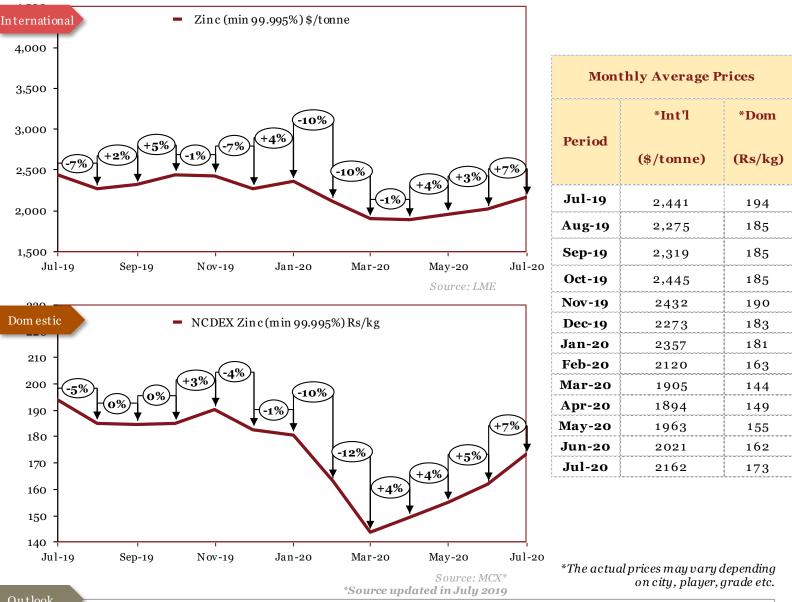
Sep-19

Nov-19

Jan-20

-6%

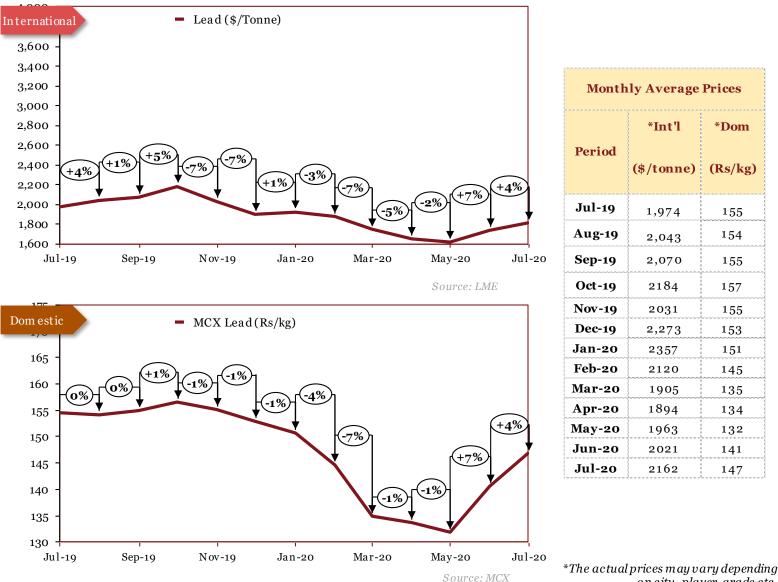
Zinc



Outlook

In October, international Zinc prices rose on the back of a shortage of supply. Domestic prices remained unchanged for the second month running, down to stability in the market. In November, international price recovery slowed due to oversupply in the market, while domestic prices rose on strong demand. In December, Zinc prices fell globally owing to oversupply in China stoking demand concerns, while domestic prices fell on the backs of slackened demand. In January, international prices rose on higher demand in preparation for the US-China trade agreement. Domestic prices fell marginally on oversupply in the market. In February, international prices fell as markets reacted to the outbreak of coronavirus in China and around the world, with domestic prices falling simultaneously. In March, global zinc prices saw a marked decline due to pressure from the COV ID-19 crisis. Domestic prices were also hurt by the halting of industrial activity. In April, the international price decline stabilised as China reopened factories, while domestic prices rose slightly. In May, international prices rose on greater demand while domestic prices were supported by a decline in output. In June and July, international and domestic prices rose despite growing unsold inventory, a sinvestors continued to be bullish about the global recovery.

Lead



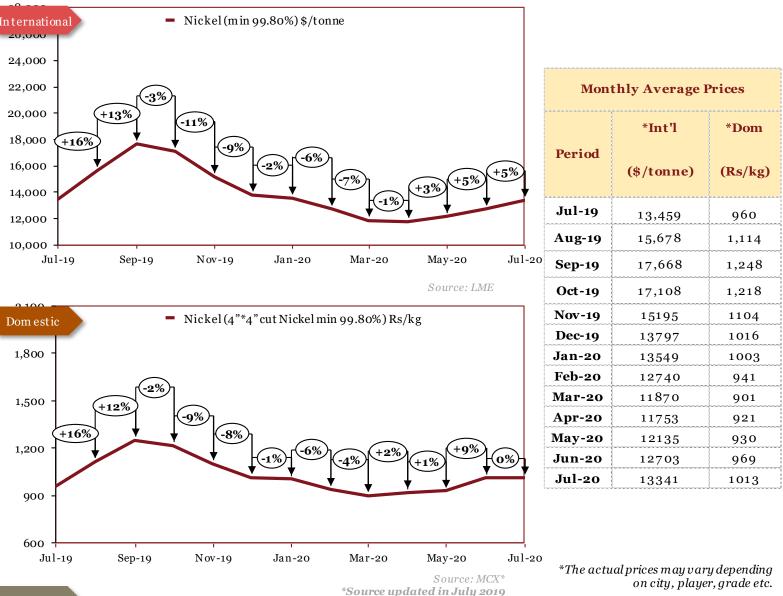
Monthly Average Prices						
	*Int'l	*Dom				
Period	(\$/tonne)	(Rs/kg)				
Jul-19	1,974	155				
Aug-19	2,043	154				
Sep-19	2,070	155				
Oct-19	2184	157				
Nov-19	2031	155				
Dec-19	2,273	153				
Jan-20	2357	151				
Feb-20	2120	145				
Mar-20	1905	135				
Apr-20	1894	134				
May-20	1963	132				
Jun-20	2021	141				
Jul-20	2162	147				

Outlook

In November, international prices fell due to the increase in production in China, alongside the expected reopening of a key Australian mine in the near future. Domestic prices followed suit in declining. In December, international prices retreated further due to weak demand, particularly in the autom obile space. China is the world's largest consumer. Domestically, lead prices were down only slightly thanks to demand from battery producers. In January, international prices remained fairly stable, still affected by poor demand. Domestic prices fell marginally. In February, international as well as domestic prices fell as the coronavirus outbreak impacted industrial demand in China and around the world. In March, international prices fell on account of global uncertainty around the COVID-19 pandemic, and domestic prices fell on account of the halting of production following containment measures. In April, prices declined on account of decreased industrial activity internationally and in India. In May prices declined slightly, continuing their downward trajectory. In June and July, international as well as domestic prices rose on account of continued bullishness from investors and fears of supply disruptions

on city, player, grade etc.

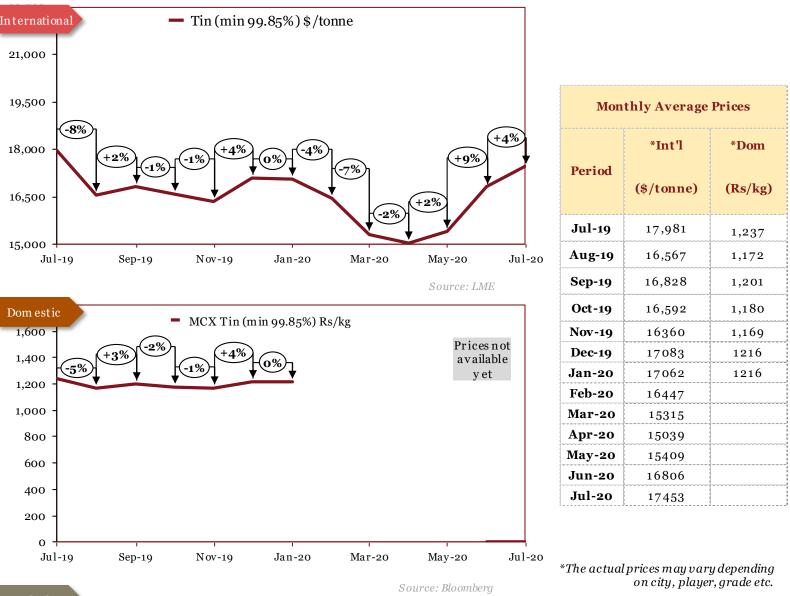
Nickel



Outlook

In Nov ember, international as well as domestic prices fell due to increasing supplies, alongside the resumption of exports from Indonesia. In December, Nickel prices continued to correct domestically and internationally on oversupply in the market, particularly large Chinese im ports. In January, international prices were hurt by the trade war as well as fears of the coronavirus epidemic. Domestic prices followed suit in declining. In February, international prices fell harshly as inventories piled up over the Chinese lockdown. Domestic prices were hurt by weakening market sentiment thanks to the coronavirus outbreak in China affecting supply chains. In March, international as well as dom estic prices were hurt by the reduction in stainless steel demand, a swell as lower production of electric vehicles. In April, international prices declined, though supply shocks prevented further fall. Dom estically, prices rose thanks to a supply shock and higher s pot demand. In May, international and domestic prices rose on account of greater demand from alloy makers. In June and July, international prices continued to recover, buoyed by strong Chinese demand. Domestic prices rose in June, but remained more or less stable in July.

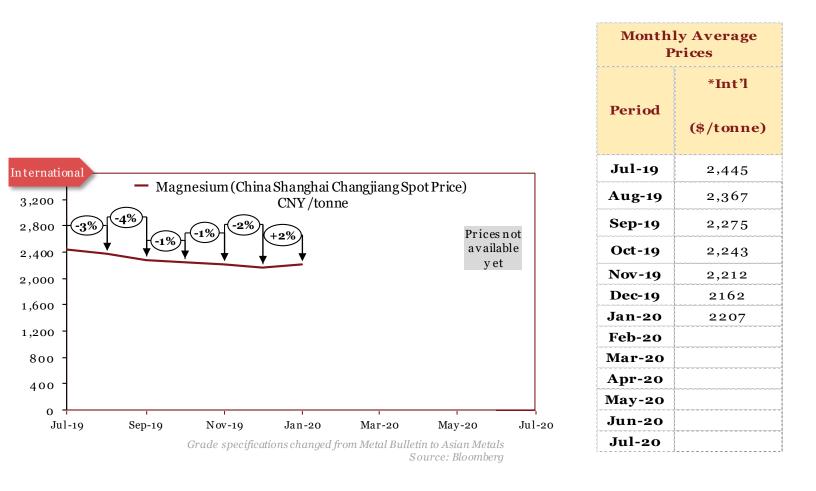
Tin



Outlook

In August, Tin prices fell globally due to uncertainty around the trade war, alongside decline in production of semiconductors in China, the primary usage of tin. In September, the fall in international prices was stopped by a cut in Chinese production, with domestic prices following suit. In October, international prices fell due to weaker demand from the electronics sector caused by the trade war. Domestic prices decreased due to weaker demand. In November international prices corrected slightly downwards, alongside domestic prices. In December, international prices finally looked to be picking up thanks to positive demand and the hopes of a US-China trade agreement. Dom estic prices also rose in tandem with international prices. In January, international and domestic prices both remained unchanged. In February, tin prices fell internationally due to slackened demand. In March, international prices declined as major semiconductor markets Japan and South Korea rapidly curtailed industrial activity to contain COVID-19. In April, prices fell due to lower demand. In June, international prices edged upwards on account of industrial activity resuming globally. In June and July prices rose as supply constraints, particularly in South America, coincided with the reopening of economic activity.

Magnesium



*The actual prices may vary depending on city, player, grade etc.

Outlook

In May, June and July, magnesium prices have witnessed increasing trend owing to favourable market conditions. In August, prices continued to rise. In September, prices rose on account of tighter supply. In October, magnesium prices continued with increasing trend. In November and December 2018, magnesium prices rose on account of tight market supply primarily from China and decreased in January 2019 with fall in dem and. In February, magnesium prices continued to fall. In March, price trend was reversed. In April, prices fell owing to subdued demand. In May, the declining trend in prices continued due to low demand across global markets. In June, prices fell due to over supply in the market from Turkey. In July, prices continued to slide due to lower demand from international markets. In August, a surplus of supply in the market led to a continued drop in prices globally. In September, the trend of international prices falling continued due to weak demand from buyers. In October, prices fell further due to weak demand in China and internationally. In November, prices continued on their downward trajectory due to weak market conditions. In December, the downward trend of prices continued. In January, magnesium prices rebounded slightly

^International prices changed due to change in grades at the source

Precious Metals

	ous Metals	33
23	Precious Metals	34

Period

Jul-19

Aug-19

Sep-19

Oct-19

Nov-19

Dec-19

Jan-20

Feb-20

Mar-20

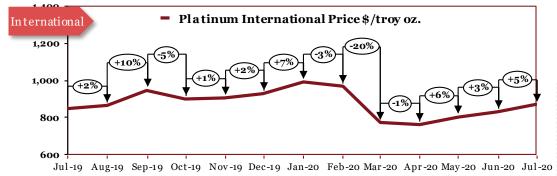
Apr-20

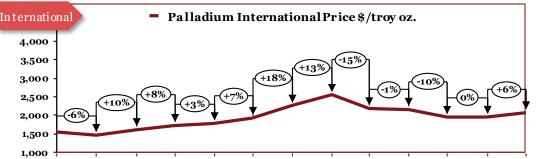
Mav-20

Jun-20

Jul-20

Precious Metals





Jul-19 Aug-19 Sep-19 Oct-19 Nov-19 Dec-19 Jan-20 Feb-20 Mar-20 Apr-20 May-20 Jun-20 Jul-20



Jul-19 Aug-19 Sep-19 Oct-19 Nov-19 Dec-19 Jan-20 Feb-20 Mar-20 Apr-20 May-20 Jun-20 Jul-20

Source: Johnson Matthey

*The actual prices may vary depending on city, player, grade etc.

Monthly Average Prices (\$/Oz)

Pd

1552

1462

1608

1,733

1777

1909

2258

2544

2170

2156

1949

1952

2062

Rh

3487

3929

5001

5,363

5728

6046

8609

11671

10617

8545

7824

8474

8603

Pt

847

863

948

901

907

929

993

968

772

762

805

831

869

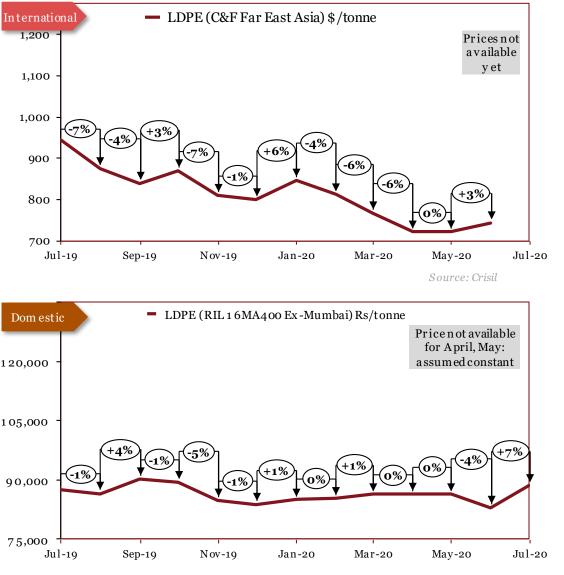
Outlook

In January, rhodium and palladium prices continued to rise due to demand from carm akers for their catalytic convertors tom anage stricter emissions rules. Platinum prices rose in conjunction, though at a lesser rate, reflecting the shift from petrol to hybrid cars that use palladium rather than platinum. In February, platinum's price growth was reversed as demand decreased in autocatylsts, electricals and glass-making, while palladium and rhodium prices continued to rise thanks to stricter environmental restrictions on cars in Europe, China and India. In March the record international price growth for palladium, platinum and rhodium was halted as the automotive industry, its primary customer, halted production around the world as part of lockdown measures. In April, lockdown measures continued to cause downward pressure on prices of all three metals, with auto production and other industries shut. In May, prices of Palladium and Rhodium continued to trend downwards from their earlier highs, while platinum prices rose as investors showed interest in it. In June and July, Rh odium and Palladium prices rose on the backs of growing automotive demand. Platinum prices rose due to interest from investors.

Polymers & Rubber

Polyn	Polymers & Rubber 35				
24	Low density polyethylene (LDPE)	36			
25	Polypropylene (PP)	37			
26	Rubber	38			

Low density polyethylene (LDPE)



Monthly Average Prices						
Period	*Int'l	l *Dom				
	(\$/tonne)	(Rs/tonne)				
Jul-19	944	87,460				
Aug-19	876	86,526				
Sep-19	840	90,160				
Oct-19	869	89,337				
Nov-19	810	84747				
Dec-19	800	83814				
Jan-20	847	84922				
Feb-20	813	85309				
Mar-20	767					
Apr-20	721	86309				
May-20	721	86309				
Jun-20	744	83005				
Jul-20	}	88626				

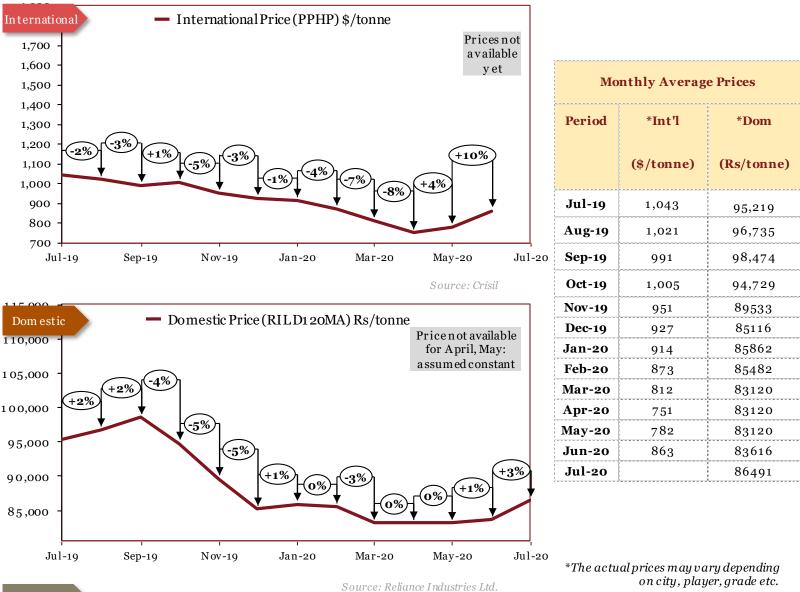
*The actual prices may vary depending on city, player, grade etc.

Outlook

In August, prices fell due to an oversupply of product and a lack of compensating demand, whilst remaining fairly stable domestically. In September, while international prices continued to slide due to oversupply, domestic prices rose, partly due to supply shocks from Saudi Arabia oilfield attack. In October, international prices rose thanks to tighter spot supply, while domestic prices fell as supply was normalised. In November prices fell internationally and domestically as producers sought to drop their excess inventory, due to overproduction in the United States. In December, prices internationally and domestically continued to decline as oversupply in the market met sluggish demand. In January, international prices rose due to plant shutdowns in Japan and Thailand, with domestic prices also rising. In February, domestic prices remained unchanged. In March, international prices decline as a result of the fall in crude oil prices and the COVID-19 lockdown. In April, low crude prices caused further decline in international prices. In June, international prices rose, corresponding with the rise in oil prices. In July, domestic prices continued their upturn.

Source: Reliance Industries Ltd.

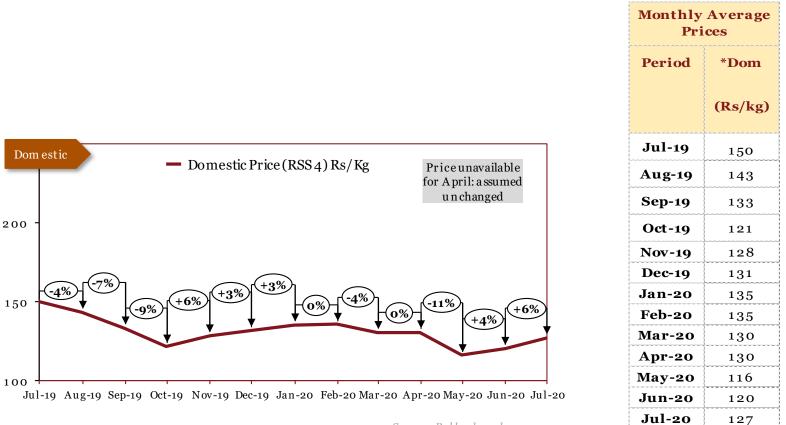
Polypropylene (PP)



Outlook

In August, polypropylene prices across the Asian regions dropped, triggered by persistent bearish demand trends and a sharp fall in PP futures. In September, while prices continued to slide internationally due to weak demand and issues surrounding international tariffs, domestic prices were rose following the rise in crude prices due to the events in Saudi Arabia. In October, international prices rose, while domestic prices were cut to try and incentivize buying. In November, prices fell domestically and internationally on account of oversupply and a period of weak demand from the plastics industry. In December, international and domestic prices continued to decline, with am ple inventory in the market as buyers resisted building up stocks. In January, the trend of falling international prices continued thanks to a production surge in China, while domestic prices rose on tighter availability of product in the domestic market. Zin February, domestic prices remained unchanged. In March, the dramatic decrease in crude oil prices led to the fall in Polypropylene prices internationally as well as domestically. In April, prices declined on low crude costs. In June, international prices rose on higher oil prices. Domestic prices follow ed suit. In July, domestic prices rose on account of higher oil prices

Rubber



Source: Rubber board

*The actual prices may vary depending on city, player, grade etc.

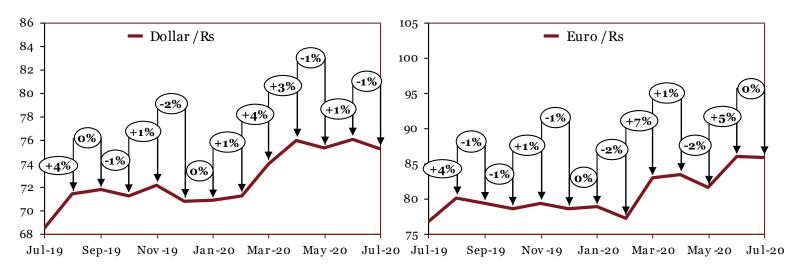
Outlook

In June, rubber prices increased substantially due to high demand of domestic rubber stemming from high import duties on rubber In July, rubber prices remained unchanged owing to stable market conditions. In August, Plummeting global prices and muted demand from tyre makers drove down the price of natural rubber in India. In September, domestic prices continued to fall due to weak demand from auto manufacturers as well as large inventories held by rubber manufacturers. In November, prices rose domestically as continuing rains prevented tapping, leading to weak production. In December, rubber prices rose due to the Pestalotiopsis disease on rubber plantations lowering international supply, alongside the higher oil price and the breakthrough in US-China trade relations. In January prices continued to trend upwards due to worsening supply problems. In February, domestic prices remained mostly unchanged despite buyers fears regarding the impact of the coronavirus crisis. In March, domestic prices fell as the COVID-19 pandemic halted all industrial activity, including in the tyre industry. In June and July, prices of rubber rose on stronger demand and supply disruptions.

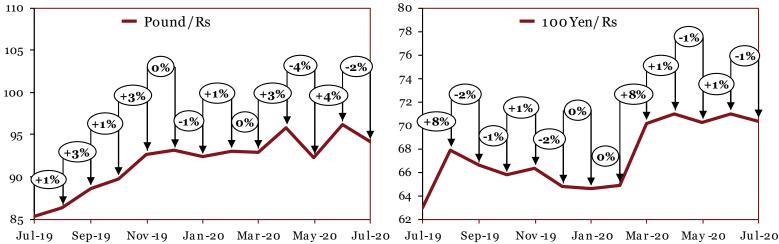


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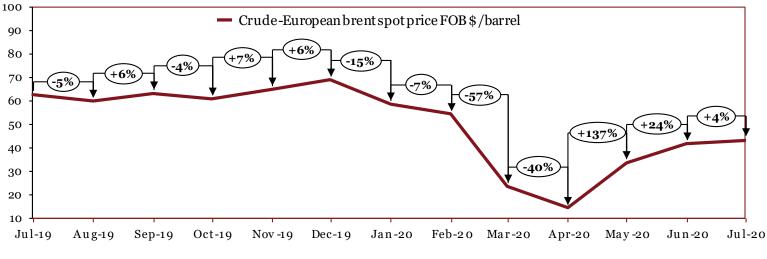
Forex Movement



Source: Reserve Bank of India

	Monthly Average Prices (Rs)												
	Jul-19	Aug-19	Sep-19	Oct - 19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20
\$	69	71	72	71	72	71	71	71	74	76	75	76	75
£	77	80	79	79	79	93	92	93	93	96	92	96	94
€	77	80	79	79	79	79	79	77	83	83	82	86	86
¥	63	68	67	66	66	65	65	65	70	71	70	71	70

Crude Oil



Source: EIA

	MonthlyAverage Prices (\$/barrel)												
	Jul-19	Aug-19	Sep-19	Oct -19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20
	63	60	63	61	65	69	59	54	24	14	34	42	43

Commodity Specifications

Commodity	International	Domestic
Iron Ore	IOECI635 Index (CIFChina) - (Fe63.5%) CIFChina	Crisil - Grade 1:58% to below 60% Fe Fines - Grade 2:60% to below 62% Fe Fines - Grade 3:62% to below 65% Fe Fines - Grade 4:65% and above Fe Fines
Pig Iron	Crisil -Foundry grade FOB CIS	Crisil -Foundry grade ex-factory, India
Stainless steel	NA	PwC Research -G 304 CR Coil -G 304 HR Coil
Wire rod	Crisil -CIS Black Sea (US \$/Tonne)	Crisil - Wire rods: 5.5 mm (Prices are inclusive of excise duty by exclusive of VAT/Sales tax)
Steel Billets	Crisil -FOB CIS Black Sea Previously: Bloomberg Black Sea Steel Billet Spot FOB	Crisil - 100^100 mm (Avg. prices collated from 2- 3 locations)
Hot-rolled coils	Crisil -FOB Black Sea	Crisil - 14G 2mm (Avg. prices collated from 2-3 locations)
Cold-rolled coils	Crisil -(CIS) FOB Black Sea	Crisil - Mumbai 16G (Avg. prices collated from 2-3 locations)
Steel Scrap	NA	Crisil - Heavy melting (excl. GST)
EN 8	NA	PwC Research -EN8 Alloy forging
20MnCr5	NA	PwC Research -Alloy forging
Ferro titanium	Ferrotitanium (Europe-70% In Warehouse Rotterdam) Previously: Ferrotitanium (min 70% in warehouse Rotterdam, Europe) \$/kg	NA
Ferro chrome	Crisil : FOB Hong Kong Cr 50%	Crisil: Ex-factory Cr 60%
Ferro molybdenum	Ferro-molybdenum (China-60% EXW) <i>Previously: Ferro-molybdenum (65%min</i> <i>in warehouse Rotterdam, Europe) \$/kg</i>	NA

Commodity Specifications

Commodity	International	Domestic
Ferro vanadium	Ferro Vanadium (China -80% FOB) \$/kg Previously: Ferrovanadium 78-82% V max 1.5% Si FOB North America warehouse USD/lbs	NA
Ferro silicon	Crisil - FOB China Si 75%	Crisil - Ex-factory Si 70%
Aluminium	LME -Primary aluminium with impurities no greater than the chemical composition of one of the registered designations: •P1020A in the North American and International Registration Record entitled "International Designations and Chemical Composition Limits for Unalloyed Aluminium" (revised March 2007) •Al99.70 in the GB/T 1196-2008 Standard entitled "Unalloyed aluminium ingots for remelting"	NCDEX, MCX (July'19 onwards) -Primary aluminium 99.7% purity (minimum) form: ingots, T -bars,
Copper	LME -Grade A copper must conform to the chemical composition of one of the following standards: •BS EN 1978:1998-Cu-CATH-1 •GB/T 467-2010-Cu-CATH-1 •ASTM B115-10-cathode Grade 1	MCX - Grade 1 electrolytic copper as per B115 specification
Zinc	LME -Special high-grade zinc of 99.995% purity (minimum) must conform to the chemical composition of one of the following standards: •BS EN 1179:2003 - 99.995% grade •ISO 752:2004 - ZN-1 grade •AST M B6-12 - LME grade •GB/T 470-2008 - Zn99.995 grade	NCDEX, MCX (July'19 onwards) - Zinc of 99.995% minimum purity. Zinc must conform with the 99.995% graded chemical composition of BS EN 1179:1996 Standard entitled "Zinc and Zinc alloys primary Zinc" Form: ingots

Commodity Specifications

Commodity	International	Domestic
Lead	LME - Lead of 99.97% purity (minimum) conforming to BS EN 12659:1999 - GB/T 469/2005	MCX - Lead ingots with minimum purity of 99.97%
Nickel	LME - Nickel of 99.80% purity (minimum) conforming to B39-79 (2013) - GB/T 6516-2010	NCDEX, MCX (July'19 onwards) - 4"*4" approved pure cut Nickel of 99.80% purity (minimum)
Tin	LME - Tin of 99.85% purity (minimum) conforming to BS EN 610:1996	Bloomberg - Tin (min 99.85%) \$/tonne
Magnesium	Magnesium (China Shanghai Changjiang Spot Price) CNY/tonne Previously: Magnesium (99.8% FOB China Main Ports Spot Price) \$/tonne	NA
Platinum	Metal in sponge form with minimum purities of 99.95% for platinum and palladium, and 99.9% for rhodium	
Palladium		
Rhodium		
Low density polyethylene (LDPE)	International price (C&F FEA) \$/tonne	RIL-16MA400 grade
Polypropylene (PP)	International Price (PPHP) \$/tonne	RIL-D120MA grade
Rubber Prices	NA	NCDEX/Rubber board - RSS 4 (Ribbed Smoked Sheet 4) ex- warehouse Kochi exclusive of all taxes
Forex Movement	RBI reference rates	
Crude	European Brent spot price FOB \$/barrel – Energy Information Administration (EIA)	



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