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# *Commodity price monitor*

## *May -20*

Prepared for ACMA

*Strictly private and confidential*

*June 2020*


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# Commodity trend dashboard

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

## Calendar Year 19-20: Q vs. Q update

| Commodity | Region | Q-o-Q Up | Q-o-Q Down |
|---|---|---|---|
| **Iron & Steel** | | | |
| Iron Ore | International | 1% ▲ | |
| | Domestic low grade | | |
| | Domestic high grade | | |
| Pig Iron | International | | -12% ▼ |
| | Domestic | | -4% ▼ |
| Stainless steel | Domestic | 0.5% ▲ | |
| | Domestic | 0.5% ▲ | |
| Wire rod | International | | -4% ▼ |
| | Domestic | 0% ▲ | |
| Steel Billets | International | | -12% ▼ |
| | Domestic | | -1% ▼ |
| Hot-rolled coils | International | | -22% ▼ |
| | Domestic | | -1% ▼ |
| Cold-rolled coils | International | | -12% ▼ |
| | Domestic | | -1% ▼ |
| Steel Scrap | Domestic | | -6% ▼ |
| 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 | | -7% ▼ |
| | Domestic | | 0% ▼ |

*ND: Not disclosed by the source*

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

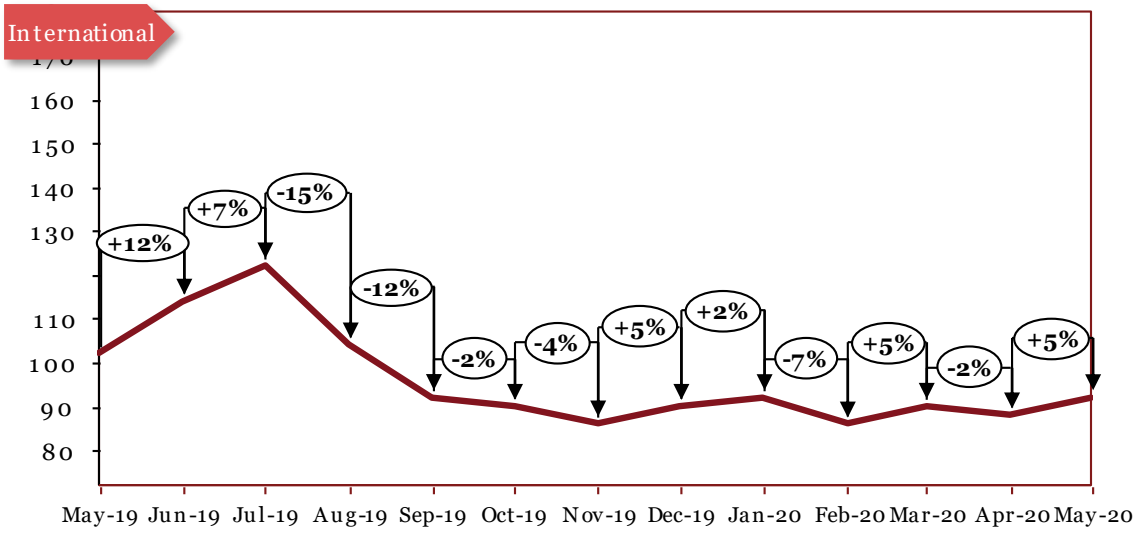
## Calendar Year 19-20: Q vs. Q update

| Commodity | Region | Q-o-Q Up | Q-o-Q Down |
|---|---|---|---|
| **Base Metals** | | | |
| Aluminum | International | | -14% ▼ |
| | Domestic | | -5% ▼ |
| Copper | International | | -9% ▼ |
| | Domestic | | -6% ▼ |
| Zinc | International | | -9% ▼ |
| | Domestic | | -6% ▼ |
| Lead | International | | -11% ▼ |
| | Domestic | | -7% ▼ |
| Nickel | International | | -6% ▼ |
| | Domestic | | -2% ▼ |
| Tin | International | | -6% ▼ |
| | Domestic | N/A | |
| Magnesium | International | N/A | |
| **Precious Metals** | | | |
| Platinum | International | | -14% ▼ |
| Palladium | International | | -12% ▼ |
| Rhodium | International | | -21% ▼ |
| **Polymers** | | | |
| Low density polyethylene (LDPE) | International | | -11% ▼ |
| | Domestic | N/A | |
| Polypropylene (PP) | International | | -13.3% ▼ |
| | Domestic | N/A | |
| Rubber | Domestic | | -13% ▼ |
| **Currency Exchange** | | | |
| Dollar | International | 5% ▲ | |
| Pound | International | 4% ▲ | |
| Euro | International | 1% ▲ | |
| Yen | International | 6% ▲ | |

# Iron & Steel

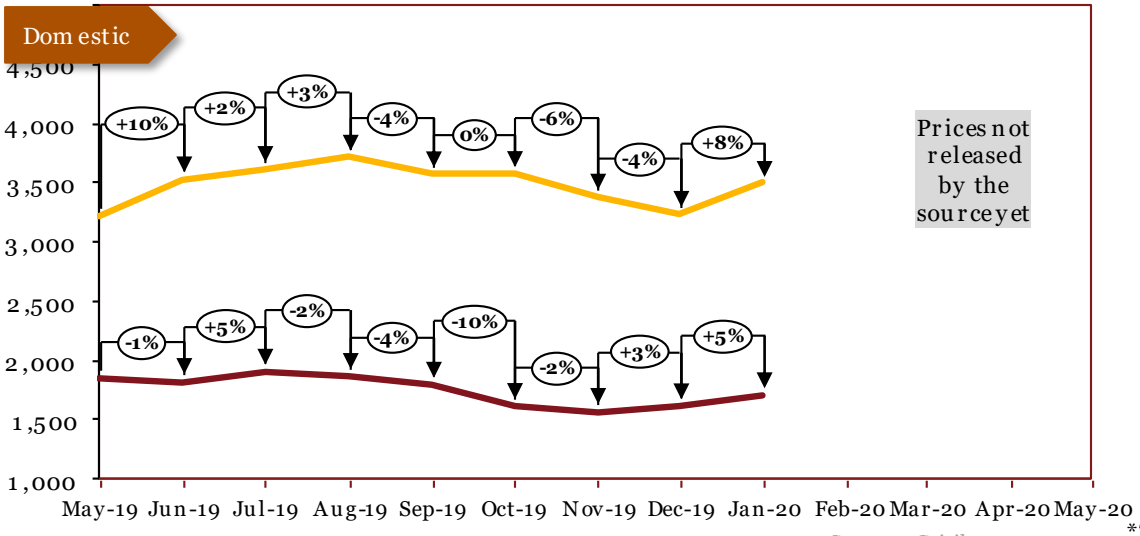
# Iron Ore

International




Source: Crisil

Domestic




Prices not released by the source yet

Source: Crisil

| Period | *Int'l | *Dom | |
|---|---|---|---|
| | $/tonne | Rs/tonne | |
| | | 65% & below | 65% & above |
| May-19 | 102 | 1,848 | 3,224 |
| Jun-19 | 114 | 1,822 | 3,531 |
| Jul-19 | 122 | 1,910 | 3,611 |
| Aug-19 | 104 | 1,863 | 3,715 |
| Sep-19 | 92 | 1796 | 3569 |
| Oct-19 | 90 | 1608 | 3574 |
| Nov-19 | 86 | 1570 | 3375 |
| Dec-19 | 90 | 1619 | 3235 |
| Jan-20 | 92 | 1704 | 3499 |
| Feb-20 | 86 | 1950 | 3792 |
| Mar-20 | 90 | 0 | 0 |
| Apr-20 | 88 | 0 | 0 |
| May-20 | 92 | 0 | 0 |

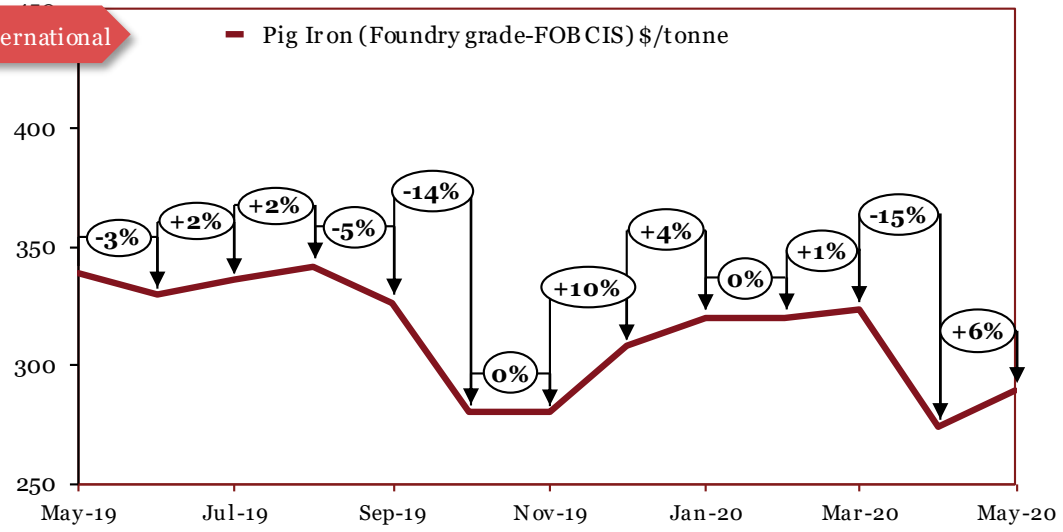
*The actual prices may vary depending on city, player, grade etc.

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.

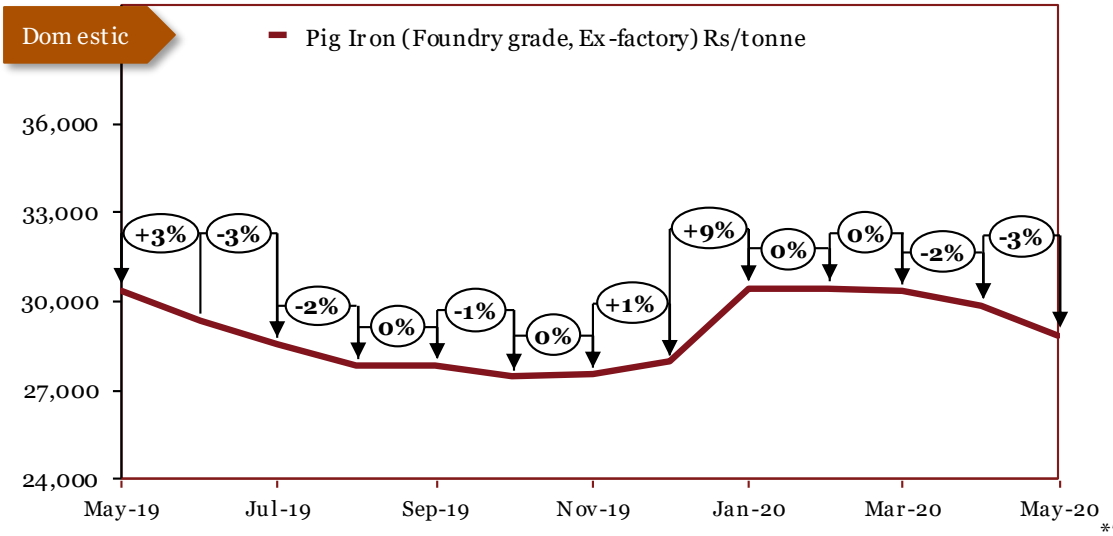
# Pig Iron

International




Source: Crisil

Domestic




Source: Crisil

**Monthly Average Prices**

| Period | *Int'l $/tonne | *Dom Rs/tonne |
|---|---|---|
| May-19 | 339 | 30,350 |
| Jun-19 | 330 | 29,350 |
| Jul-19 | 336 | 28,550 |
| Aug-19 | 342 | 27,850 |
| Sep-19 | 326 | 27850 |
| Oct-19 | 280 | 27450 |
| Nov-19 | 280 | 27550 |
| Dec-19 | 308 | 27950 |
| Jan-20 | 320 | 30450 |
| Feb-20 | 320 | 30450 |
| Mar-20 | 323 | 30350 |
| Apr-20 | 274 | 29850 |
| May-20 | 290 | 28850 |

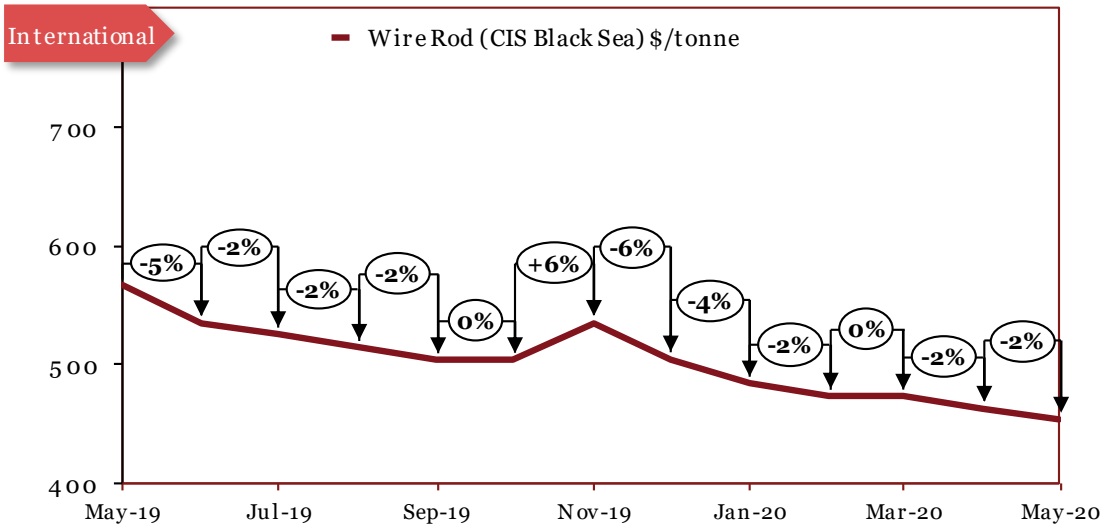
*The actual prices may vary depending on city, player, grade etc.

Outlook

In October, international prices fell considerably owing to weak mill demand and low demand for steel scrap. Domestically, weak exports caused a glut of supply in the market, hurting the price at a time of weak industrial demand. 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 COVID-19 pandemic shut down production at factories. In April, international prices fell as lockdown measures caused global industrial demand to fall precipitously. Domestic prices declined on less demand from 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.

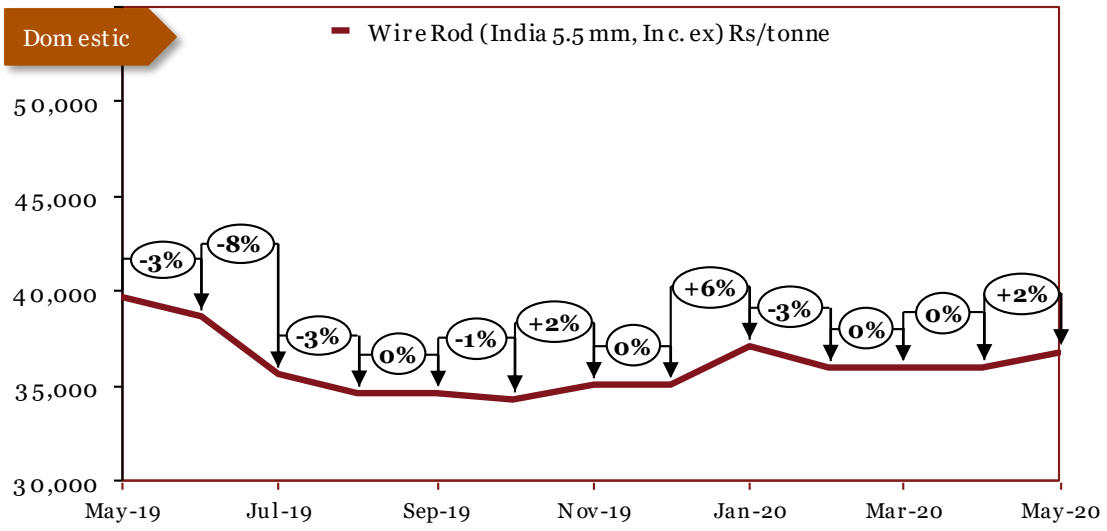
# Wire Rod

International




Source: Crisil

Domestic




Source: Crisil

| Monthly Average Prices | | |
|---|---|---|
| Period | ^*Int'l ($/tonne) | *Dom (Rs/tonne) |
| May-19 | 566 | 39644 |
| Jun-19 | 535 | 38644 |
| Jul-19 | 525 | 35644 |
| Aug-19 | 515 | 34,644 |
| Sep-19 | 504 | 34,644 |
| Oct-19 | 504 | 34344 |
| Nov-19 | 535 | 35094 |
| Dec-19 | 504 | 35094 |
| Jan-20 | 484 | 37094 |
| Feb-20 | 473 | 35994 |
| Mar-20 | 473 | 35994 |
| Apr-20 | 463 | 35994 |
| May-20 | 453 | 36794 |

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

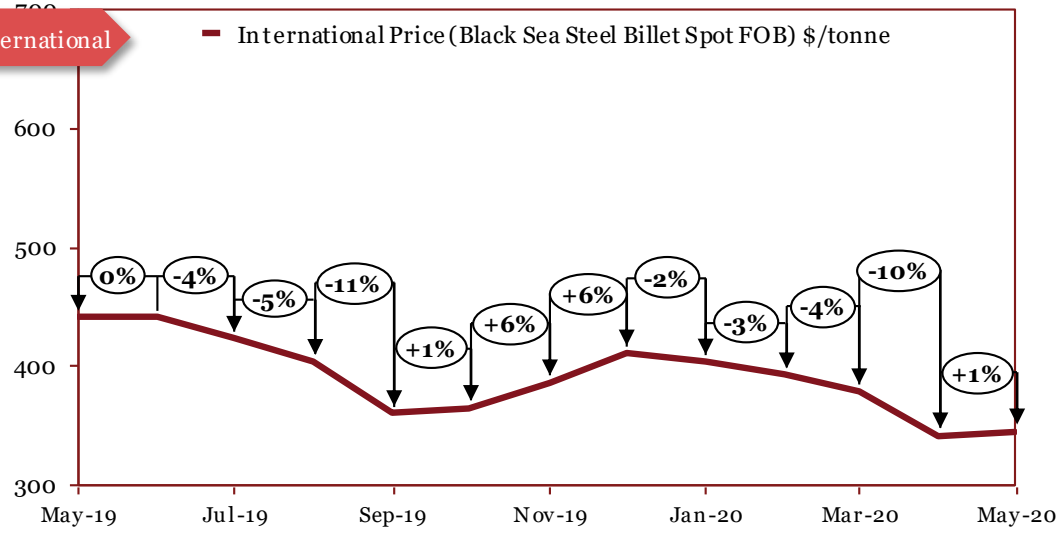
Outlook

In August, mills across the world lowered prices due to continuing weak demand. In India, weakening manufacturing led to a decrease in demand for wire rod. In September, the lowering cost of ferrous scrap, along with weak demand 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 demand. 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

*^Prices have been retrospectively revised by the source due to change in base year*

# Steel Billets

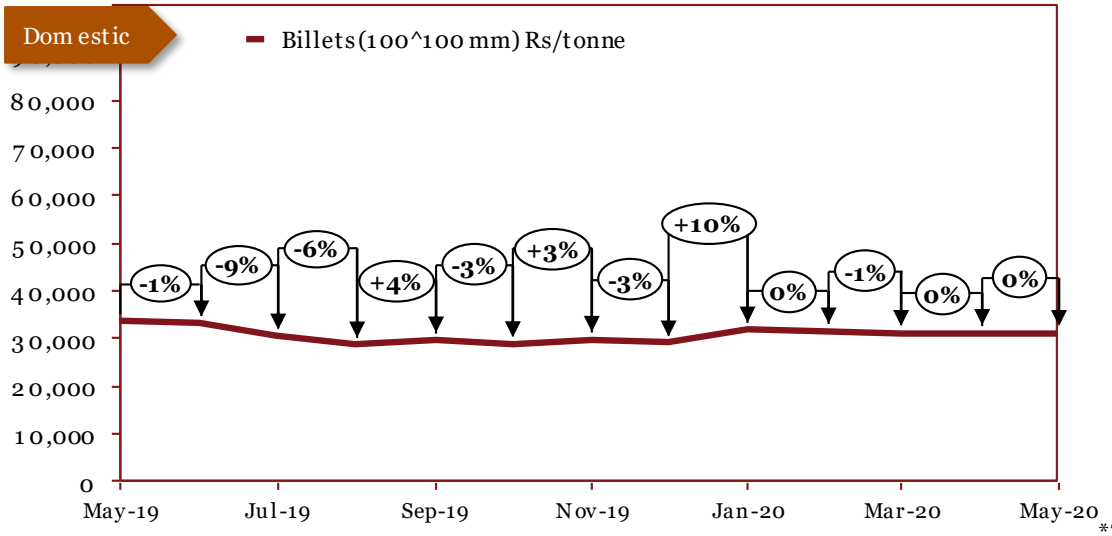
International




Source: Crisil*

Source: Bloomberg from July 2019 to January 2020

Domestic




Source: Crisil

| Monthly Average Prices | | |
|---|---|---|
| Period | ^*Int'l ($/tonne) | *Dom (Rs/tonne) |
| May-19 | 442 | 33867 |
| Jun-19 | 442 | 30533 |
| Jul-19 | 424 | 33400 |
| Aug-19 | 404 | 28633 |
| Sep-19 | 361 | 29750 |
| Oct-19 | 366 | 28967 |
| Nov-19 | 386 | 29900 |
| Dec-19 | 411 | 29033 |
| Jan-20 | 404 | 31800 |
| Feb-20 | 393 | 31650 |
| Mar-20 | 379 | 31200 |
| Apr-20 | 342 | 31200 |
| May-20 | 345 | 31200 |

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

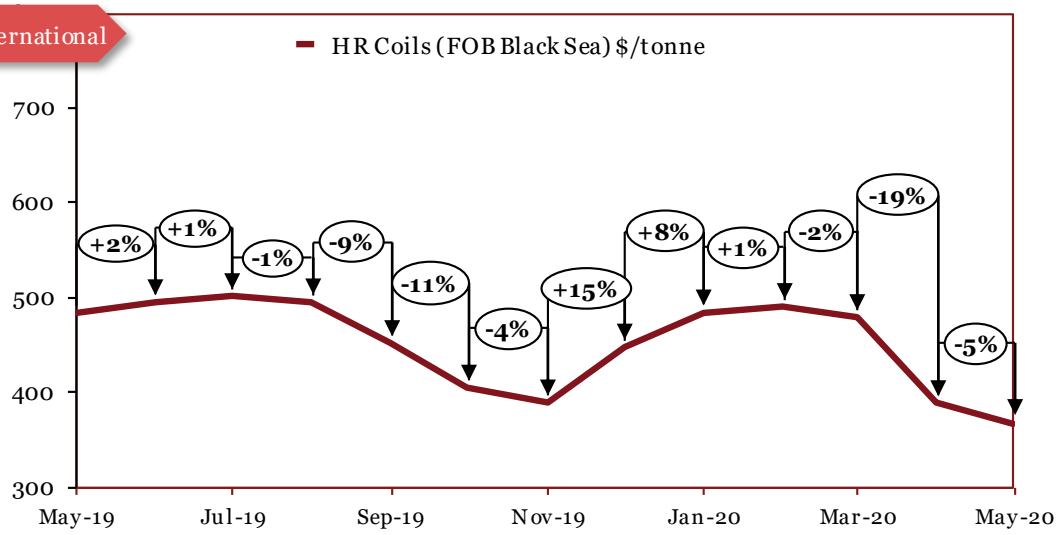
Outlook

In August, prices in Southeast Asia's steel billet market declined due to lower prices of scrap and competition from cheap exports. Domestic prices were hurt by the slowdown in manufacturing. 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 COVID-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.

^International prices changed due to change in the grade

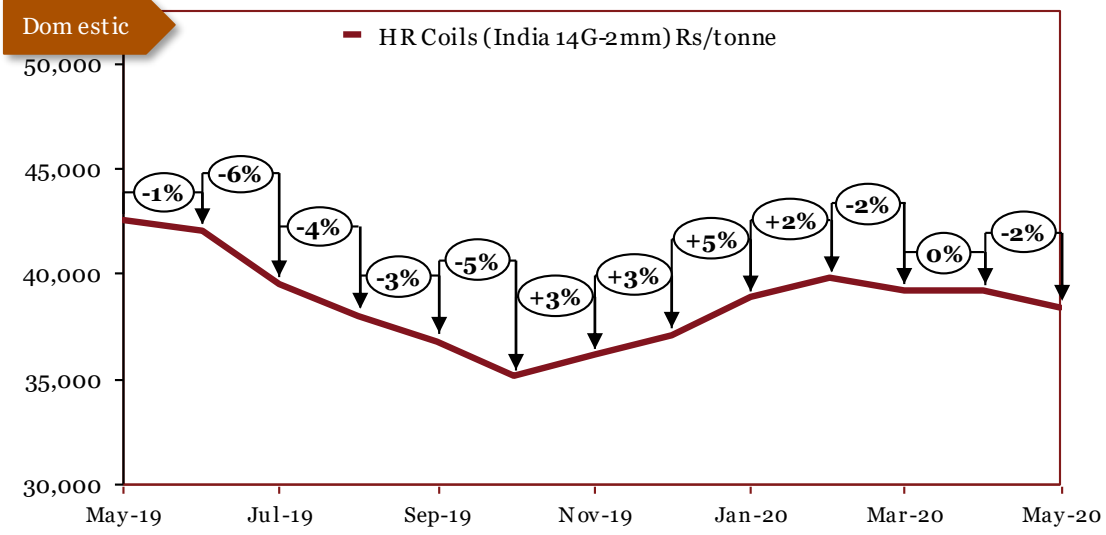
# Hot-Rolled (HR) Coils

International




Source: Crisil

Domestic




Source: Crisil

| Monthly Average Prices | | |
|---|---|---|
| Period | *Int'l ($/tonne) | ^*Dom (Rs/tonne) |
| May-19 | 485 | 42550 |
| Jun-19 | 496 | 42050 |
| Jul-19 | 501 | 39550 |
| Aug-19 | 496 | 38,050 |
| Sep-19 | 453 | 36850 |
| Oct-19 | 405 | 35150 |
| Nov-19 | 389 | 36150 |
| Dec-19 | 448 | 37150 |
| Jan-20 | 485 | 38900 |
| Feb-20 | 490 | 39800 |
| Mar-20 | 480 | 39200 |
| Apr-20 | 389 | 39200 |
| May-20 | 368 | 38450 |

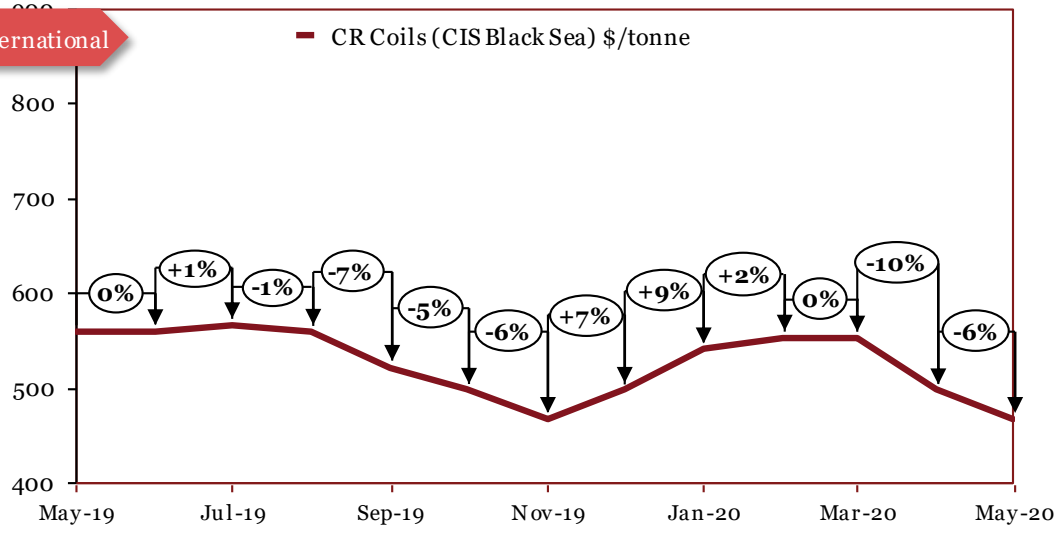
*The actual prices may vary depending on city, player, grade etc.*

## Outlook

In November, international prices fell on account of continued uncertainty regarding the trade war, while domestic prices rose on account of increasing construction activity and infrastructure spending alongside higher automotive manufacturing. In December, international prices rose on recovering demand from infrastructure and automotive sectors, whilst domestic prices rose thanks to stronger export margins. 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.

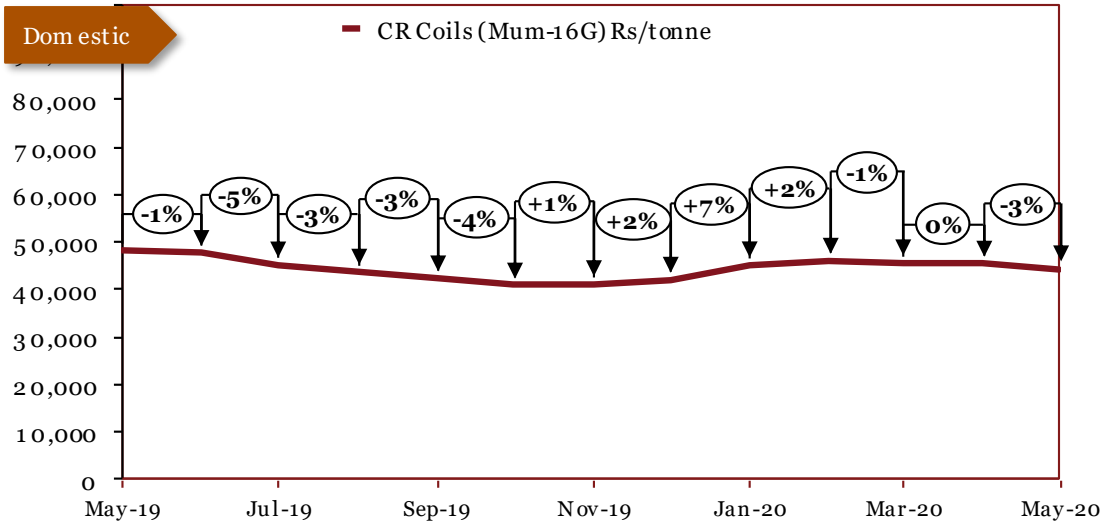
# Cold-Rolled (CR) Coils

International




Source: Crisil

Domestic




Source: Crisil.

| Monthly Average Prices | | |
|---|---|---|
| Period | *Int'l ($/tonne) | ^*Dom (Rs/tonne) |
| May-19 | 560 | 48250 |
| Jun-19 | 560 | 47750 |
| 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 |

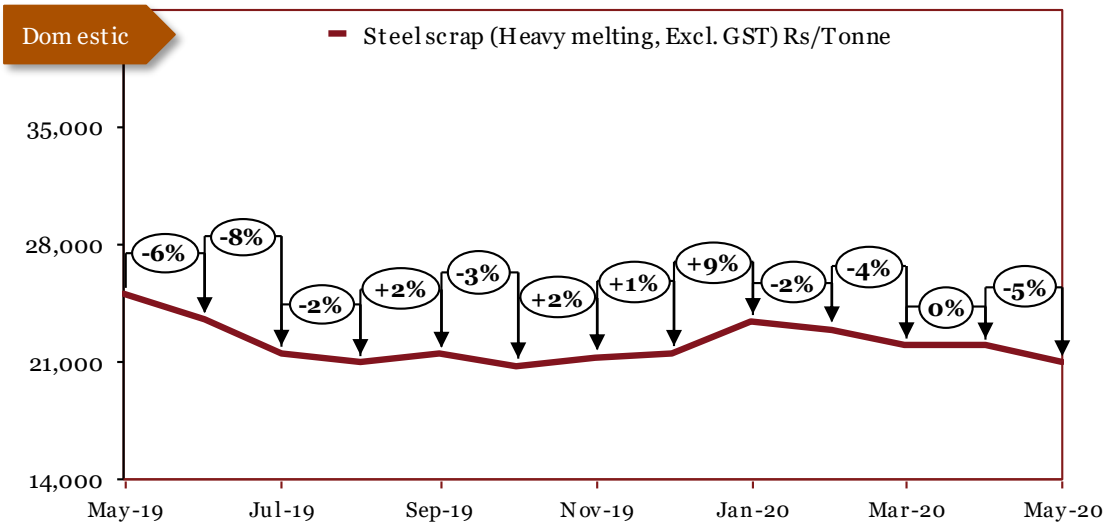
*The actual prices may vary depending on city, player, grade etc.*

Outlook

In July, domestic prices declined due to the continued slowdown in sectors that are major consumers of steel. Internationally, the demand scenario remained stable for steel, as reflected in the prices. In August, domestic prices fell partly due to the continuing crisis in the Auto sector and weakening economic growth. 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.

# Steel Scrap (Heavy Melting)

Domestic




Source: CRISIL

| Monthly Average Prices | |
|---|---|
| **Period** | ***Dom (Rs/Tonne)** |
| **May-19** | 25050 |
| **Jun-19** | 23550 |
| **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 |

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

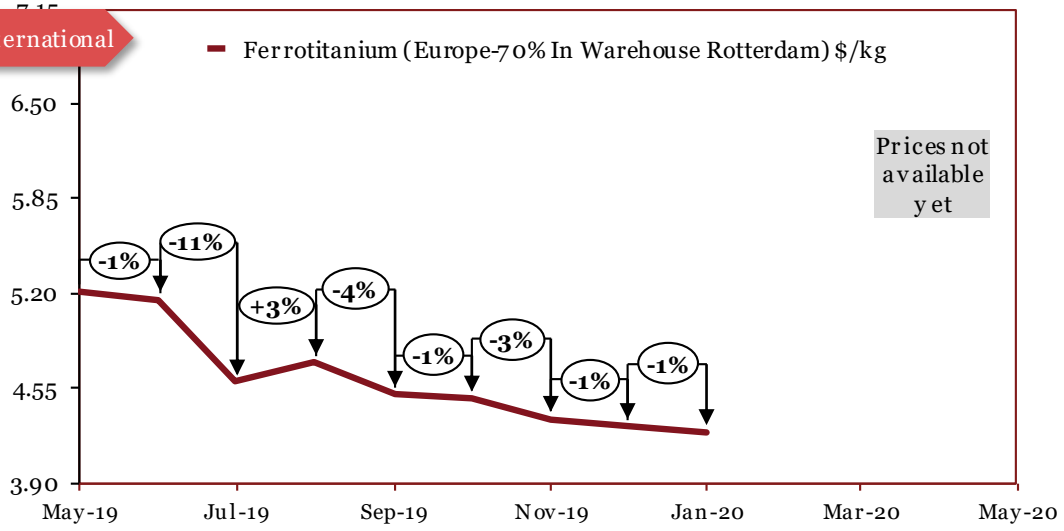
Outlook

In June, scrap prices dropped due to low exports demand from countries such as Turkey which is the largest buyer of steel scrap. In July, scrap prices decreased due to a sustained slowdown in demand along with competition from better quality scrap imports. In August, oversupply in the spot market ensure prices continued to fall. In September, domestic prices began to inch up due to stronger sentiment following the stabilisation of international prices. In October, the prices returned to decreasing, due to weak demand and uncertainty 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, domestic prices rose strongly owing to higher demand for steel, buoyed by the performance of the infrastructure and automotive sectors. In February, prices corrected as sentiments were weakened by the spread of the coronavirus. In March, prices declined as the national lockdown shut all factory production across the country. In April, domestic prices remained constant. In May, domestic prices declined as traders reduced orders due to logistical concerns during the lockdown

# Ferro-alloys

# Ferro titanium

International




*Grade specifications changed from Metal Bulletin to Asian Metals*
*Source: Bloomberg*

| Monthly Average Prices | |
|---|---|
| **Period** | **^*Int'l ($/kg)** |
| **May-19** | 5.21 |
| **Jun-19** | 5.16 |
| **Jul-19** | 4.60 |
| **Aug-19** | 4.72 |
| **Sep-19** | 4.51 |
| **Oct-19** | 4.48 |
| **Nov-19** | 4.34 |
| **Dec-19** | 4.28 |
| **Jan-20** | 4.25 |
| **Feb-20** | |
| **Mar-20** | |
| **Apr-20** | |
| **May-20** | |

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

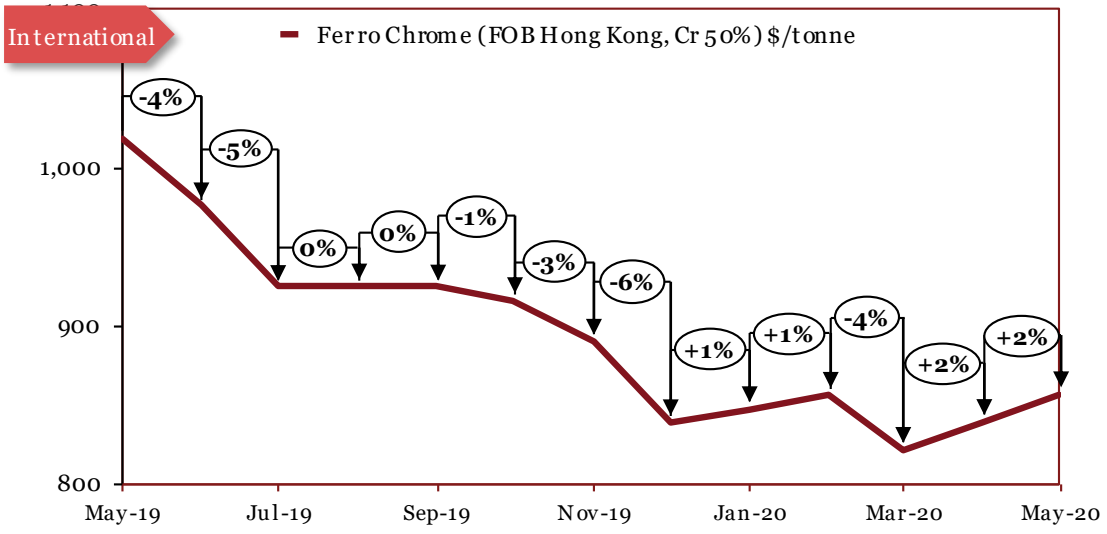
Outlook

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.

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

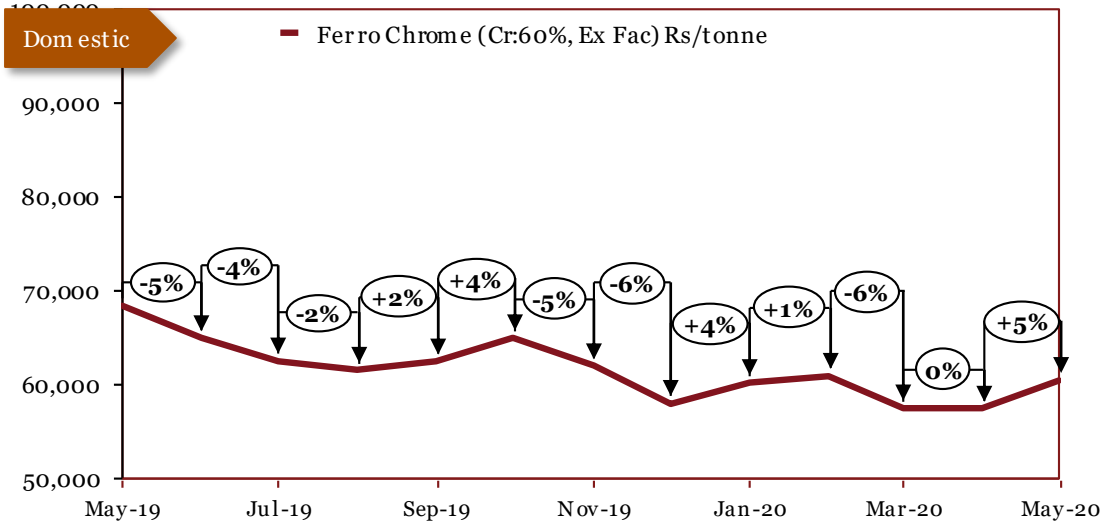
# Ferro chrome

International




Source: Crisil

Domestic




Source: Crisil

**Monthly Average Prices**

| Period | *Int'l ($/tonne) | *Dom (Rs/tonne) |
|---|---|---|
| May-19 | 1019 | 68500 |
| Jun-19 | 976 | 65000 |
| Jul-19 | 924 | 62500 |
| Aug-19 | 924 | 61500 |
| Sep-19 | 924 | 62500 |
| Oct-19 | 916 | 65000 |
| Nov-19 | 890 | 62000 |
| Dec-19 | 839 | 58000 |
| Jan-20 | 847 | 60200 |
| Feb-20 | 856 | 61000 |
| Mar-20 | 822 | 57500 |
| Apr-20 | 839 | 57500 |
| May-20 | 856 | 60500 |

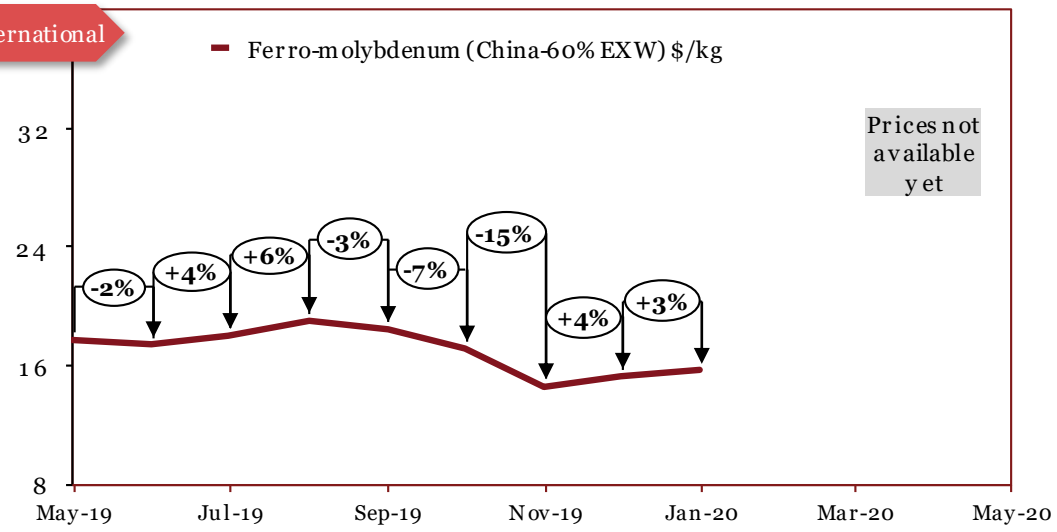
*The actual prices may vary depending on city, player, grade etc.

Outlook

In October, international prices fell owing to weak demand and the trade war, whilst improving slightly domestically. In November, prices internationally declined again, owing to oversupply in the market and uncertainty regarding the trade war, whilst domestically prices fell owing to weak demand. 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.

# Ferro molybdenum

International




*Grade specifications changed from Metal Bulletin to Asian Metals*
*Source: Bloomberg*

| Monthly Average Prices | |
|---|---|
| **Period** | ***^Int'l ($/kg)** |
| **May-19** | 18 |
| **Jun-19** | 18 |
| **Jul-19** | 17 |
| **Aug-19** | 19 |
| **Sep-19** | 18 |
| **Oct-19** | 17 |
| **Nov-19** | 15 |
| **Dec-19** | 15 |
| **Jan-20** | 16 |
| **Feb-20** | |
| **Mar-20** | |
| **Apr-20** | |
| **May-20** | |

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

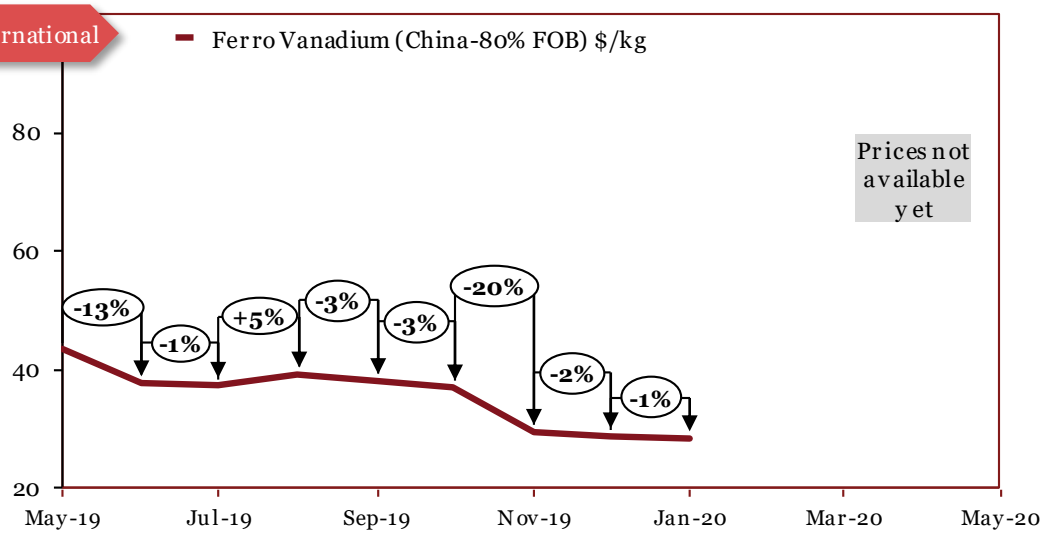
Outlook

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

International




*Grade specifications changed from Metal Bulletin to Asian Metals*
*Source: Bloomberg*

| Monthly Average Prices | |
|---|---|
| **Period** | ***Int'l ($/kg)** |
| **May-19** | 43 |
| **Jun-19** | 38 |
| **Jul-19** | 37 |
| **Aug-19** | 39 |
| **Sep-19** | 38 |
| **Oct-19** | 37 |
| **Nov-19** | 29 |
| **Dec-19** | 29 |
| **Jan-20** | 29 |
| **Feb-20** | |
| **Mar-20** | |
| **Apr-20** | |
| **May-20** | |

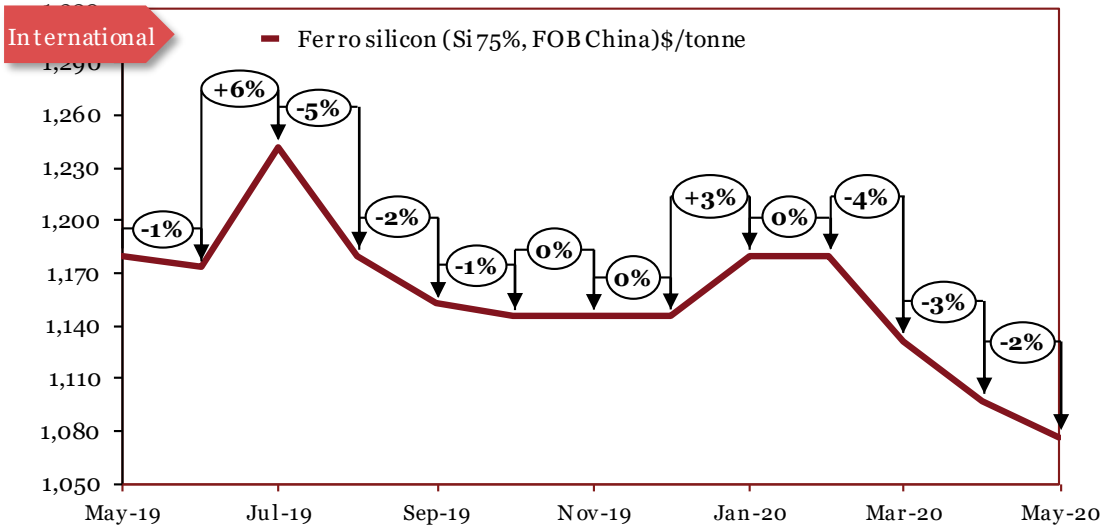
**The actual prices may vary depending on city, player, grade etc.*

## 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, alongside slow enforcement of new rebar regulations in China. In January prices fell minimally on stable market conditions.

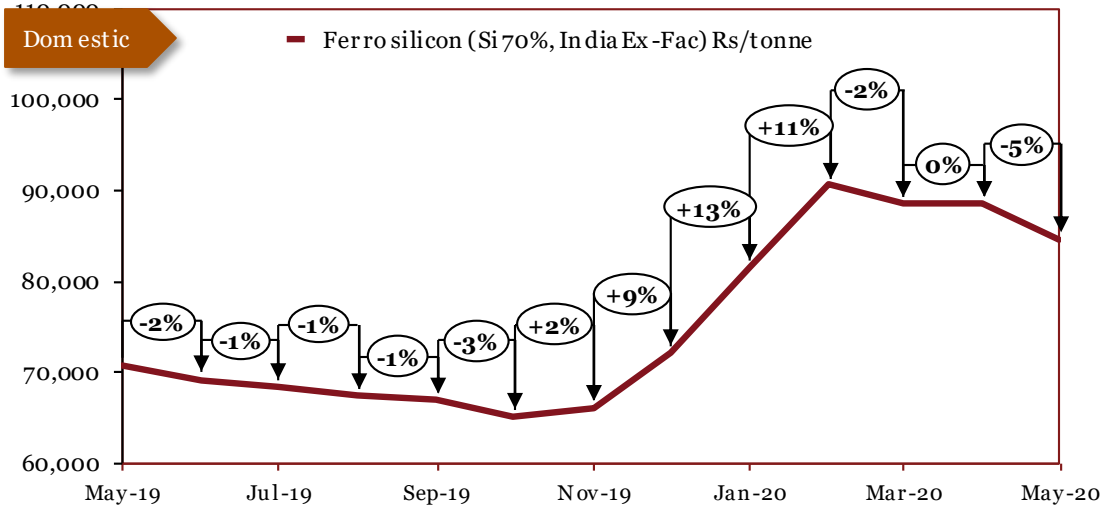
# Ferro silicon

International




*Source: Crisil*

Domestic




*Source: Crisil*

| Monthly Average Prices | | |
|---|---|---|
| Period | *Int'l ($/tonne) | *Dom (Rs/tonne) |
| May-19 | 1,180 | 70,700 |
| Jun-19 | 1,173 | 69,200 |
| 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 |

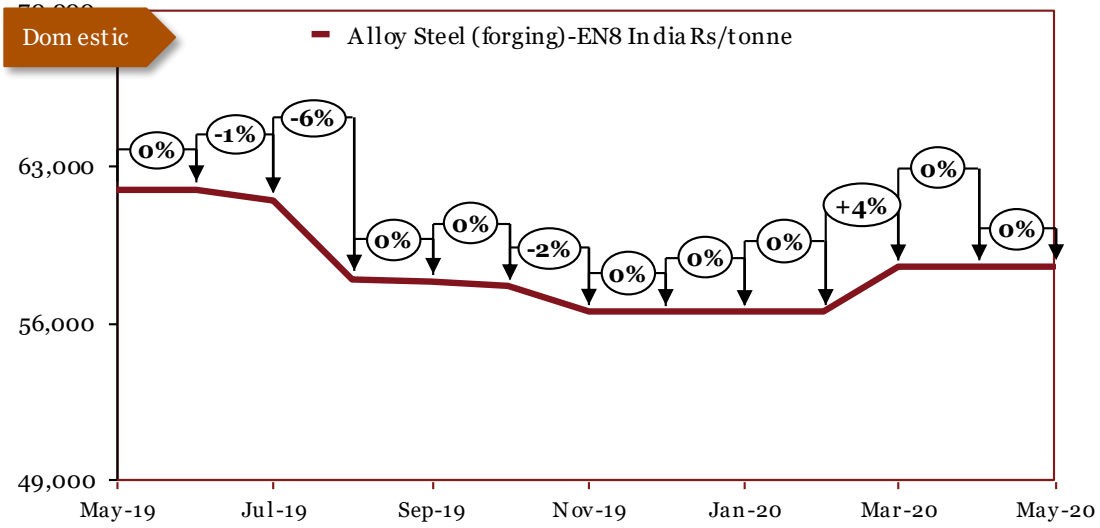
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In October, international prices remained fairly stable, as suppliers were able to counter weak demand with tight supply. In November, international prices remained constant on account of stable market conditions, while domestic prices rose on account of tighter supply. 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 COVID-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 COVID-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.

# EN8 Alloy Steel (Forging)

Domestic




Source: PwC Research

| Monthly Average Prices | |
|---|---|
| Period | *Dom (Rs/tonne) |
| May-19 | 62,000 |
| Jun-19 | 62,000 |
| 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 |

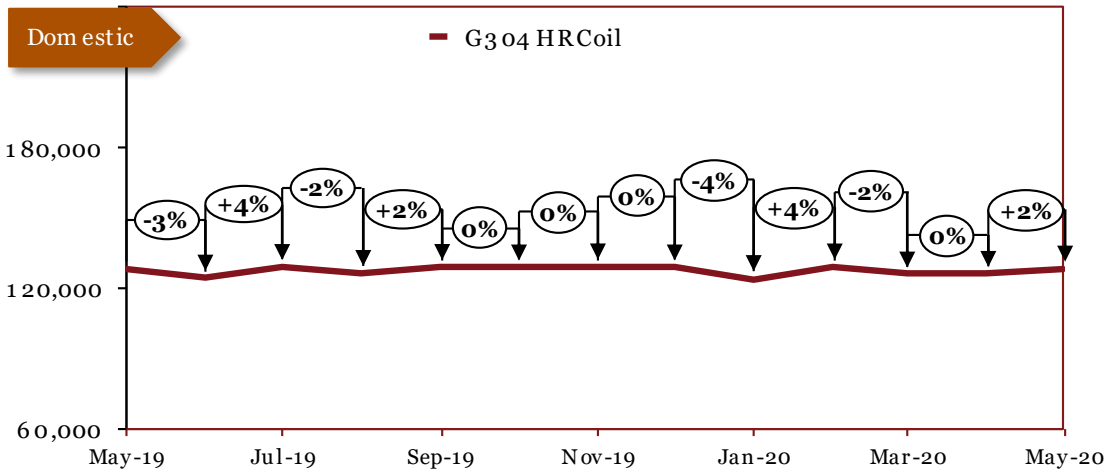
*The actual prices may vary depending on city, player, grade etc.*

Outlook

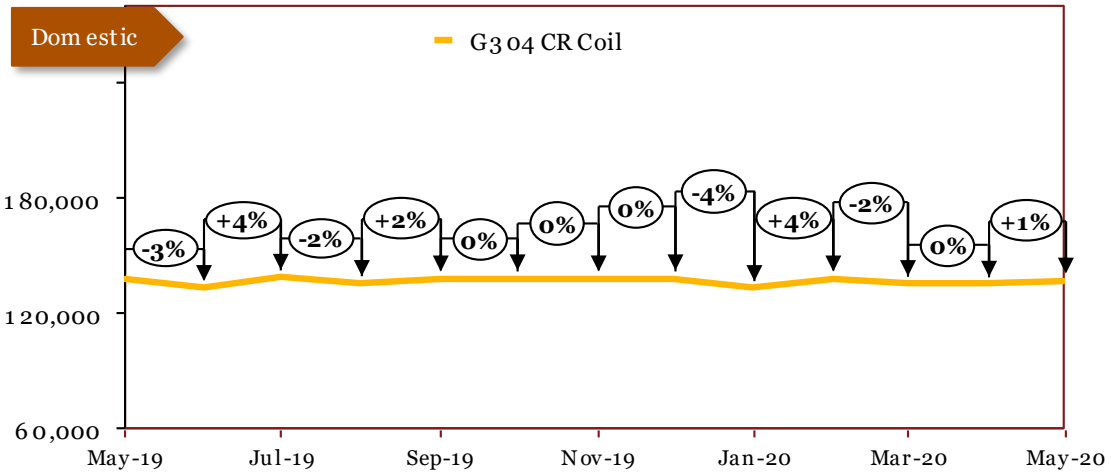
In November, domestic prices witnessed decline. In December, prices declined further owing to a decrease in the Chinese market. In January 19, prices continued with declining trend. In February, declining trend continued. In March, prices remained unchanged due to stable market conditions. In April, 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.

# Stainless Steel

Domestic




Domestic




**Monthly Domestic Average Prices**

| Period | *G304 HR (Rs/tonne) | *G304 CR (Rs/tonne) |
|---|---|---|
| May-19 | 128,200 | 137,750 |
| Jun-19 | 124,200 | 133,750 |
| Jul-19 | 129,200 | 138,750 |
| Aug-19 | 126,200 | 135,750 |
| Sep-19 | 128,700 | 138,250 |
| Oct-19 | 128,700 | 138,250 |
| Nov-19 | 128700 | 138250 |
| Dec-19 | 128700 | 138250 |
| Jan-20 | 123700 | 133250 |
| Feb-20 | 128700 | 138250 |
| Mar-20 | 125700 | 135250 |
| Apr-20 | 125700 | 135250 |
| May-20 | 127700 | 138250 |

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

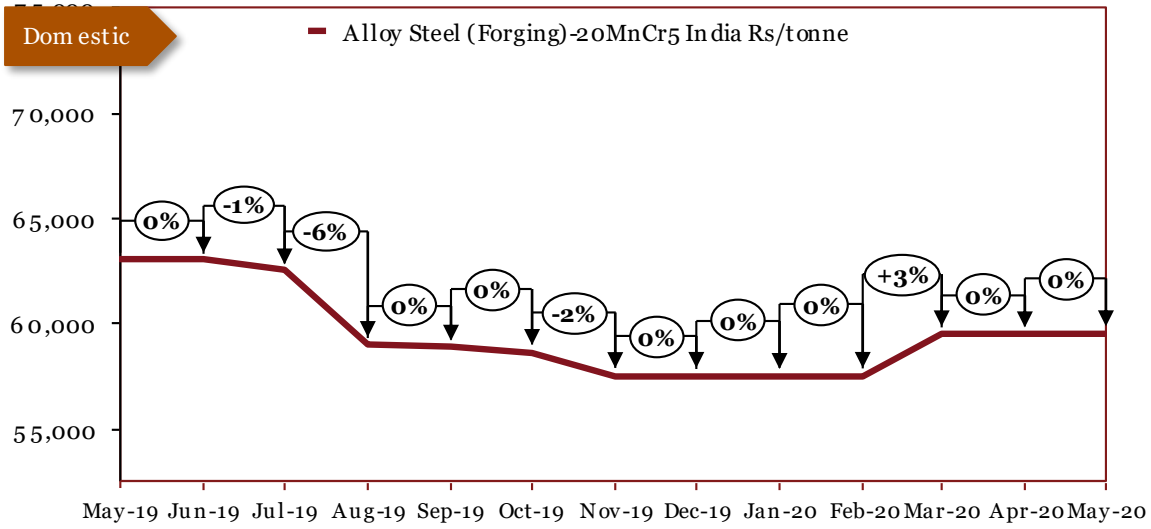
Source: PwC Research

## Outlook

In February, increasing trend in HR and CR coil prices continued. In March, price trend from previous months was reversed. 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 COVID-19 pandemic rocked industrial activity all around the world. In April, international and domestic prices remained stable. In May, prices rose marginally despite a weak demand environment both in India and globally.

# 20MnCr5 Alloy Steel (Forging)

Domestic




Source: PwC Research

| Monthly Average Prices | |
|---|---|
| Period | *Dom (Rs/tonne) |
| May-19 | 63,000 |
| Jun-19 | 63,000 |
| 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 |

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

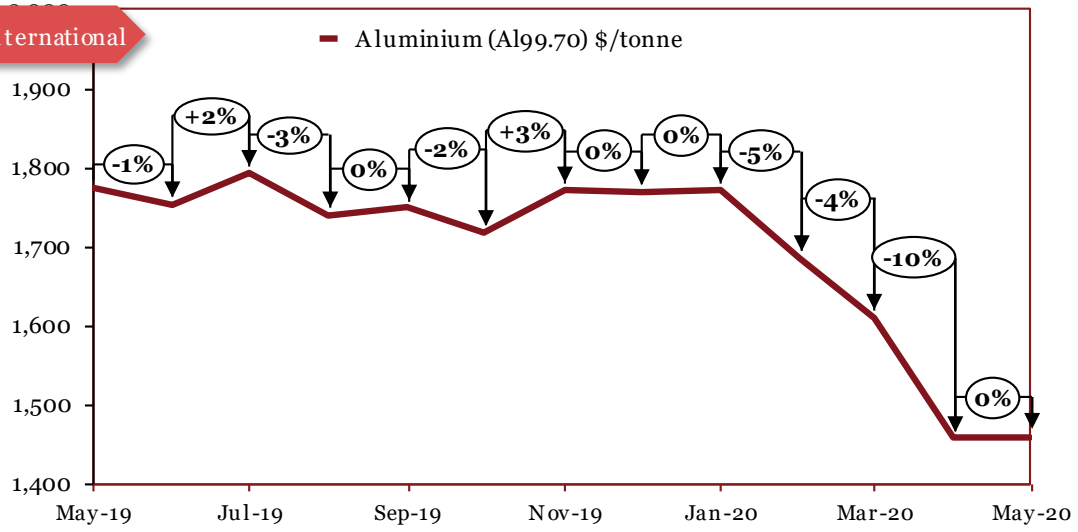
Outlook

In September, domestic prices reversed declining trend. In October, declining trend in prices was reversed. 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 November, prices fell due to weak demand, partly down to the Auto slowdown. In December, 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.

# Base Metals

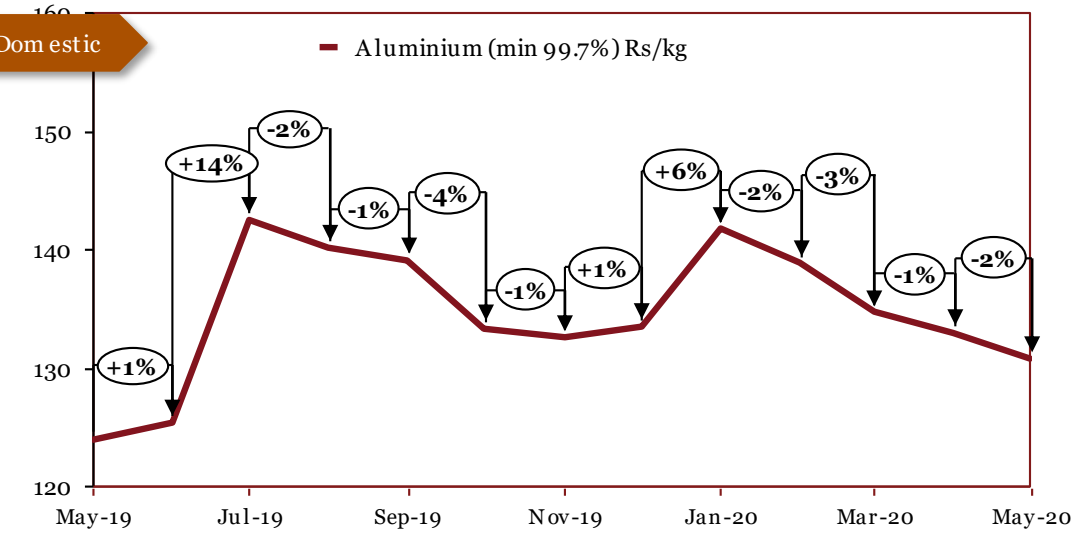
# Aluminium

International




*Source: LME*

Domestic




*Source: MCX**
***Source updated in July 2019***

| Monthly Average Prices | | |
|---|---|---|
| Period | *Int'l ($/tonne) | *Dom (Rs/kg) |
| May-19 | 1,775 | 124 |
| Jun-19 | 1,754 | 125 |
| 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 |

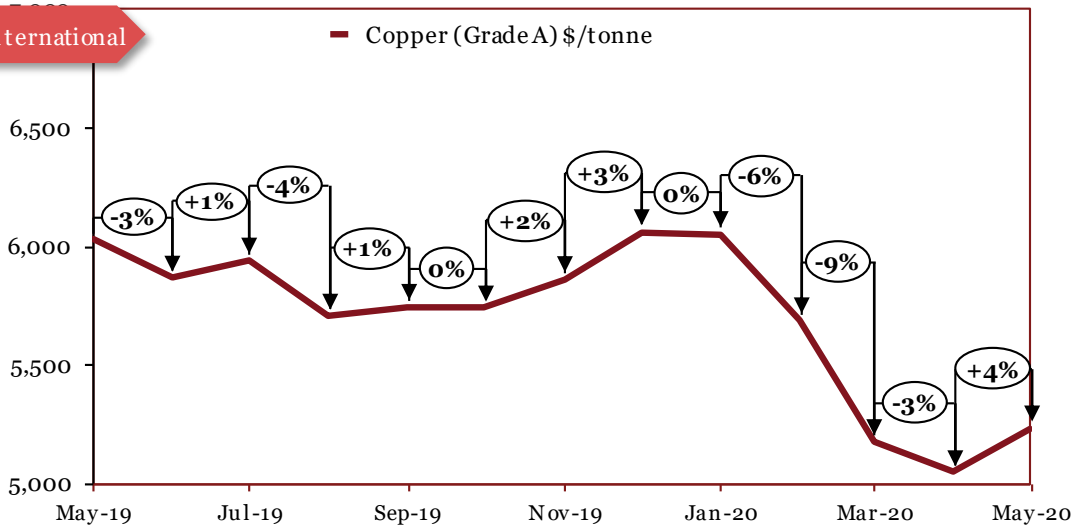
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In October, international prices fell despite lower production, partly due to weak demand from the Chinese auto sector, while the slowdown in the Indian auto sector hurt domestic prices. 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 were stable while domestic prices rose thanks to improving macro-economic sentiment. In February, international prices fell sharply as the coronavirus had a major impact on Chinese demand, which was reflected on domestic imported 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.

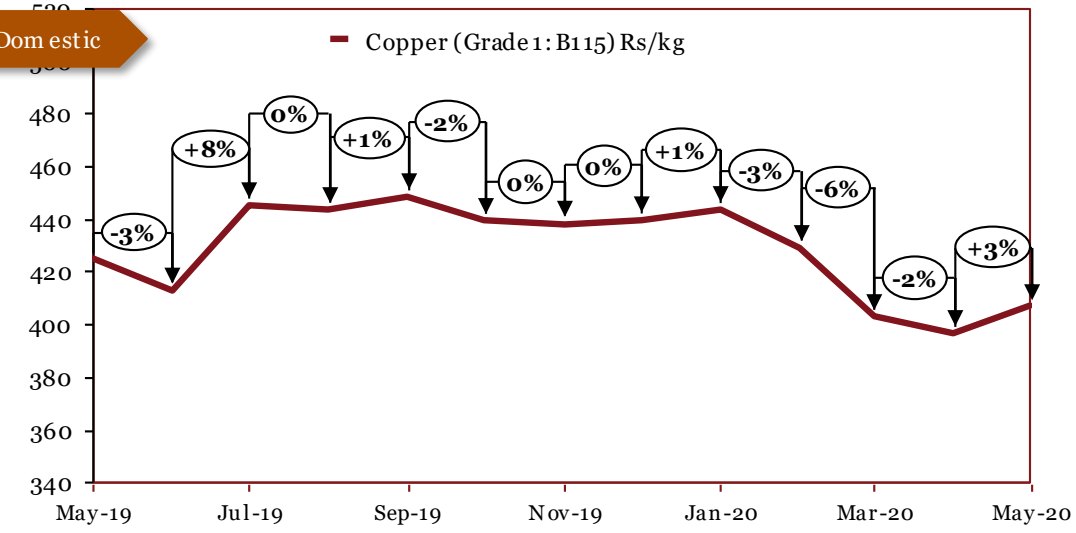
# Copper

International




Source: LME

Domestic




Source: MCX

| Monthly Average Prices | | |
|---|---|---|
| Period | *Int'l ($/tonne) | *Dom (Rs/kg) |
| May-19 | 6,028 | 425 |
| Jun-19 | 5,868 | 413 |
| 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 |

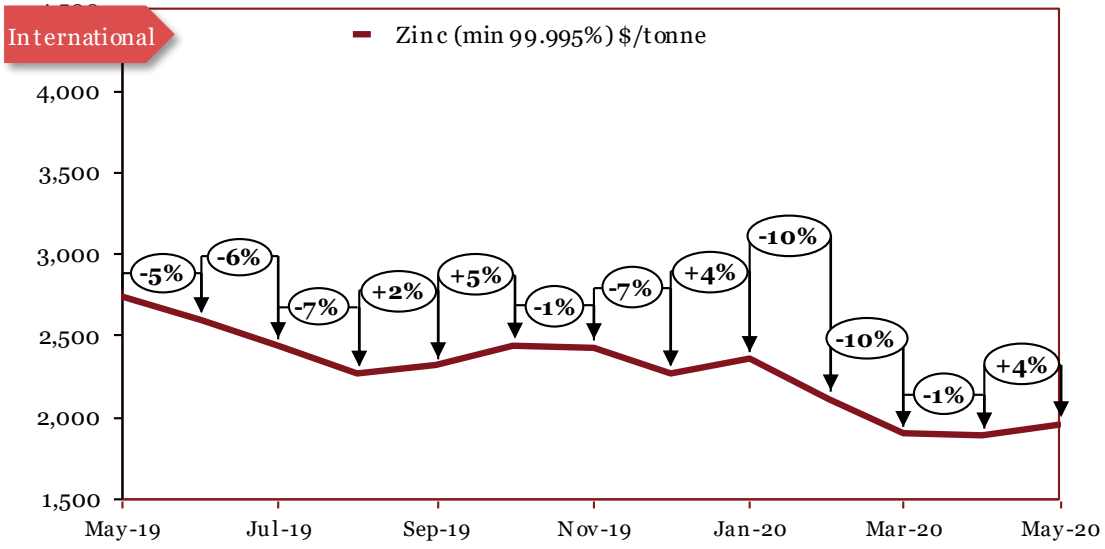
*The actual prices may vary depending on city, player, grade etc.

Outlook

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 COVID-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 COVID-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.

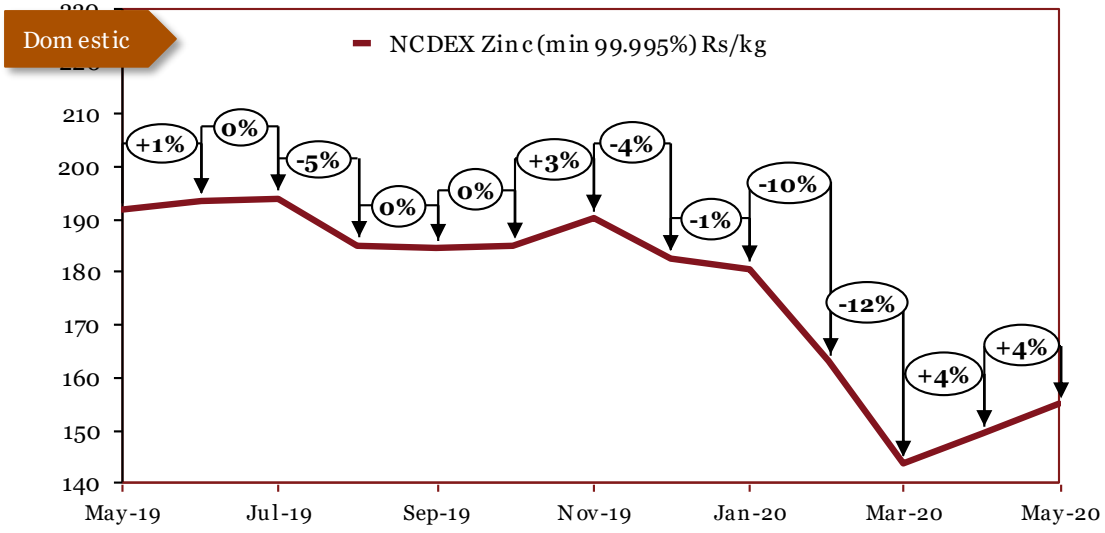
# Zinc

International




Source: LME

Domestic




Source: MCX*
*Source updated in July 2019

| Monthly Average Prices | | |
|---|---|---|
| Period | *Int'l ($/tonne) | *Dom (Rs/kg) |
| May-19 | 2,747 | 192 |
| Jun-19 | 2,602 | 194 |
| Jul-19 | 2,441 | 194 |
| Aug-19 | 2,275 | 185 |
| Sep-19 | 2,319 | 185 |
| Oct-19 | 2,445 | 185 |
| Nov-19 | 2432 | 190 |
| Dec-19 | 2273 | 183 |
| Jan-20 | 2357 | 181 |
| Feb-20 | 2120 | 163 |
| Mar-20 | 1905 | 144 |
| Apr-20 | 1894 | 149 |
| May-20 | 1963 | 155 |

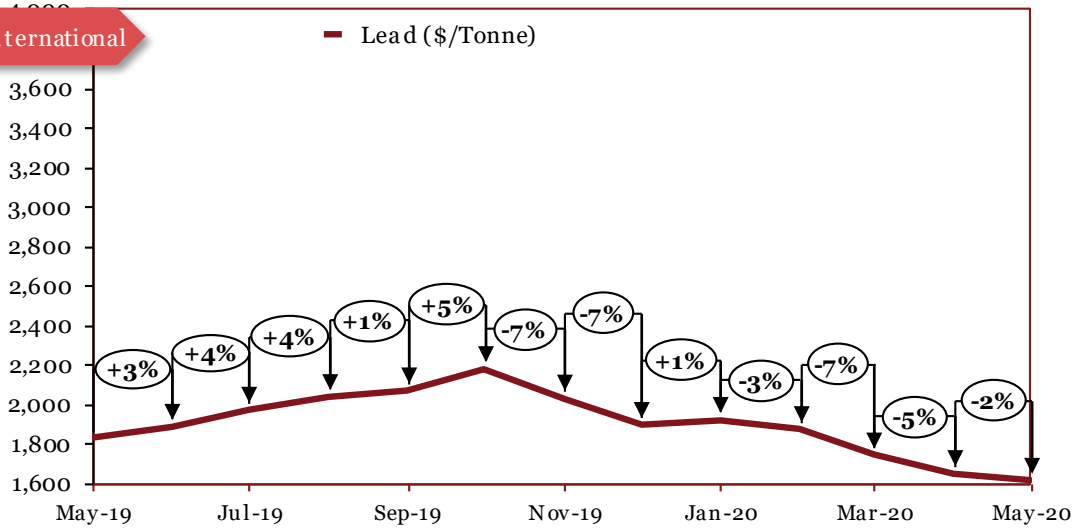
*The actual prices may vary depending on city, player, grade etc.

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 COVID-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

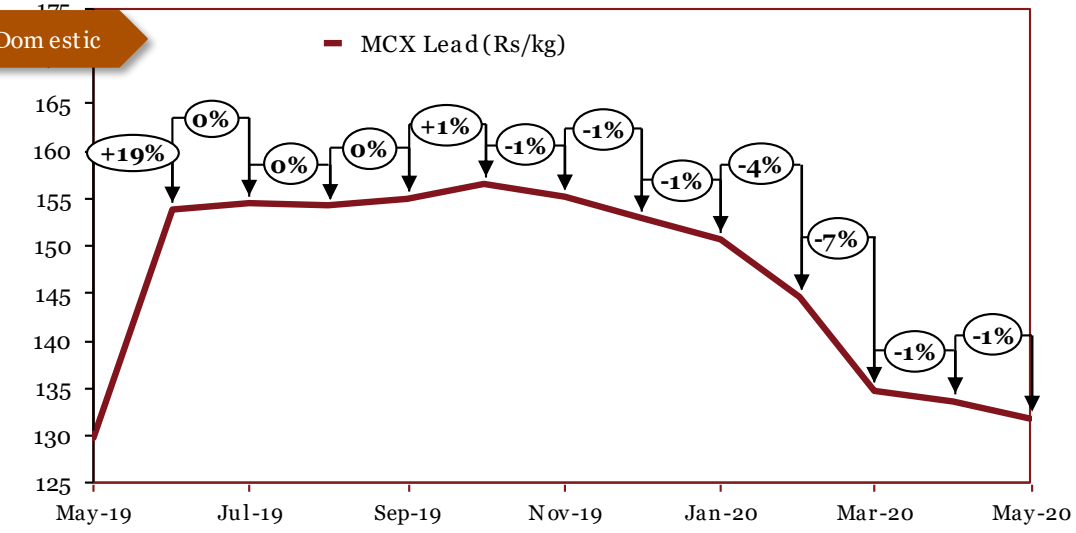
# Lead

International




Source: LME

Domestic




Source: MCX

| Monthly Average Prices | | |
|---|---|---|
| Period | *Int'l ($/tonne) | *Dom (Rs/kg) |
| May-19 | 1,830 | 130 |
| Jun-19 | 1,891 | 154 |
| 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 |

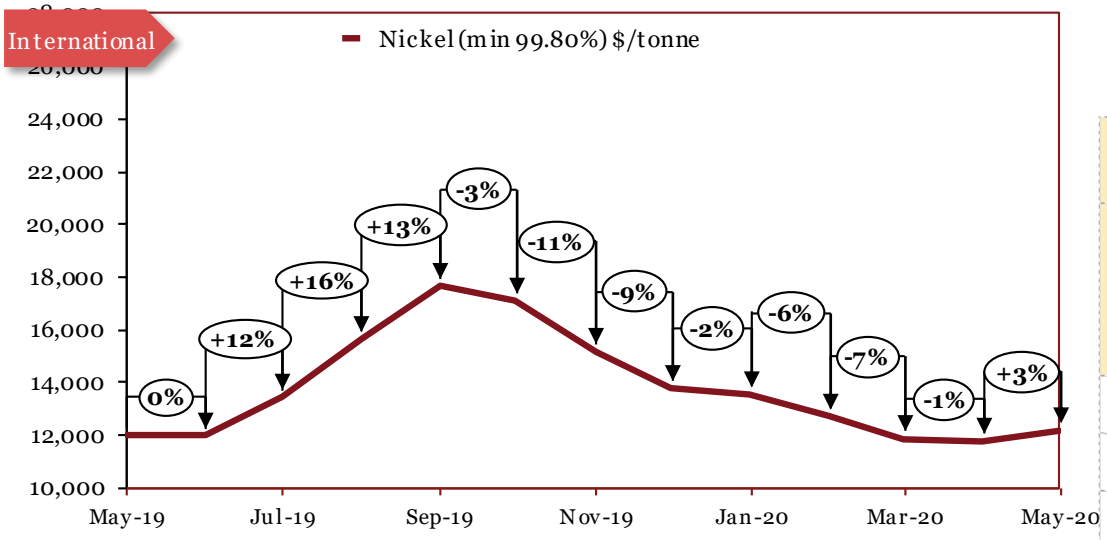
*The actual prices may vary depending on city, player, grade etc.

## Outlook

In October, international prices rose thanks to higher demand from battery makers in the physical market. Domestic prices also rose thanks to rising demand. 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 automobile 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.

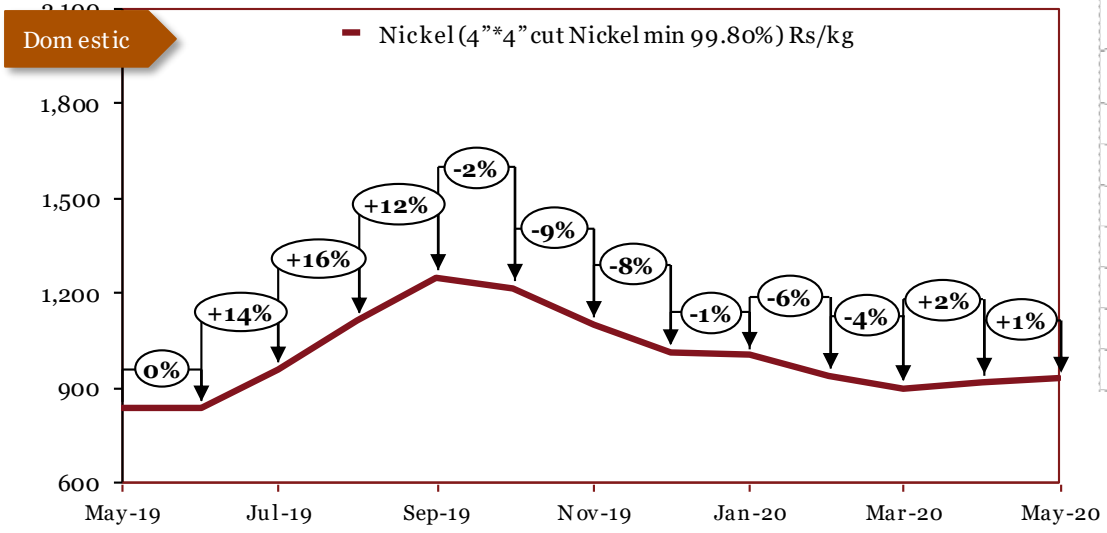
# Nickel

International




Source: LME

Domestic




Source: MCX*
*Source updated in July 2019

| Monthly Average Prices | | |
|---|---|---|
| Period | *Int'l ($/tonne) | *Dom (Rs/kg) |
| May-19 | 11,995 | 837 |
| Jun-19 | 11,967 | 839 |
| Jul-19 | 13,459 | 960 |
| Aug-19 | 15,678 | 1,114 |
| Sep-19 | 17,668 | 1,248 |
| Oct-19 | 17,108 | 1,218 |
| Nov-19 | 15195 | 1104 |
| Dec-19 | 13797 | 1016 |
| Jan-20 | 13549 | 1003 |
| Feb-20 | 12740 | 941 |
| Mar-20 | 11870 | 901 |
| Apr-20 | 11753 | 921 |
| May-20 | 12135 | 930 |

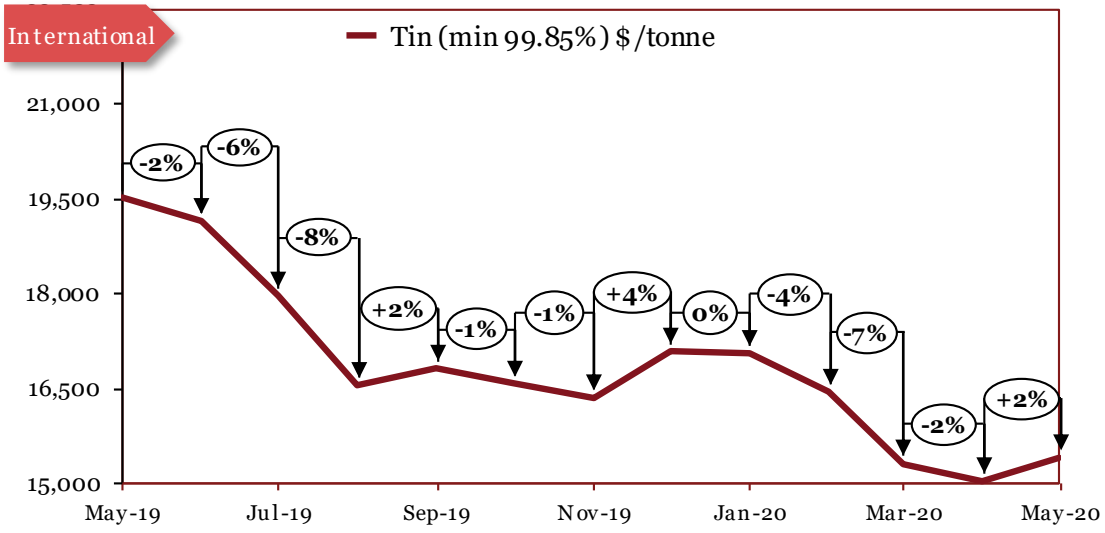
*The actual prices may vary depending on city, player, grade etc.

Outlook

In October, Nickel prices began to slide downwards as supply uncertainties were countered by weakening demand from China and easing of supply constraints in the physical market. In November, 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 imports. 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 domestic prices were hurt by the reduction in stainless steel demand, as well as lower production of electric vehicles. In April, international prices declined, though supply shocks prevented further fall. Domestically, prices rose thanks to a supply shock and higher spot demand. In May, international and domestic prices rose on account of greater demand from alloy makers.

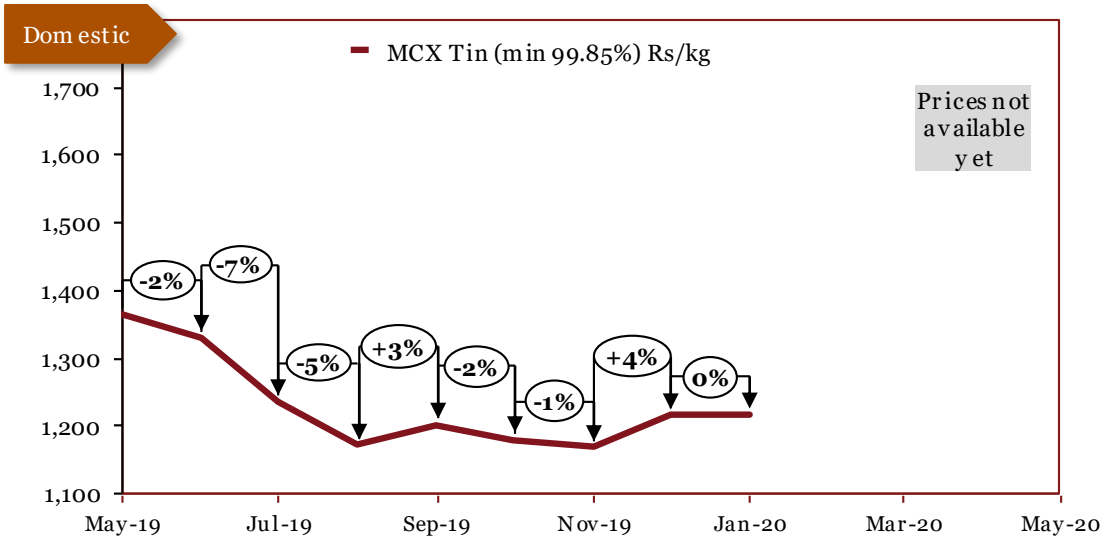
# Tin

International




Source: LME

Domestic




Source: Bloomberg

| Monthly Average Prices | | |
|---|---|---|
| Period | *Int'l ($/tonne) | *Dom (Rs/kg) |
| May-19 | 19,520 | 1,364 |
| Jun-19 | 19,163 | 1,331 |
| Jul-19 | 17,981 | 1,237 |
| Aug-19 | 16,567 | 1,172 |
| Sep-19 | 16,828 | 1,201 |
| Oct-19 | 16,592 | 1,180 |
| Nov-19 | 16360 | 1,169 |
| Dec-19 | 17083 | 1216 |
| Jan-20 | 17062 | 1216 |
| Feb-20 | 16447 | |
| Mar-20 | 15315 | |
| Apr-20 | 15039 | |
| May-20 | 15409 | |

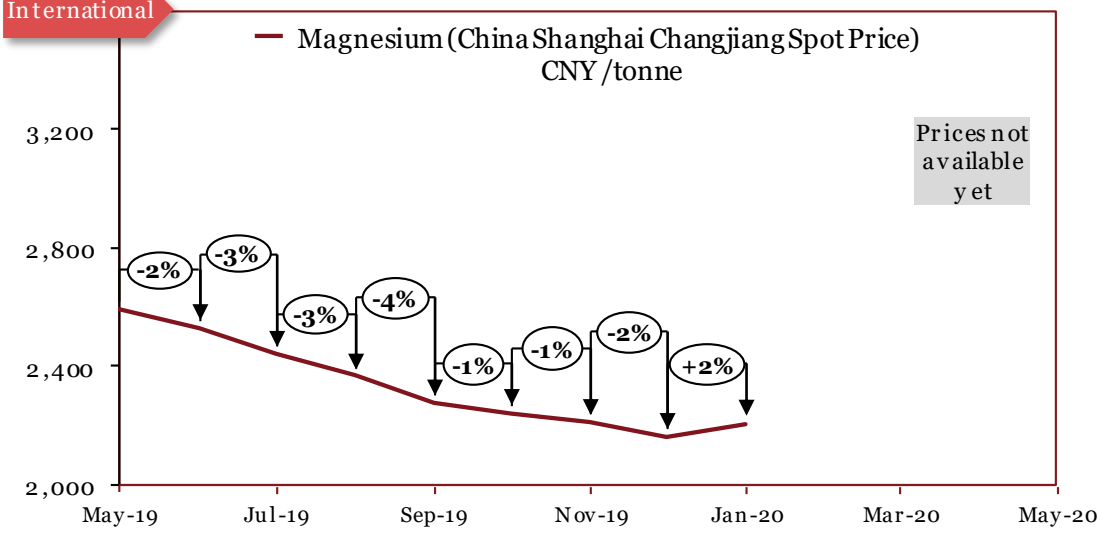
*The actual prices may vary depending on city, player, grade etc.

Outlook

In July, international and domestic prices have continued to slide due to high inventory levels, stemming from a poor global demand scenario. 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. Domestic 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.

# Magnesium

International




*Grade specifications changed from Metal Bulletin to Asian Metals*
*Source: Bloomberg*

| Monthly Average Prices | |
|---|---|
| Period | *Int'l ($/tonne) |
| May-19 | 2,595 |
| Jun-19 | 2,532 |
| Jul-19 | 2,445 |
| Aug-19 | 2,367 |
| Sep-19 | 2,275 |
| Oct-19 | 2,243 |
| Nov-19 | 2,212 |
| Dec-19 | 2162 |
| Jan-20 | 2207 |
| Feb-20 | |
| Mar-20 | |
| Apr-20 | |
| May-20 | |

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

Outlook

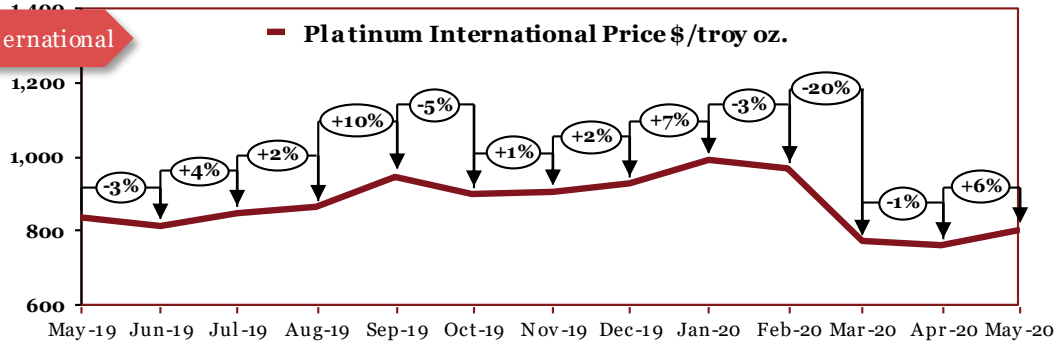
In May, June and July, magnesium prices have witnessed increasing trend owing to favourable market conditions. In August, prices continued to rise. In September, prices rose on account of tighter supply. In October, magnesium prices continued with increasing trend. In November and December 2018, magnesium prices rose on account of tight market supply primarily from China and decreased in January 2019 with fall in demand. 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 oversupply 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*

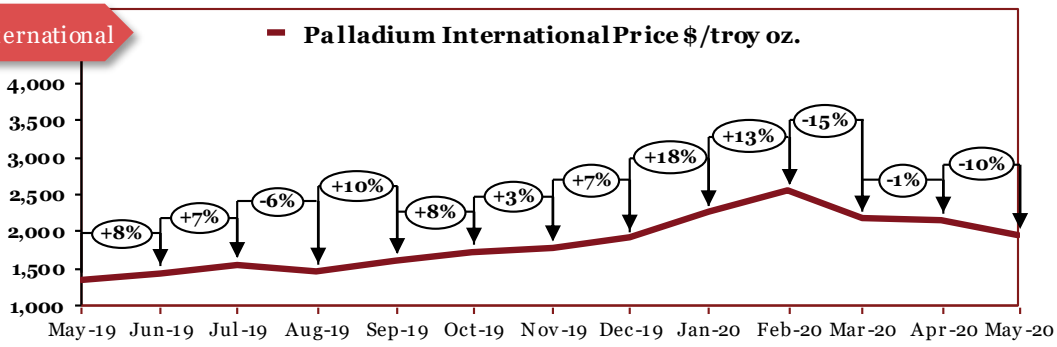
# Precious Metals

# Precious Metals

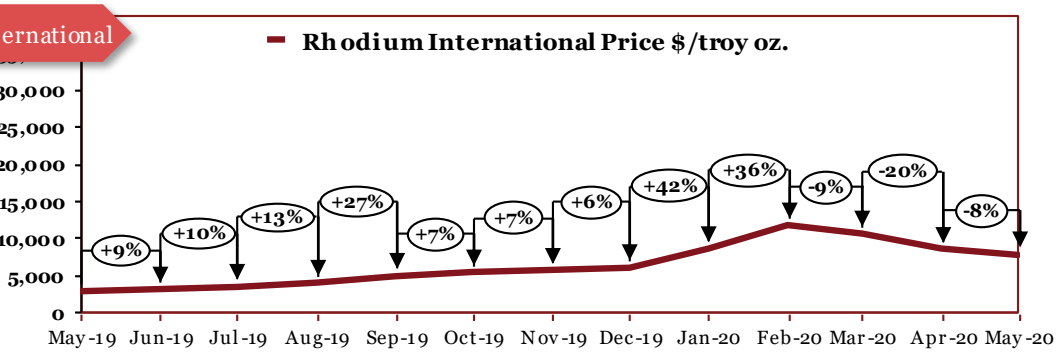
International




International




International




| Monthly Average Prices ($/Oz) | | | |
|---|---|---|---|
| Period | Pt | Pd | Rh |
| May-19 | 838 | 1340 | 2900 |
| Jun-19 | 813 | 1446 | 3157 |
| Jul-19 | 847 | 1552 | 3487 |
| Aug-19 | 863 | 1462 | 3929 |
| Sep-19 | 948 | 1608 | 5001 |
| Oct-19 | 901 | 1,733 | 5,363 |
| Nov-19 | 907 | 1777 | 5728 |
| Dec-19 | 929 | 1909 | 6046 |
| Jan-20 | 993 | 2258 | 8609 |
| Feb-20 | 968 | 2544 | 11671 |
| Mar-20 | 772 | 2170 | 10617 |
| Apr-20 | 762 | 2156 | 8545 |
| May-20 | 805 | 1949 | 7824 |

*Source: Johnson Matthey*

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

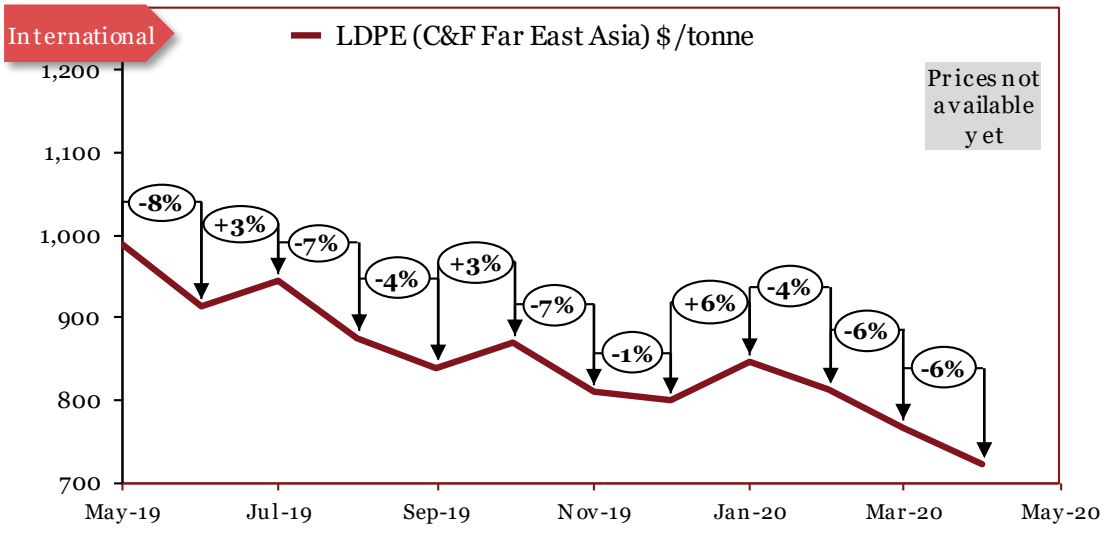
## Outlook

In December, prices of Rhodium and Palladium continued to rise exponentially as demand from auto manufacturers continued to outstrip supply, while platinum prices rose steadily, being a popular investment. In January, rhodium and palladium prices continued to rise due to demand from carmakers for their catalytic convertors to manage 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.

# Polymers & Rubber

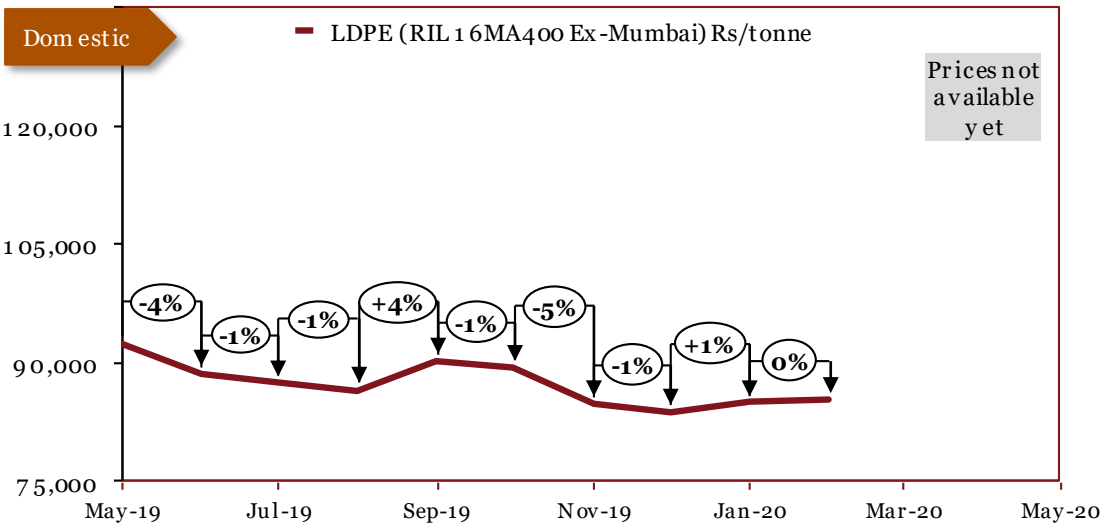
# Low density polyethylene (LDPE)

International




Source: Crisil

Domestic




Source: Reliance Industries Ltd.

| Monthly Average Prices | | |
|---|---|---|
| Period | *Int'l ($/tonne) | *Dom (Rs/tonne) |
| May-19 | 989 | 92,325 |
| Jun-19 | 913 | 88,579 |
| 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 | |
| May-20 | | |

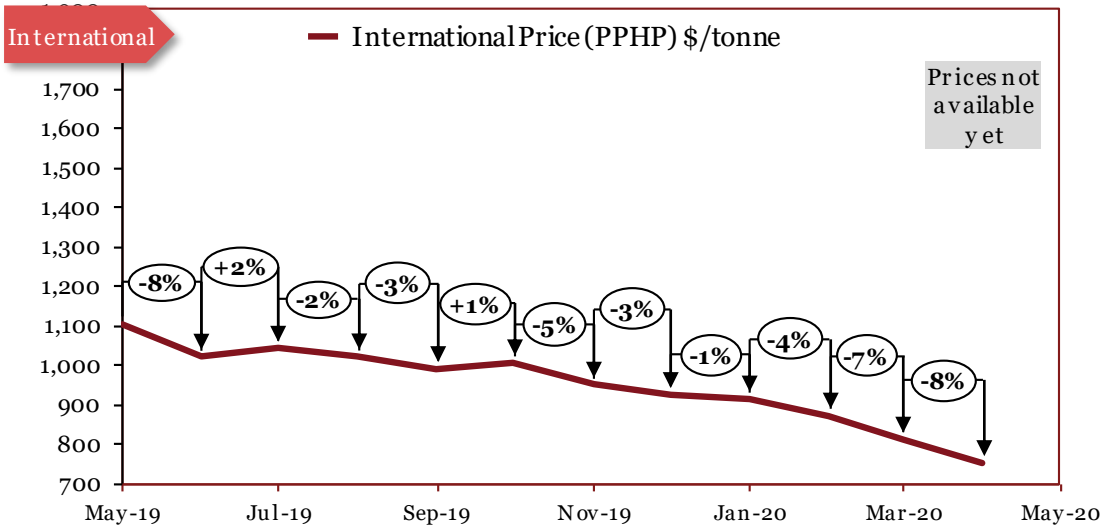
*The actual prices may vary depending on city, player, grade etc.

Outlook

In July, international prices increased slightly due to a rollover for ethylene contract prices in the futures market. Domestically also, prices remained stable due to unchanged demand-supply conditions in the market. 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 declined 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

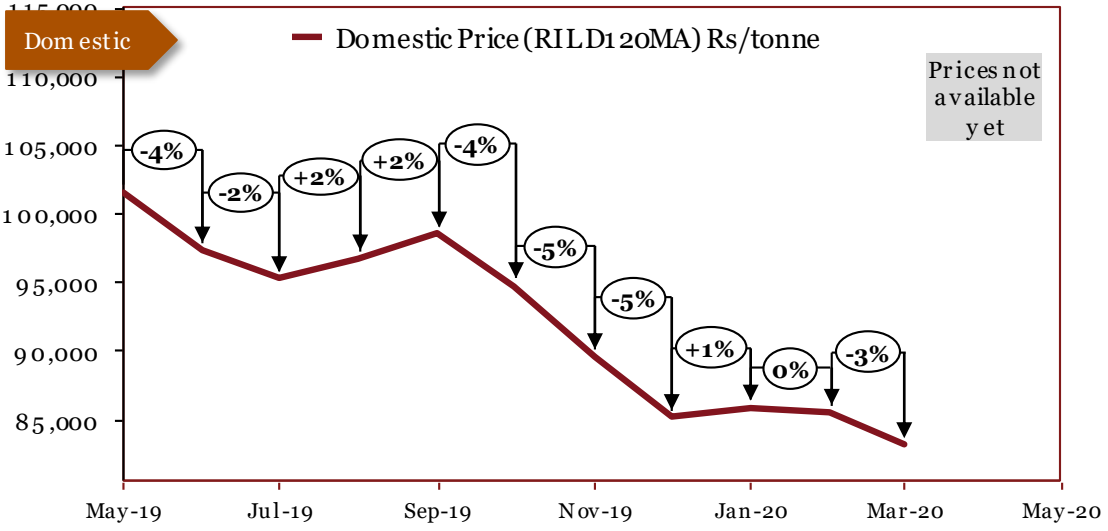
# Polypropylene (PP)

International




Source: Crisil

Domestic




Source: Reliance Industries Ltd.

**Monthly Average Prices**

| Period | *Int'l ($/tonne) | *Dom (Rs/tonne) |
|---|---|---|
| May-19 | 1,104 | 101,567 |
| Jun-19 | 1,020 | 97,334 |
| Jul-19 | 1,043 | 95,219 |
| Aug-19 | 1,021 | 96,735 |
| Sep-19 | 991 | 98,474 |
| Oct-19 | 1,005 | 94,729 |
| Nov-19 | 951 | 89533 |
| Dec-19 | 927 | 85116 |
| Jan-20 | 914 | 85862 |
| Feb-20 | 873 | 85482 |
| Mar-20 | 812 | 83120 |
| Apr-20 | 751 | |
| May-20 | | |

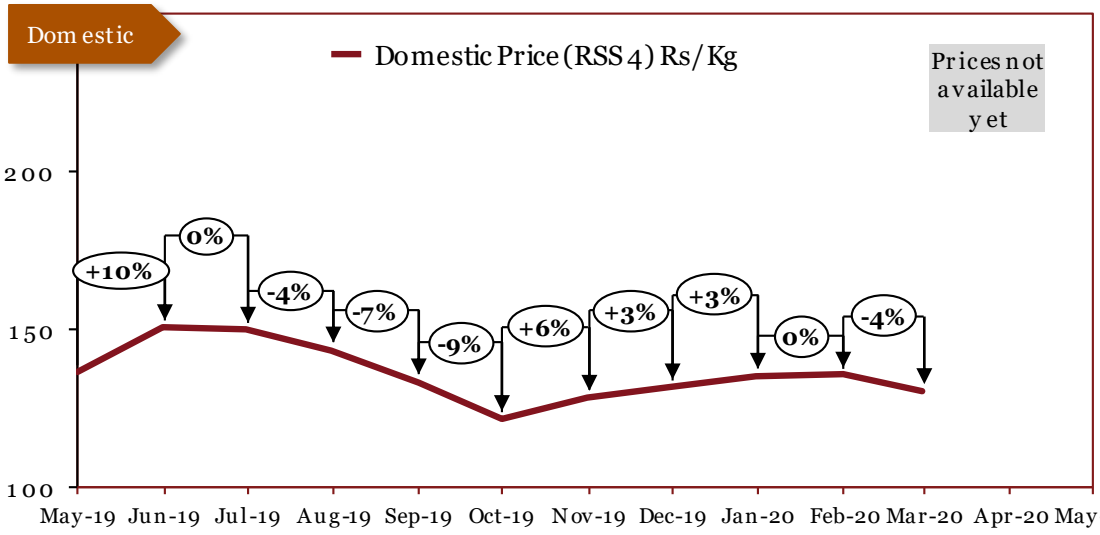
*The actual prices may vary depending on city, player, grade etc.*

Outlook

In July, international PP prices recovered slightly after the slump in June on the back of decreasing inventories as capacity was rectified in July. Domestically, prices decreased due to a continued slump in domestic demand. 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 ample 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.

# Rubber

Domestic




*Source: Rubber board*

| Monthly Average Prices | |
|---|---|
| **Period** | ***Dom (Rs/kg)** |
| **May-19** | 136 |
| **Jun-19** | 150 |
| **Jul-19** | 150 |
| **Aug-19** | 143 |
| **Sep-19** | 133 |
| **Oct-19** | 121 |
| **Nov-19** | 128 |
| **Dec-19** | 131 |
| **Jan-20** | 135 |
| **Feb-20** | 135 |
| **Mar-20** | 130 |
| **Apr-20** | |
| **May-20** | 116 |

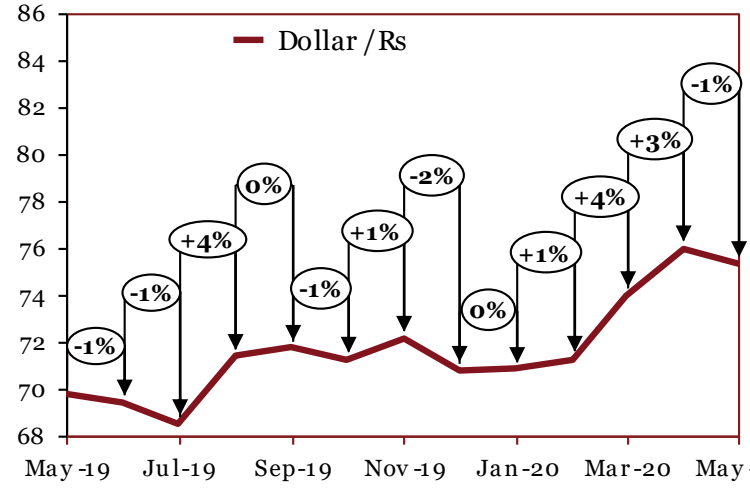
**The actual prices may vary depending on city, player, grade etc.*

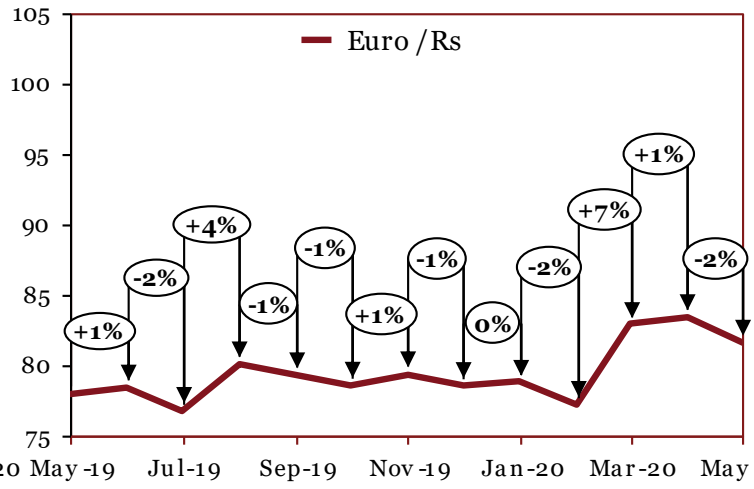
Outlook

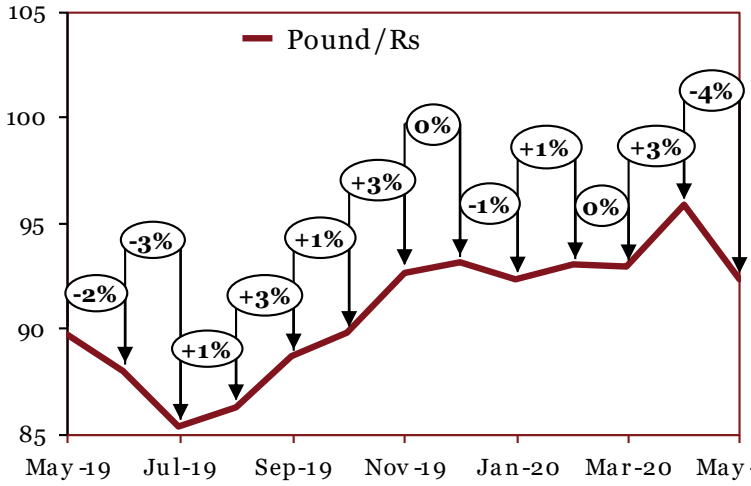
In March, price trend was reversed. In April, prices remained unchanged due to stable market conditions. In May, rubber prices continued to increase due to supply constraints amid speculation that farmers are holding back stocks in anticipation of higher prices. In June, rubber prices increased substantially 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.

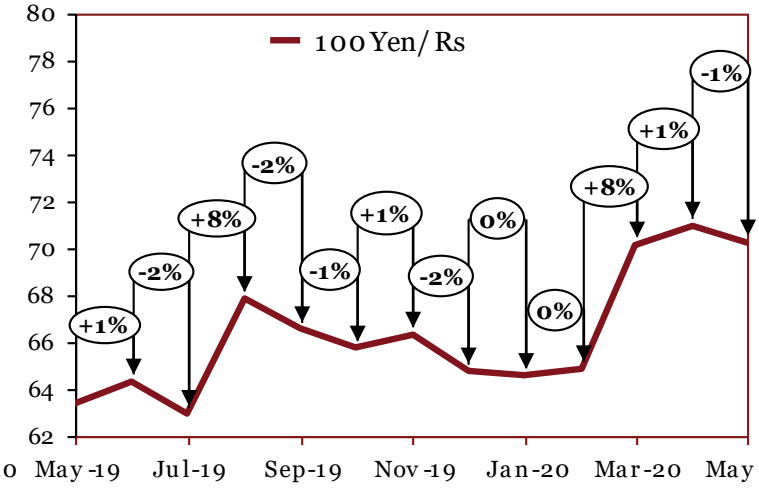
# Appendices

# Forex Movement



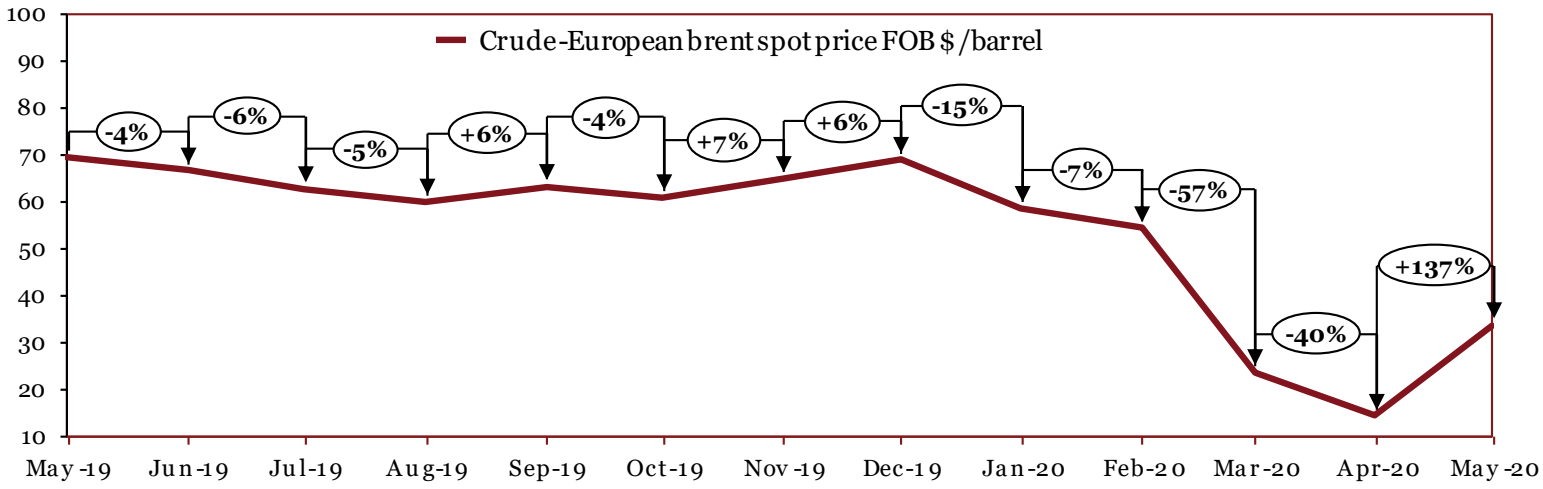




*Source: Reserve Bank of India*

**Monthly Average Prices (Rs)**

| | May-19 | Jun-19 | Jul-19 | Aug-19 | Sep-19 | Oct-19 | Nov-19 | Dec-19 | Jan-20 | Feb-20 | Mar-20 | Apr-20 | May-20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $ | 70 | 69 | 69 | 71 | 72 | 71 | 72 | 71 | 71 | 71 | 74 | 76 | 75 |
| £ | 78 | 78 | 77 | 80 | 79 | 79 | 79 | 93 | 92 | 93 | 93 | 96 | 92 |
| € | 78 | 78 | 77 | 80 | 79 | 79 | 79 | 79 | 79 | 77 | 83 | 83 | 82 |
| ¥ | 63 | 64 | 63 | 68 | 67 | 66 | 66 | 65 | 65 | 65 | 70 | 71 | 70 |

# Crude Oil




*Source: EIA*

**Monthly Average Prices ($/barrel)**

| | May-19 | Jun-19 | Jul-19 | Aug-19 | Sep-19 | Oct-19 | Nov-19 | Dec-19 | Jan-20 | Feb-20 | Mar-20 | Apr-20 | May-20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 69 | 67 | 63 | 60 | 63 | 61 | 65 | 69 | 59 | 54 | 24 | 14 | 34 |

# Commodity Specifications

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

# Commodity Specifications

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

# Commodity Specifications

| Commodity | International | Domestic |
|---|---|---|
| **Lead** | LME<br>- Lead of 99.97% purity (minimum) conforming to BS EN 12659:1999<br>- GB/T 469/2005 | MCX<br>- Lead ingots with minimum purity of 99.97% |
| **Nickel** | LME<br>- Nickel of 99.80% purity (minimum) conforming to B39-79 (2013)<br>- GB/T 6516-2010 | NCDEX, MCX (July'19 onwards)<br>- 4"*4" approved pure cut Nickel of 99.80% purity (minimum) |
| **Tin** | LME<br>- Tin of 99.85% purity (minimum) conforming to BS EN 610:1996 | Bloomberg<br>- Tin (min 99.85% ) $/tonne |
| **Magnesium** | Magnesium (China Shanghai Changjiang Spot Price) CNY/tonne<br>*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<br>- 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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