

www.pwc.com

Commodity price monitor

May -21

Prepared for ACMA

*Strictly private
and confidential*

June 2021



pwc

Contents

Commodity trend dashboard		4
Iron & Steel		7
1	Iron Ore	8
2	Pig Iron	9
3	Wire Rod	10
4	Steel Billets	11
5	Hot-Rolled (HR) Coils	12
6	Cold-Rolled (CR) Coils	13
7	Steel Scrap (Heavy Melting)	14
Ferro-alloys		15
9	Ferro chrome	16
10	Ferro silicon	17
11	EN8 Alloy Steel (Forging)	18
12	Stainless Steel	19
13	20MnCr5 Alloy Steel (Forging)	20
Base Metals		21
14	Aluminium	22

***To navigate this report
on-screen (in pdf format)***

From any page – click on the section title in the header navigation bar

From this Contents page – click on the title of the section or sub-section

From the contents listing on any section divider – click on the title of the sub-section

Contents

15	Copper	23
16	Zinc	24
17	Lead	25
18	Nickel	26
19	Tin	27
Precious Metals		28
20	Precious Metals	29
Polymers & Rubber		30
21	Low density polyethylene (LDPE)	31
22	Polypropylene (PP)	32
23	Acrylonitrile Butadiene Styrene (ABS)	33
24	High Impact Polystyrene (PS)	34
25	Rubber	35
Appendices		36
26	Forex Movement	37
27	Crude Oil	38
28	Commodity Specifications	39

***To navigate this report
on-screen (in pdf format)***

From any page – click on the section title in the header navigation bar

From this Contents page – click on the title of the section or sub-section

From the contents listing on any section divider – click on the title of the sub-section

Commodity trend dashboard

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

Calendar Year 20-21: Q vs. Q update

Commodity	Region	Q-o-Q Up	Q-o-Q Down
Iron & Steel			
Iron Ore	International	24% ▲	
	Domestic low grade		
	Domestic high grade		
Pig Iron	International	9% ▲	
	Domestic	9% ▲	
Stainless steel	Domestic		-7% ▼
	Domestic		-6% ▼
Wire rod	International	31% ▲	
	Domestic	9% ▲	
Steel Billets	International	9% ▲	
	Domestic	4% ▲	
Hot-rolled coils	International	28% ▲	
	Domestic	18% ▲	
Cold-rolled coils	International	29% ▲	
	Domestic	19% ▲	
Steel Scrap	Domestic	15% ▲	
EN8	Domestic	7% ▲	
20MnCr5	Domestic	7% ▲	
Ferro-alloys			
Ferro chrome	International		-3% ▼
	Domestic	3% ▲	
Ferro silicon	International	4% ▲	
	Domestic	11% ▲	

ND: Not disclosed by the source

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

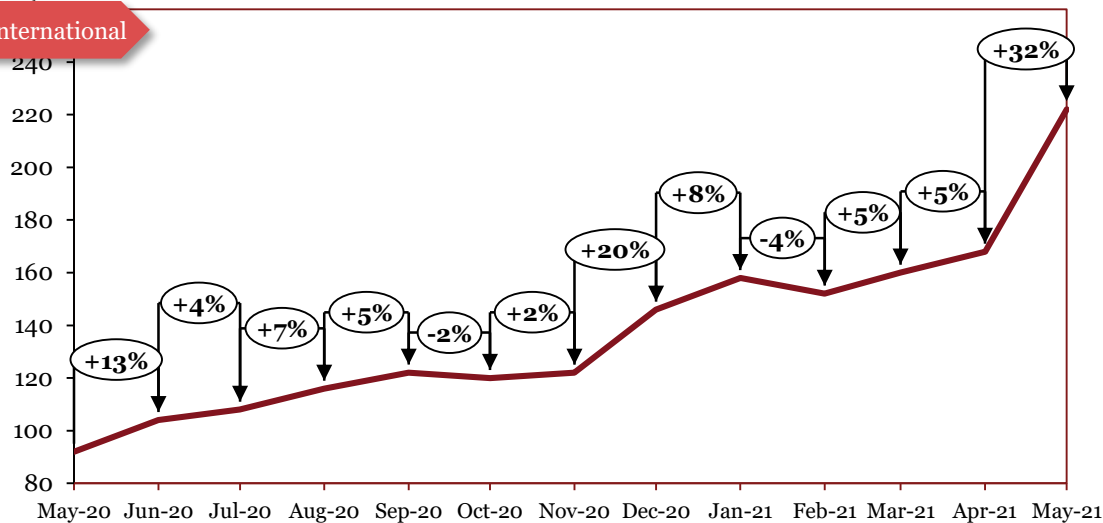
Calendar Year 20-21: Q vs. Q update

Commodity	Region	Q-o-Q Up	Q-o-Q Down
Base Metals			
Aluminum	International	13.7% ▲	
	Domestic	13% ▲	
Copper	International	15% ▲	
	Domestic	15% ▲	
Zinc	International		-3% ▼
	Domestic	6% ▲	
Lead	International	6% ▲	
	Domestic	4% ▲	
Nickel	International		-3% ▼
	Domestic		-1% ▼
Tin	International	20.3% ▲	
	Domestic	N/A	
Precious Metals			
Platinum	International	4% ▲	
Palladium	International	17% ▲	
Rhodium	International	20% ▲	
Polymers			
Low density polyethylene (LDPE)	International	6% ▲	
	Domestic	11% ▲	
Polypropylene (PP)	International	4% ▲	
	Domestic	9% ▲	
Acrylonitrile Butadiene Styrene (ABS)	International	16% ▲	
	Domestic	17% ▲	
Polystyrene (PS)	International	9% ▲	
	Domestic	14% ▲	
Rubber	Domestic	7% ▲	
Currency Exchange			
Dollar	International	2% ▲	
Pound	International	1% ▲	
Euro	International	2% ▲	
Yen	International		-2% ▼

Iron & Steel

Iron Ore

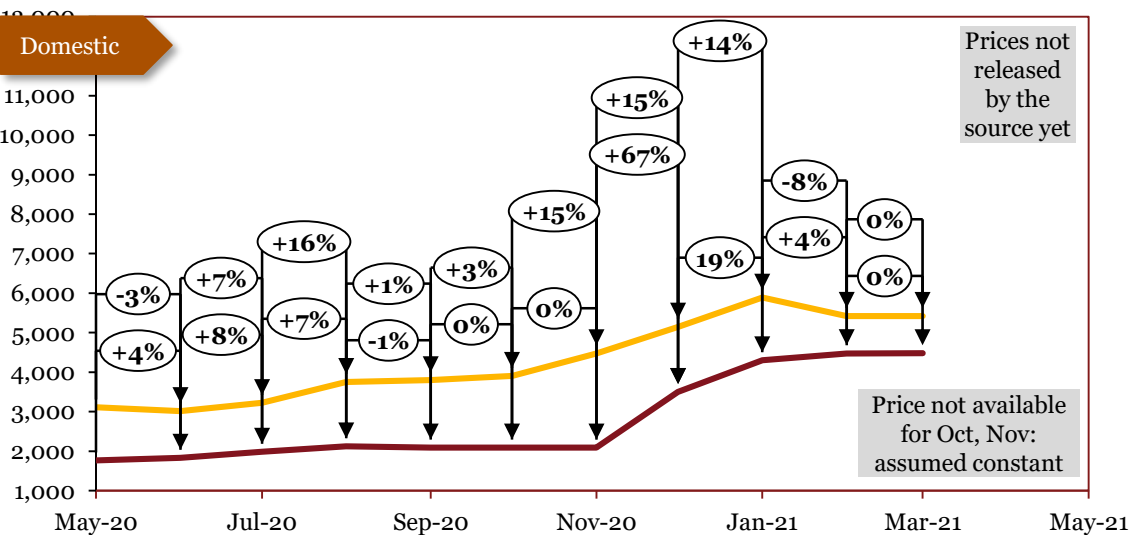
International



Source: Crisil

Period	*Int'l	*Dom	
	\$/tonne	Rs/tonne	
		65% & below	65% & above
May-20	92	1768	3111
Jun-20	104	1834	3014
Jul-20	108	1988	3223
Aug-20	116	2120	3750
Sep-20	122	2090	3797
Oct-20	120	2090	3901
Nov-20	122	2090	4473
Dec-20	146	3499	5148
Jan-21	158	4301	5888
Feb-21	152	4473	5418
Mar-21	160	4477	5419
Apr-21	168		
May-21	222		

Domestic



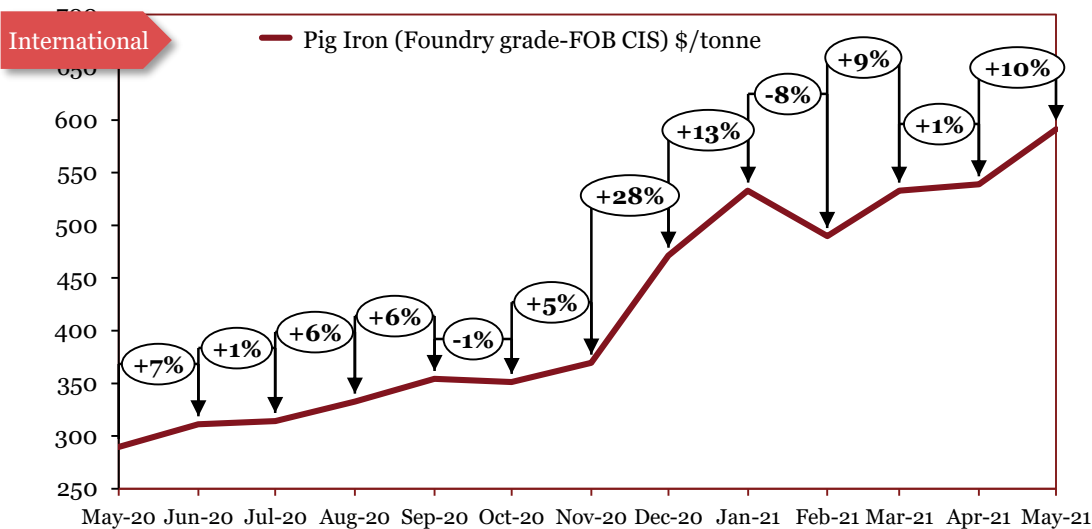
Source: Crisil

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

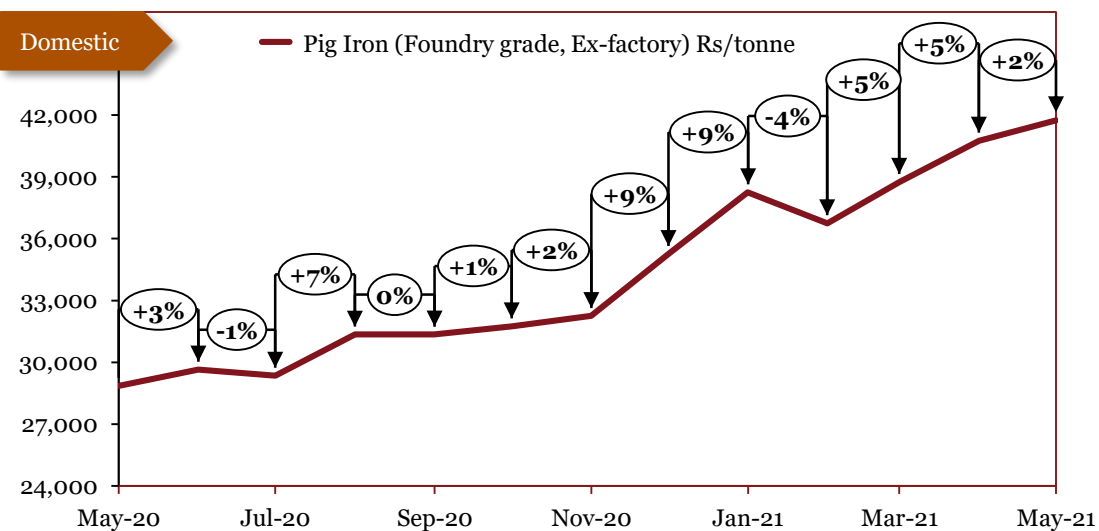
Outlook

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. In August, international prices rose as Chinese infrastructure spending was aided by a government stimulus, along with supply concerns from Brazil. In September, international prices continued their upturn on account of high demand from China. In October, international prices declined due to lower Chinese imports, along with greater supply from Brazil and South Africa. In November, international prices rose on account of a shortage of available supply in the market. In December, prices rose aggressively on the backs of trade disputes between China and Australia. In January, domestic prices continued to rise due to disruptions in supply. In February, international prices saw a dip due to reduced buying from China as part of low-carbon initiatives to reduce crude steel output. In March, international iron ore prices rose on the back of high demand from China fuelled by strong steel margins and high output. In April, international prices rose on demand amidst increased infrastructure projects post Covid-19 recovery. In May, international prices surged in line with flat steel prices and strong demand.

Pig Iron



Source: Crisil



Source: Crisil

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

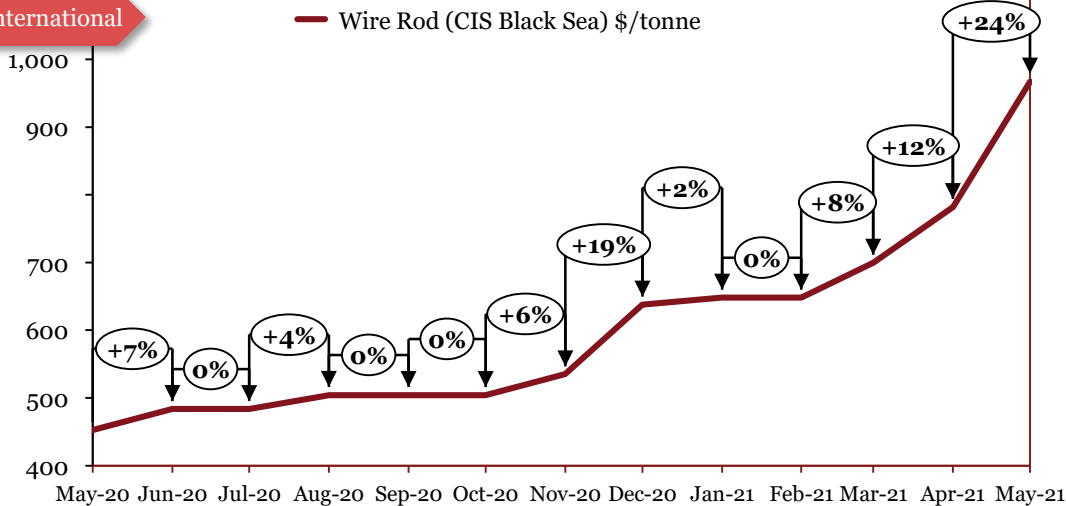
Monthly Average Prices		
Period	*Int'l	*Dom
	\$/tonne	Rs/tonne
May-20	290	28850
Jun-20	311	29650
Jul-20	314	29350
Aug-20	333	31350
Sep-20	354	31350
Oct-20	351	31750
Nov-20	370	32250
Dec-20	471	35250
Jan-21	533	38250
Feb-21	490	36750
Mar-21	533	38750
Apr-21	539	40750
May-21	591	41750

Outlook

In November, international as well as domestic prices rose on account of the trend for greater demand for steel. In November, international prices rose due to supply constraints and greater steel demand, while domestic prices rose steeply as part of the trend for higher raw material prices. In December, pig iron prices rose aggressively globally, following from a trend of higher prices for iron and steel commodities due to higher Chinese buying. Domestic prices rose in tandem. In January, international prices rose due to high Chinese consumption which led to shortage of imports, while domestic prices rose due to infrastructure projects gaining momentum post lockdown. In February international prices fell along with Iron Ore prices, while domestic prices slumped on lower demand. In March, international prices surged on increased buying from Brazil and good demand. Domestic prices rose due to healthy demand coupled with strong flat steel prices. In April, international prices rose in conjunction with steel prices. Domestic prices rose on demand from both castings and steel segment coupled with strong flat steel prices. In May, international prices rose on strong demand and limited supply from China. Domestic prices rose in line with flat steel prices, even as demand remains weak owing to the second wave of Covid-19.

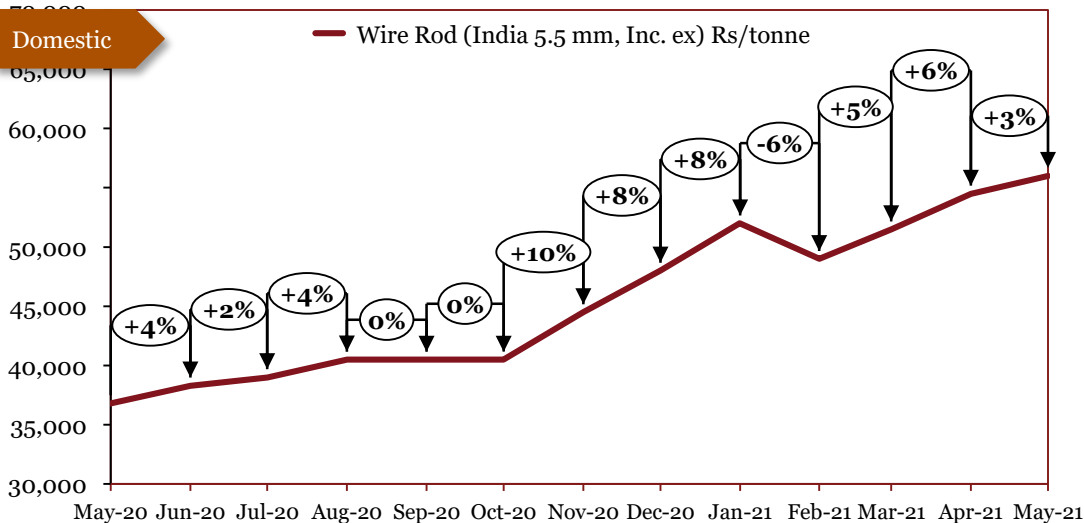
Wire Rod

International



Source: Crisil

Domestic



Source: Crisil

Monthly Average Prices		
Period	^*Int'l (\$/tonne)	*Dom (Rs/tonne)
May-20	453	36794
Jun-20	484	38294
Jul-20	484	38994
Aug-20	504	40494
Sep-20	504	40494
Oct-20	504	40494
Nov-20	535	44494
Dec-20	638	47994
Jan-21	648	51994
Feb-21	648	48994
Mar-21	700	51494
Apr-21	782	54494
May-21	967	55994

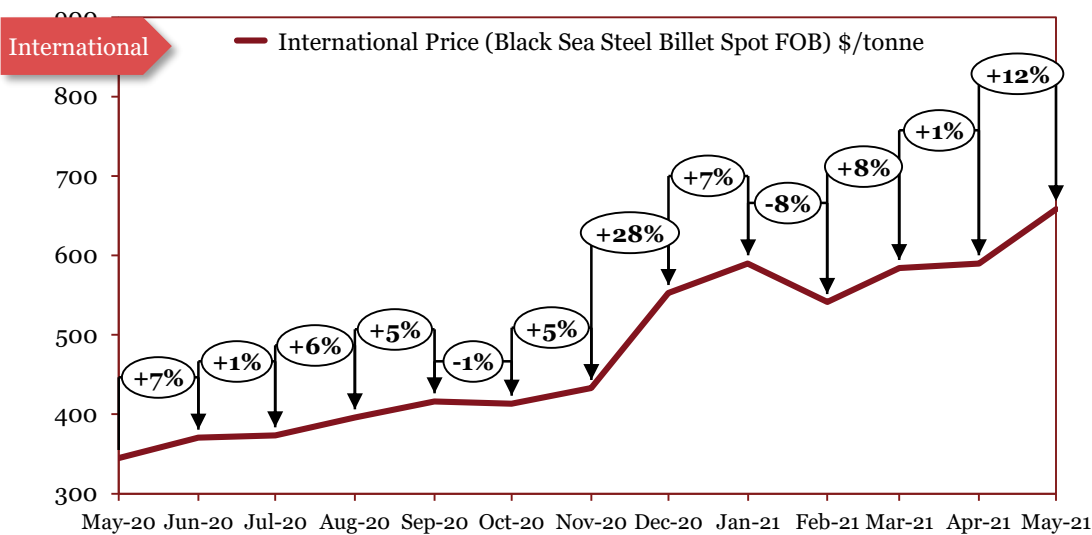
*The actual prices may vary depending on city, player, grade etc.

Outlook

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. In August, international as well as domestic prices rose on the backs of growing demand, shortage of inventory. In September, international and domestic prices remained stable. In October, international and domestic prices remained stable. In November, international as well as domestic prices rose due to the higher cost of iron ore. In December, a boom in Chinese construction drove higher international and domestic prices. In January, international prices rose on tight supply and price rise for scrap. Domestically, prices rose reflecting soaring steelmaking cost. In February, international prices remained stable on good demand, while domestic prices slumped with reduced steel prices. In March, international and domestic prices rose in conjunction with steel prices. In April, international as well as domestic prices rose on the back of increased demand from China. In May, global prices surged on short supply in Europe and Asia. Domestic prices followed suit.

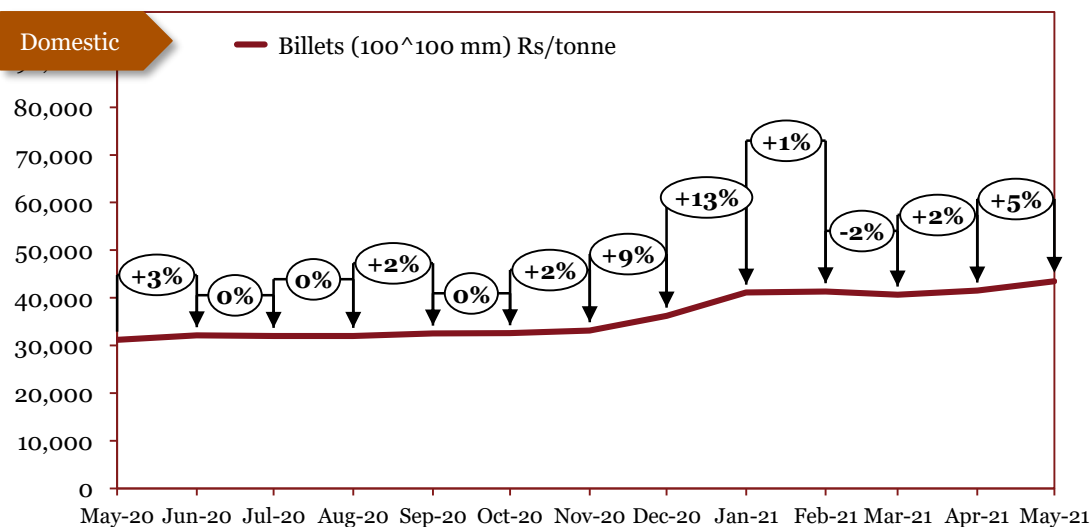
^Prices have been retrospectively revised by the source due to change in base year

Steel Billets



Source: Crisil

Monthly Average Prices		
Period	^*Int'l	*Dom
	(\$/tonne)	(Rs/tonne)
May-20	345	31200
Jun-20	371	32100
Jul-20	373	32000
Aug-20	396	31950
Sep-20	416	32500
Oct-20	413	32567
Nov-20	433	33150
Dec-20	553	36233
Jan-21	590	41100
Feb-21	542	41350
Mar-21	584	40667
Apr-21	590	41500
May-21	658	43500



Source: Crisil

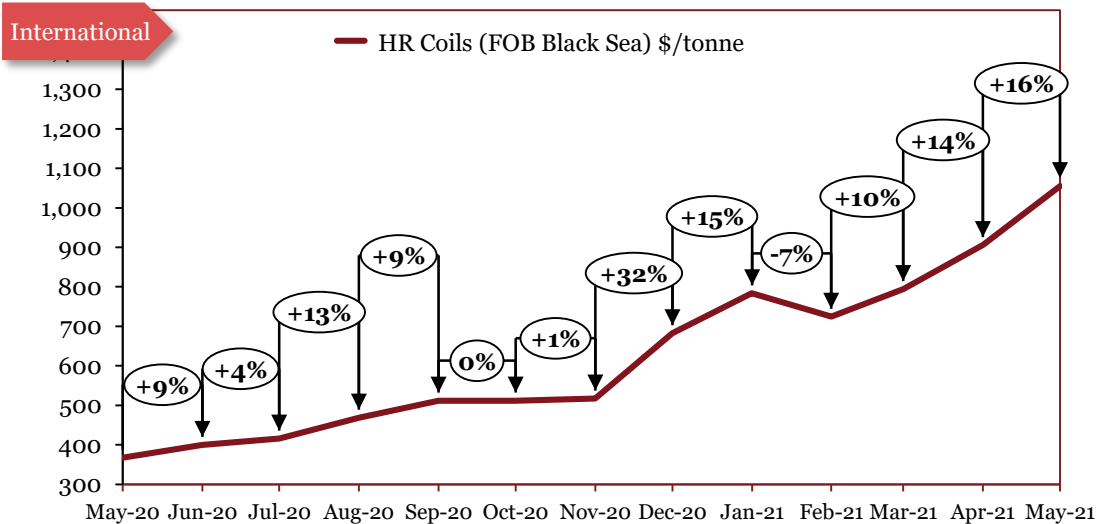
*The actual prices may vary depending on city, player, grade etc.

Outlook

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. In August, international billet prices rose on greater demand and a shortage of scrap. In September, international prices rose, while domestic prices rose on account of higher DRI rates. In October, international prices declined while domestic prices remained stable. In November, international prices rose on higher ore prices, as well as reduced supply. Domestic prices followed suit. In December, international as well as domestic prices rose due to the higher price of scrap. In January, international prices along with domestic prices rose due to increased demand of steel in China and an upward trend in prices of steel products. In February, international prices saw a dip due to lack of trade and falling steel prices, while domestic prices remained stable. In March, international prices surged on the back of high Chinese buying. Domestic prices dipped on account of weaker demand for finished products. In April, international as well as domestic prices rose in conjunction with scrap prices. In May, international and domestic prices increased due to reduced availability.

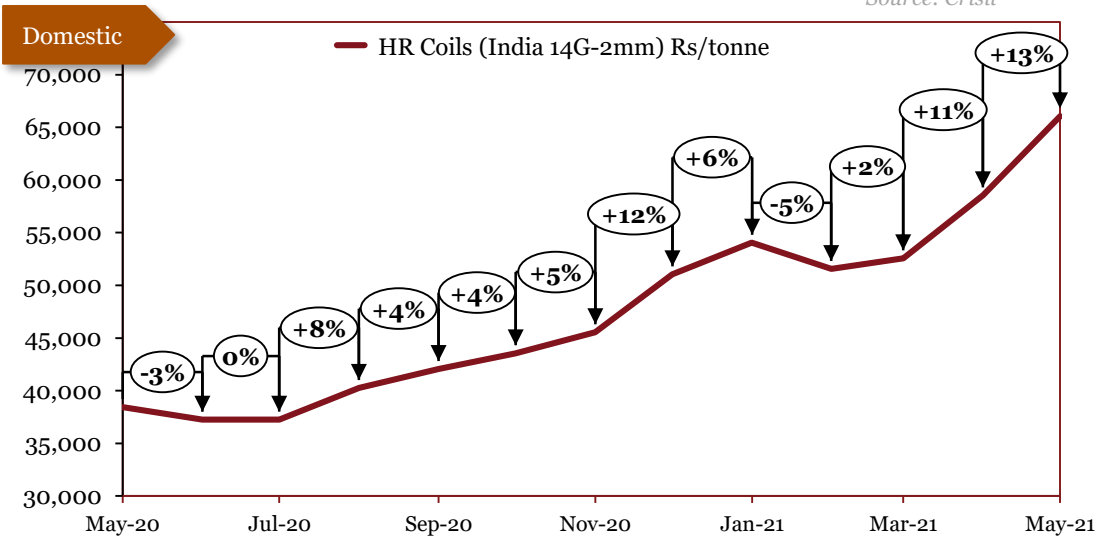
^International prices changed due to change in the grade

Hot-Rolled (HR) Coils



Monthly Average Prices		
Period	*Int'l (\$/tonne)	^*Dom (Rs/tonne)
May-20	368	38450
Jun-20	400	37250
Jul-20	416	37250
Aug-20	469	40250
Sep-20	512	42050
Oct-20	512	43550
Nov-20	517	45550
Dec-20	682	51050
Jan-21	784	54050
Feb-21	725	51550
Mar-21	794	52550
Apr-21	906	58550
May-21	1055	66050

Source: Crisil



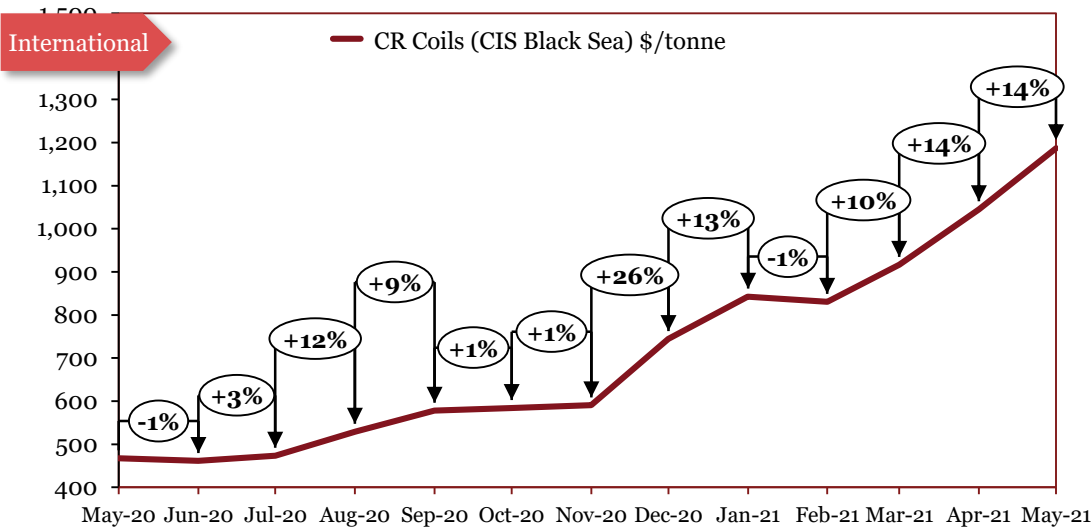
Source: Crisil

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

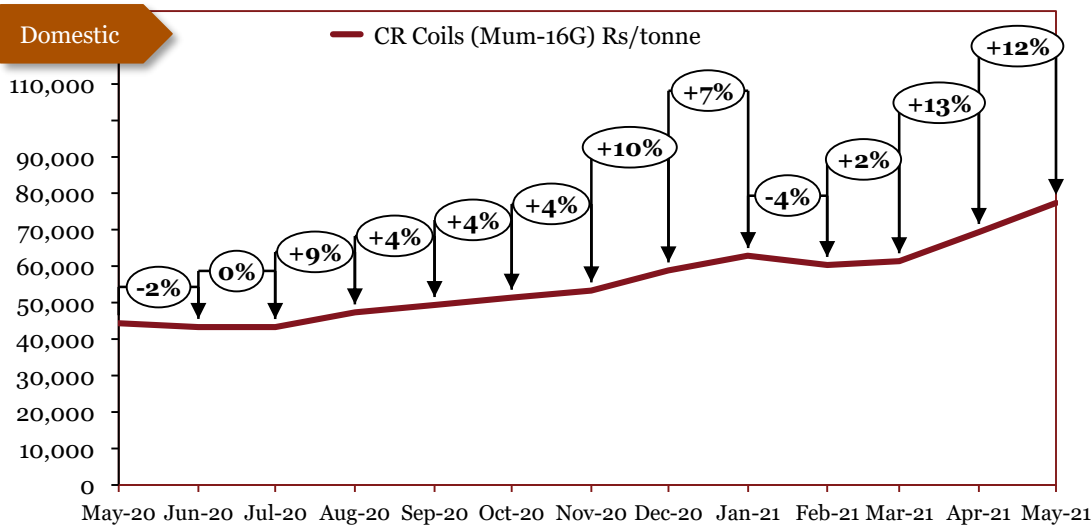
Outlook

In October, international prices remained stable due to the new lockdowns in Europe, while domestic prices rose on higher demand from industry before the festive season. In November, prices of HR coils rose internationally on the backs of reduced supply, while domestic growth was enabled by improvement in construction, higher ore prices and reduced availability. In December, international prices alongside domestic prices rose on the back of higher cost for steel raw materials. In January, international prices continued to rise on robust demand. Domestic prices surged amid constrained supply and increased demand from construction, automotive and white goods sectors. In February, international prices slumped due to decreased demand. Domestic prices dipped due to traders' sufficient inventories as well as moderation in demand from auto and pipe makers. In March, international prices rose on strong demand in China post resumption of activities after New Year holidays. Domestic prices followed suit. In April, international and domestic prices surged on the back of increased demand from China. In May, international prices rose on the back of increased crude steel output from China coupled with increasing iron ore prices. Domestic prices followed suit.

Cold-Rolled (CR) Coils



Source: Crisil



Source: Crisil.

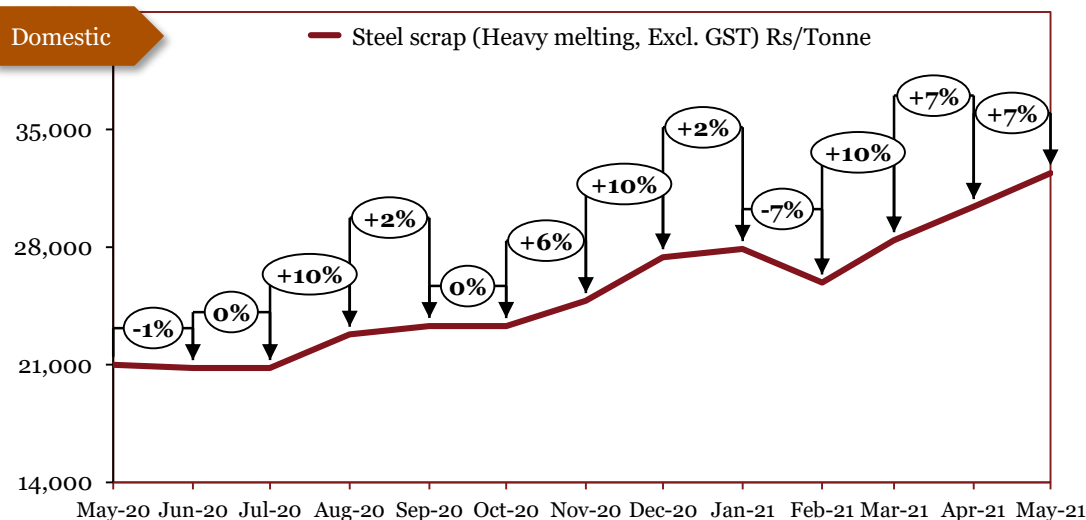
Monthly Average Prices		
Period	*Int'l (\$/tonne)	^*Dom (Rs/tonne)
May-20	467	44350
Jun-20	461	43350
Jul-20	474	43350
Aug-20	529	47350
Sep-20	578	49350
Oct-20	584	51350
Nov-20	590	53350
Dec-20	744	58850
Jan-21	843	62850
Feb-21	830	60350
Mar-21	916	61350
Apr-21	1046	69350
May-21	1187	77350

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

Outlook

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. In August, prices rose in tandem with HR coil prices. In September, international and domestic prices rose in line with HR Coil prices. In October, international prices rose on continued strong Chinese demand, while domestic prices rose in accordance with HR Coil prices. In November, international and domestic prices rose in tandem with HR coil prices. In December, international and domestic prices rose in tandem with HR Coil prices. In January, domestic as well as international prices rose in line with HR Coils, reflecting strong demand. In February, both international and domestic prices dipped in conjunction with hot-rolled coil prices. In March, international and domestic prices rose in accordance with HR Coil prices. In April, international and domestic prices increased concurrently with HR Coils. In May, prices rose mirroring HR coil prices.

Steel Scrap (Heavy Melting)



Source: CRISIL

Monthly Average Prices	
Period	*Dom (Rs/Tonne)
May-20	21000
Jun-20	20800
Jul-20	20800
Aug-20	22800
Sep-20	23300
Oct-20	23300
Nov-20	24800
Dec-20	27400
Jan-21	27900
Feb-21	25900
Mar-21	28400
Apr-21	30400
May-21	32400

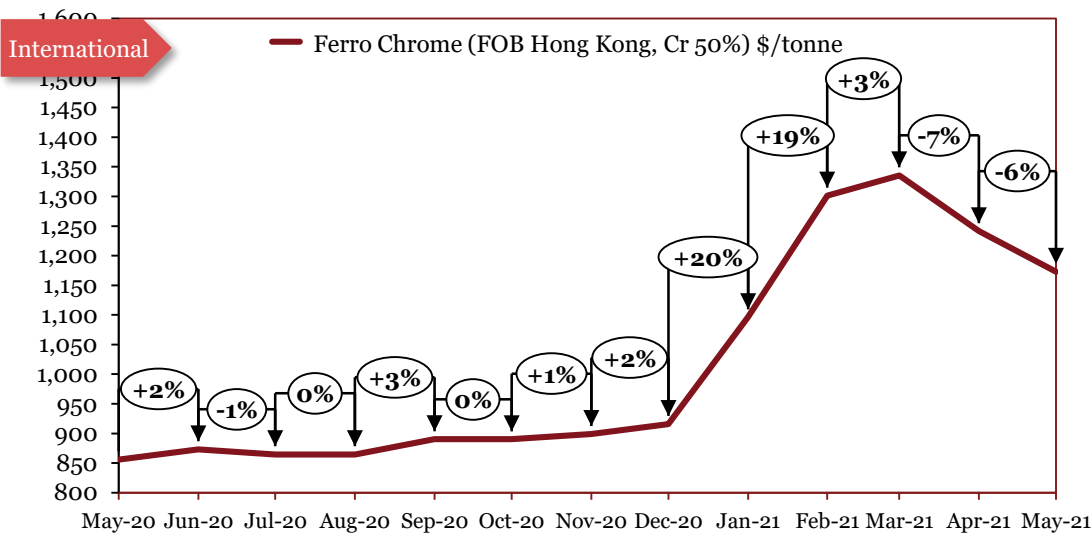
*The actual prices may vary depending on city, player, grade etc.

Outlook

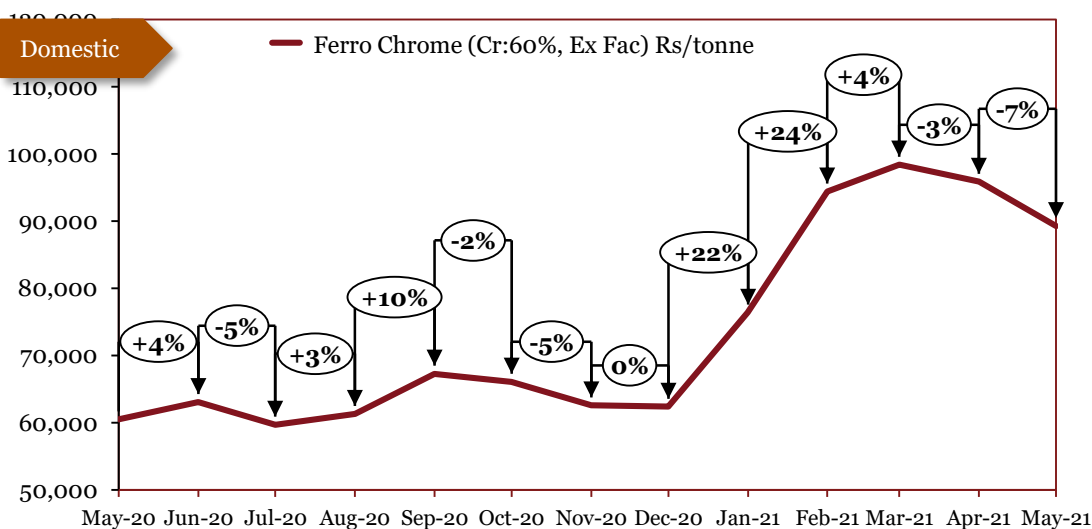
In February, prices corrected as sentiments were weakened by the spread of the coronavirus. In March, prices declined as the national lockdown shut all factory production across the country. In April, domestic prices remained constant. In May, domestic prices declined as traders reduced orders due to logistical concerns during the lockdown. In June, domestic prices declined on the back of continued weak demand and oversupply in the market, while in July, prices remained constant. In August, domestic prices rose as Indian manufacturers had to contend with global price rise. In September, prices continued to rise on the backs of strong Chinese demand. In October, prices remained stable. In November prices rose on account of higher demand for steel. In December, scrap prices rose internationally and domestically on limited supply and greater demand from developing economies. In January, scrap prices saw a slight increase, reflecting strong demand and lack of abundant supply. In February, prices fell due to plummeting steel prices coupled with weakened demand. In March, prices rose in conjunction with steel prices. In April, domestic scrap prices increased, owing to rise in global steel prices. In May, domestic prices increased in line with global and domestic steel prices.

Ferro-alloys

Ferro chrome



Source: Crisil



Source: Crisil

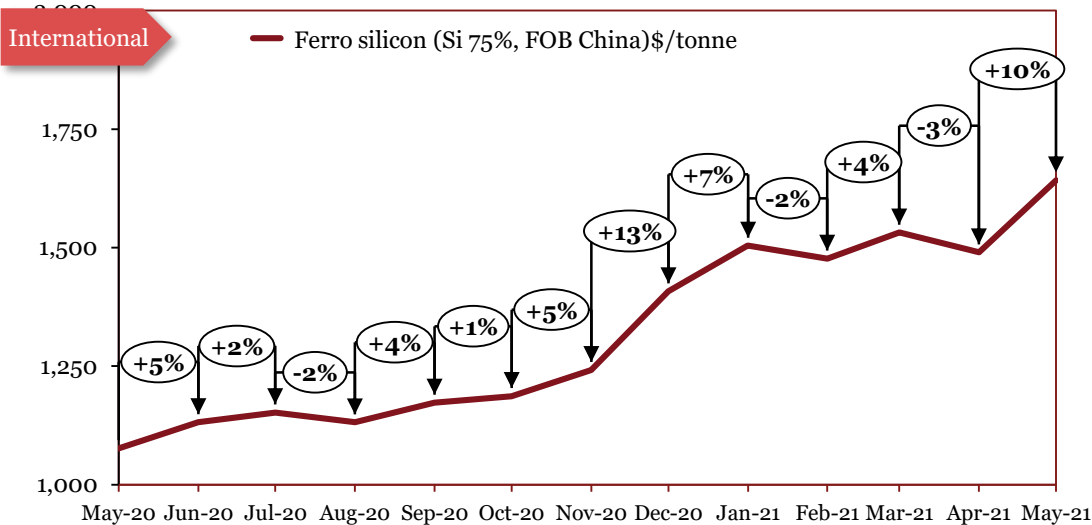
Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/tonne)
May-20	856	60500
Jun-20	873	63100
Jul-20	865	59700
Aug-20	865	61300
Sep-20	890	67300
Oct-20	890	66100
Nov-20	899	62600
Dec-20	916	62400
Jan-21	1096	76400
Feb-21	1301	94400
Mar-21	1335	98400
Apr-21	1241	95876
May-21	1173	89297

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

Outlook

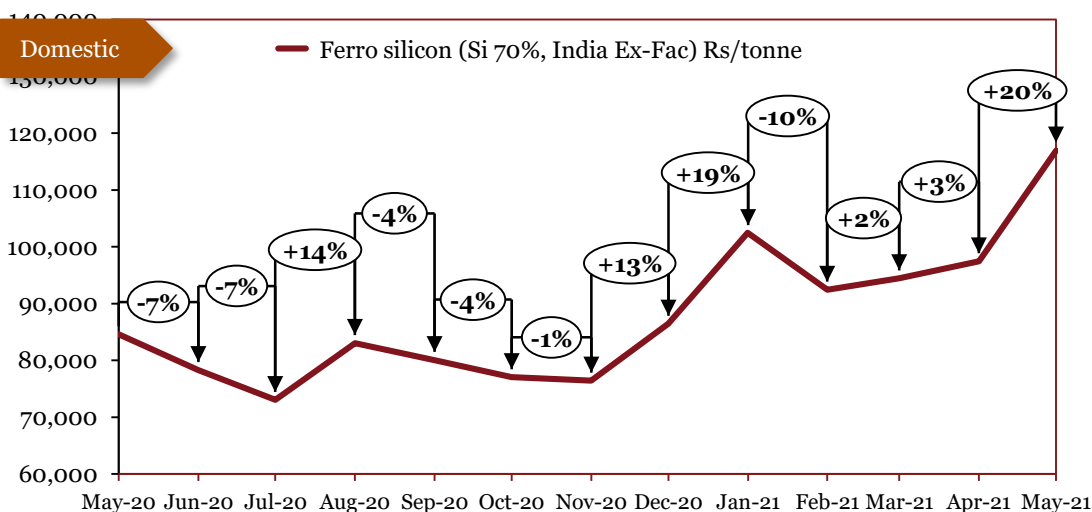
In September, international and domestic prices rose substantially due to a chrome ore shortage in India, which depressed volumes but helped raise prices. In October, international prices remained stable, while domestic prices fell due to weaker export and excess inventory. In November, international prices remained stable on strong demand, while domestic prices continued to correct, as producers held excess supply in expectation of higher demand. In December, international prices rose on tighter spot supplies and higher input costs while domestic prices remained stable. In January, international and domestic rose on the back of South Africa's increased export duty coupled with reduced raw material supply and anticipation of pick up in demand. In February, international prices rose on reduced production from China due to high-carbon emission restrictions which led to shortfall in supply. Domestic prices rose on the back of limited supply and increased chrome ore prices. In March, International as well as domestic prices continued to rise due to increased buying activity from China. In April, global and domestic ferro chrome prices declined with normalcy in supply situation in China, hence moderation in exports demand. In May, international and domestic prices declined with increased supply in China, hence a moderation in exports demand.

Ferro silicon



Source: Crisil

Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/tonne)
May-20	1076	84600
Jun-20	1132	78300
Jul-20	1152	73050
Aug-20	1132	83050
Sep-20	1173	80050
Oct-20	1187	77050
Nov-20	1242	76450
Dec-20	1408	86450
Jan-21	1504	102450
Feb-21	1477	92450
Mar-21	1532	94450
Apr-21	1490	97450
May-21	1642	116950



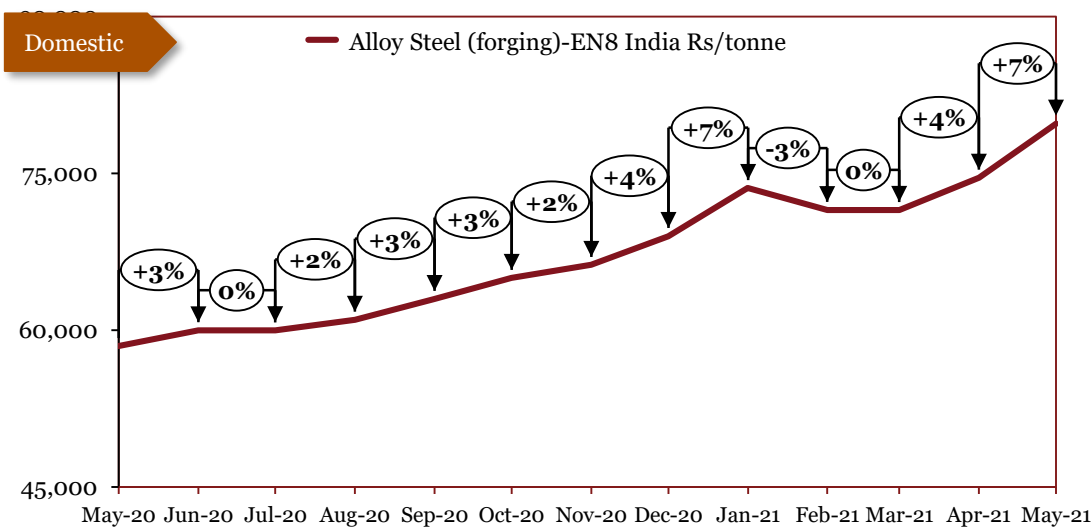
Source: Crisil

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

Outlook

In September, international prices rose due to supply concerns in China's Inner Mongolia region. Domestically, prices dipped after a heavy jump in August. In October, international prices rose globally on tight supply, whilst declining domestically on weakened demand. In November, international prices rose on stronger demand, while domestic prices fell on excess supply in the market. In December and January, international prices rose on the back of Chinese mills restocking ahead of the festive season. Domestic prices surged on increased demand, high cost of raw materials as well as increase in no. of megaprojects. In February, international price and domestic prices plummeted due to lack of trade and producers looking to liquidate stocks. In March, international prices increased with demand, while domestic prices rose on supply constraints in Meghalaya due to daily power-outages. In April, international prices declined with moderation in demand and increased supply. Domestic prices increased marginally due to continued supply constraints in Meghalaya as the producers are over-booked with existing orders amidst power disruptions. In May, international prices rose on tight supply and increased Chinese prices. Domestic prices increased due to supply constraints in Guwahati and Meghalaya.

EN8 Alloy Steel (Forging)



Source: PwC Research

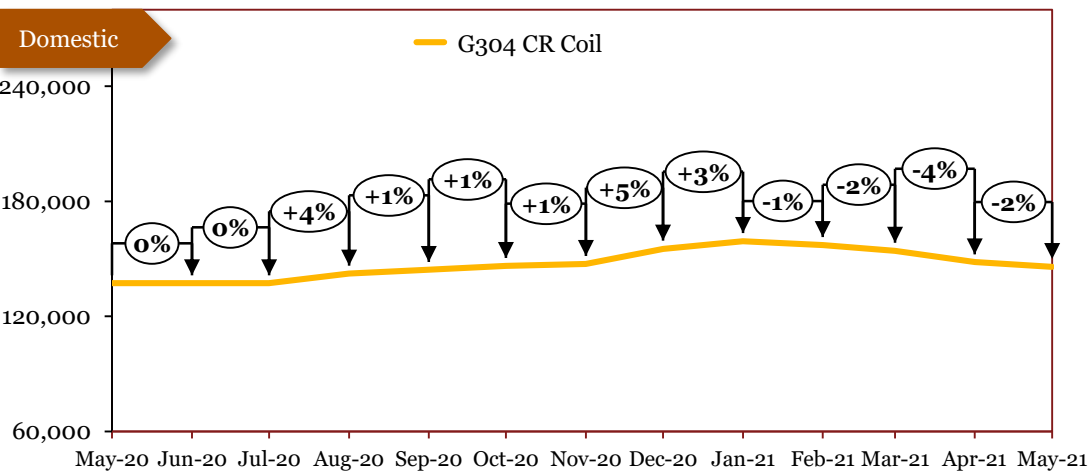
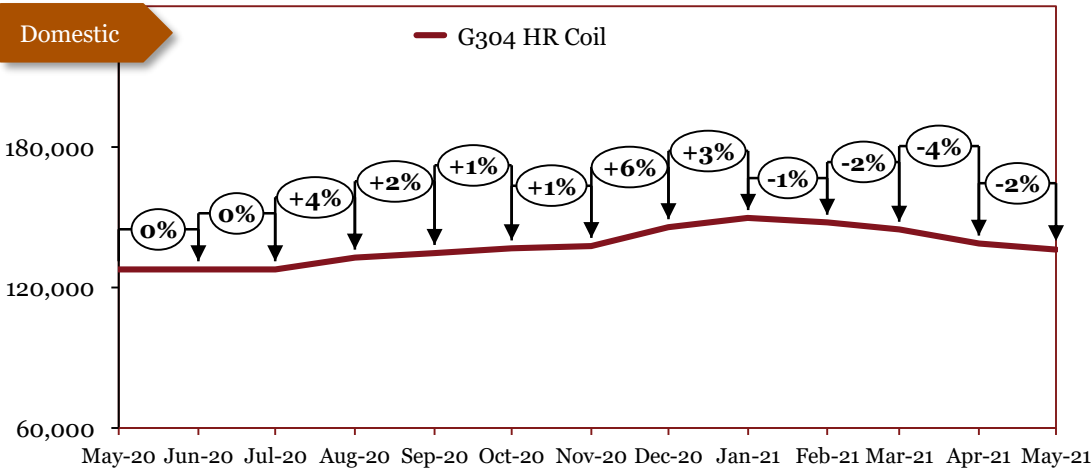
Monthly Average Prices	
Period	*Dom (Rs/tonne)
May-20	58500
Jun-20	60000
Jul-20	60000
Aug-20	61000
Sep-20	63000
Oct-20	65000
Nov-20	66250
Dec-20	69000
Jan-21	73600
Feb-21	71500
Mar-21	71500
Apr-21	74600
May-21	79750

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

Outlook

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 August, prices rose domestically as part of the trend to higher steel prices. In September, prices rose further as steel prices rose on a tight supply. In October, prices continued to rise due to increased steel demand from industry. In November, prices continued to rise, on account of higher steel demand. In December, prices rose on stronger demand and a global trend of higher steel prices. In January, the trend of rise in prices continued domestically on shortage of demand of demand and increased supply. In February, domestic prices fell in conjunction with steel prices. In March, domestic prices remained stable. In April, domestic prices increased in conjunction with international steel prices. In May, domestic prices rose amidst tight supply.

Stainless Steel



Monthly Domestic Average Prices		
Period	*G304 HR (Rs/tonne)	*G304 CR (Rs/tonne)
May-20	127700	137250
Jun-20	127700	137250
Jul-20	127700	137250
Aug-20	132700	142250
Sep-20	134700	144250
Oct-20	136700	146250
Nov-20	137700	147250
Dec-20	145700	155250
Jan-21	149700	159250
Feb-21	147700	157250
Mar-21	144700	154250
Apr-21	138700	148250
May-21	136200	145750

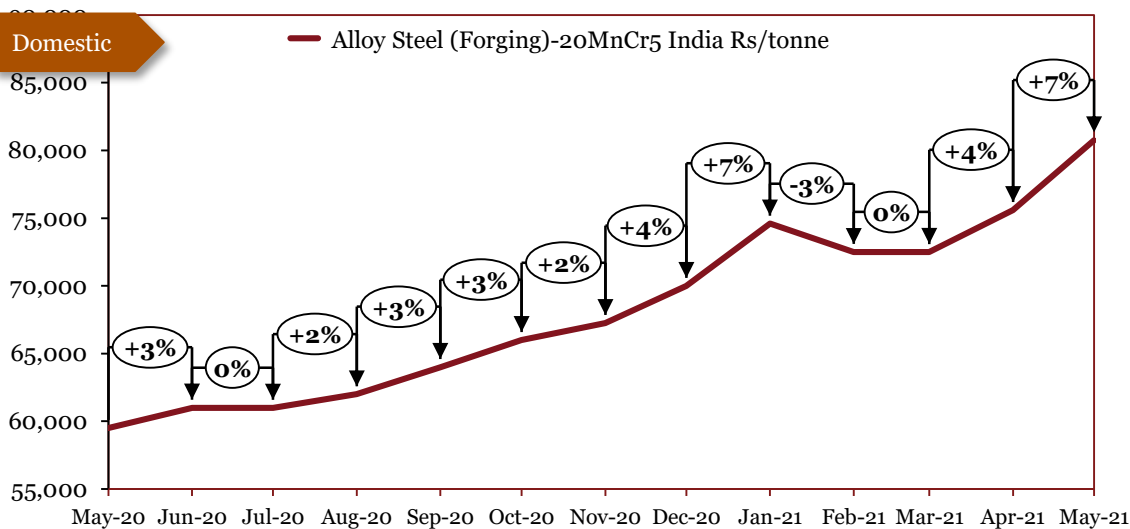
*The actual prices may vary depending on city, player, grade etc.

Source: PwC Research

Outlook

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. In June and July, prices remained stable and unchanged. In August, international and domestic prices rose due to higher demand, partly in China, and lower scrap availability. In September, HR Coil prices rose on the back of continued momentum in steel prices. In October, domestic prices rose on account of higher industrial demand. In November, domestic prices rose on increased demand for steel as a result of new government stimulus announcements. In December, prices rose due to higher raw material prices. In January, prices rose as steel producers and dealers increased prices to preserve their margins due to pick-up in demand across construction, automotive and the white goods sector. In February, domestic prices saw a negligible dip on the back of weakened supply. In March, domestic prices fell marginally on improved stainless-steel supply in the market. In April, domestic prices fell on the back of improved supply. In May, prices fell owing to weaker demand amidst the second wave of Covid-19.

20MnCr5 Alloy Steel (Forging)



Source: PwC Research

Monthly Average Prices

Period	*Dom (Rs/tonne)
May-20	59500
Jun-20	61000
Jul-20	61000
Aug-20	62000
Sep-20	64000
Oct-20	66000
Nov-20	67250
Dec-20	70000
Jan-21	74600
Feb-21	72500
Mar-21	72500
Apr-21	75600
May-21	80750

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

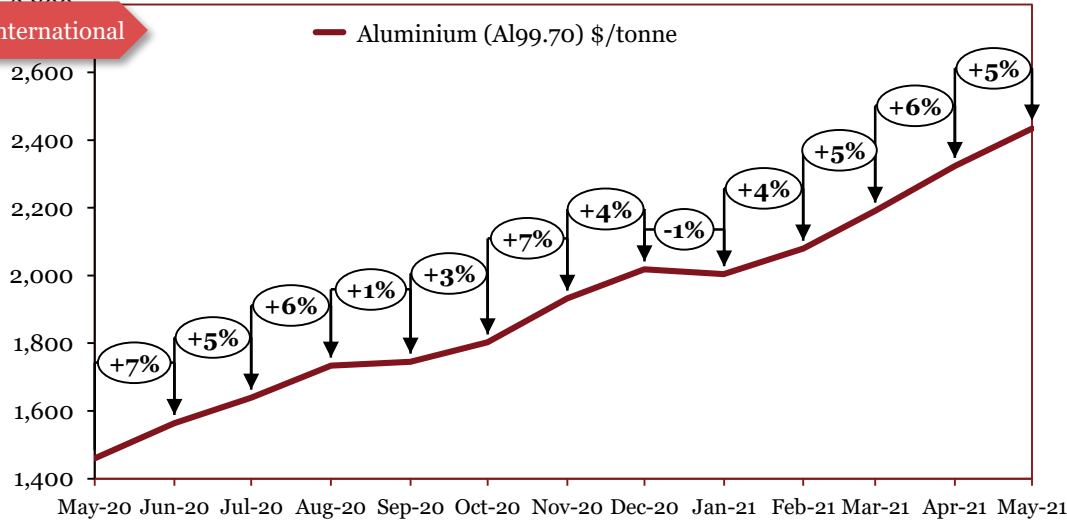
Outlook

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. In June, prices rose on account of the gradual unlocking of the economy. In July, prices remained stable. In August, prices rose on stronger demand. In September, prices rose as steel prices continued to trend upwards. In October, price movement continued upwards as industrial demand from segments such as automotive continued to rise. In November, prices rose, following the trend of rising steel prices. In December, prices rose on increased demand and tight supply. In January, surging steel prices globally along with short supply were key drivers to price rise. In February, prices dipped in conjunction with global and domestic steel prices amidst weaker demand. In March, domestic prices remained stable. In April, domestic prices rose in tandem with global steel prices on the back of reduced exports from China. In May, prices rose in line with flat steel prices coupled with increased consumption from China.

Base Metals

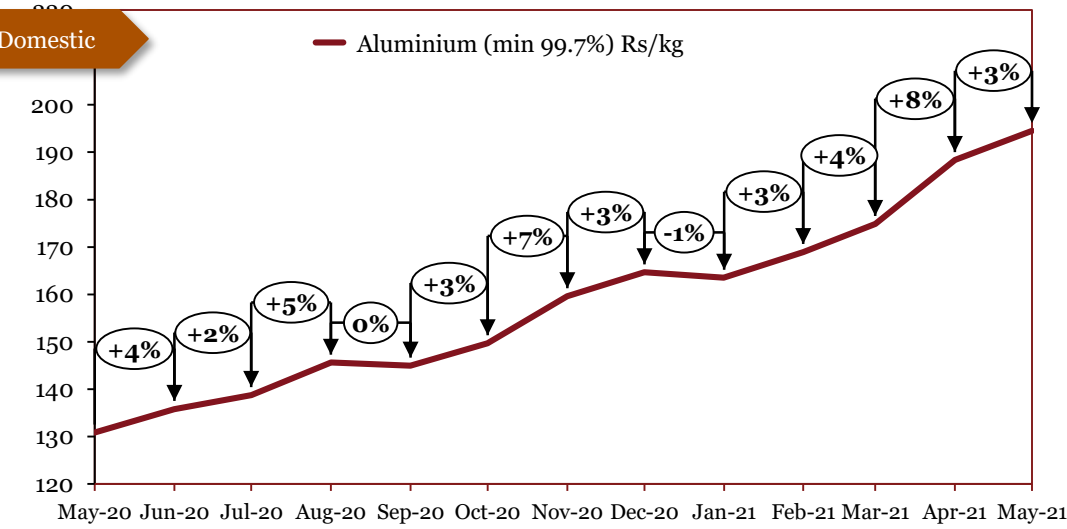
Aluminium

International



Source: LME

Domestic



Source: MCX*

*Source updated in July 2019

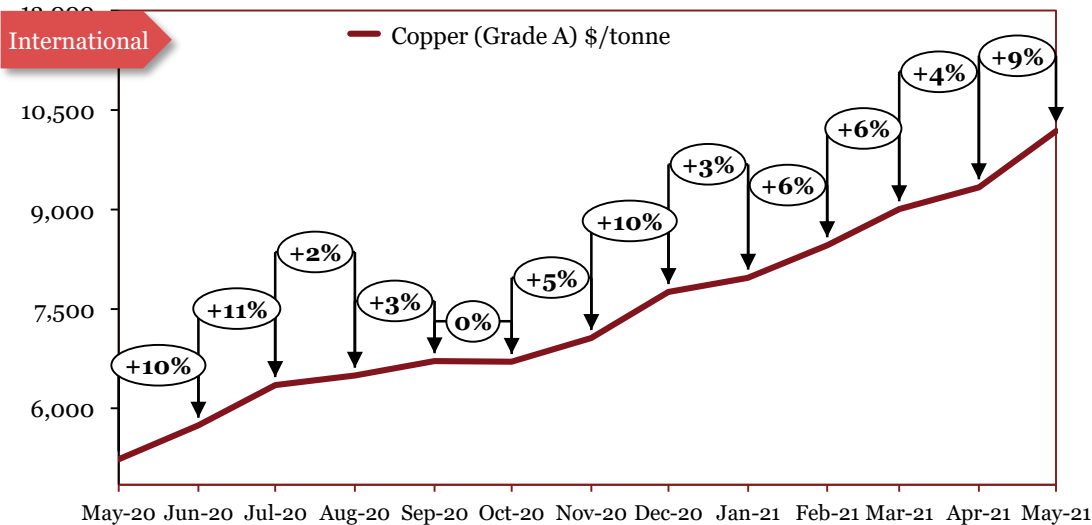
Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/kg)
May-20	1460	131
Jun-20	1564	136
Jul-20	1639	139
Aug-20	1734	146
Sep-20	1745	145
Oct-20	1803	150
Nov-20	1932	160
Dec-20	2018	165
Jan-21	2004	164
Feb-21	2080	169
Mar-21	2192	175
Apr-21	2324	188
May-21	2434	194

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

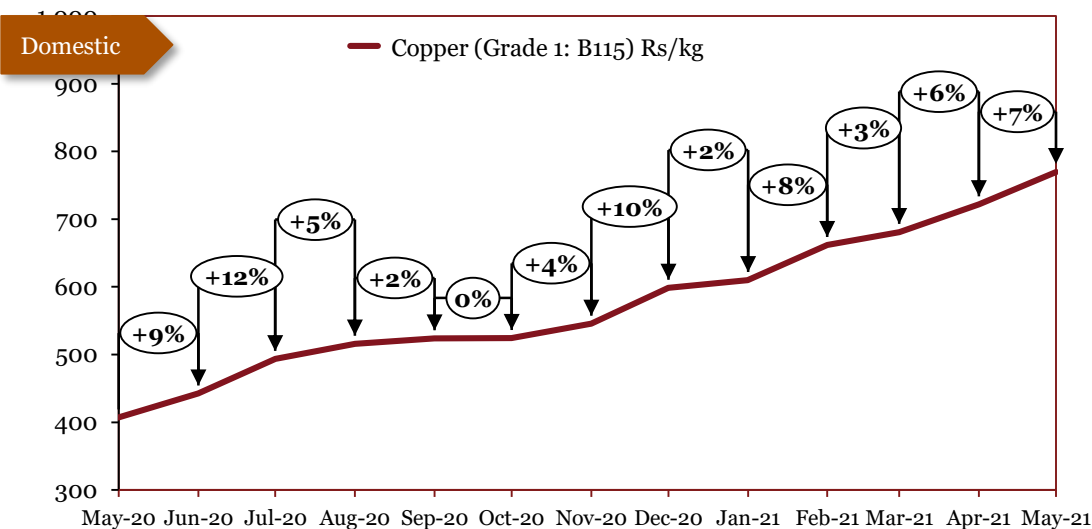
Outlook

In October, international prices rose due to a surge in Chinese demand, while domestic prices rose on account of higher demand from domestic manufacturers following economic reopening. In November, international prices rose on account of improving demand in China and the United States, leading to higher prices domestically as well. In December, international prices rose on higher demand from China and the United States, coupled with higher freight prices. Domestic prices rose in tandem. In January, global prices saw a slight dip to due rise in Chinese exports, while domestic prices softened due to subdued demand. In February, international prices rose on increased demand and a softer US Dollar Index, while domestic prices rose in line with international prices and revival in domestic demand. In March, international and domestic prices rose on demand from consumer industries, primarily from China. In April, international prices increased on the back of increased buying from China, while domestic prices rose on demand. In May, international prices rose on the back of high demand and decreased production in China. Domestic prices decreased in tandem.

Copper



Source: LME



Source: MCX

Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/kg)
May-20	5234	407
Jun-20	5742	443
Jul-20	6354	494
Aug-20	6497	516
Sep-20	6712	524
Oct-20	6703	524
Nov-20	7063	545
Dec-20	7755	599
Jan-21	7971	610
Feb-21	8460	662
Mar-21	9005	681
Apr-21	9336	722
May-21	10184	770

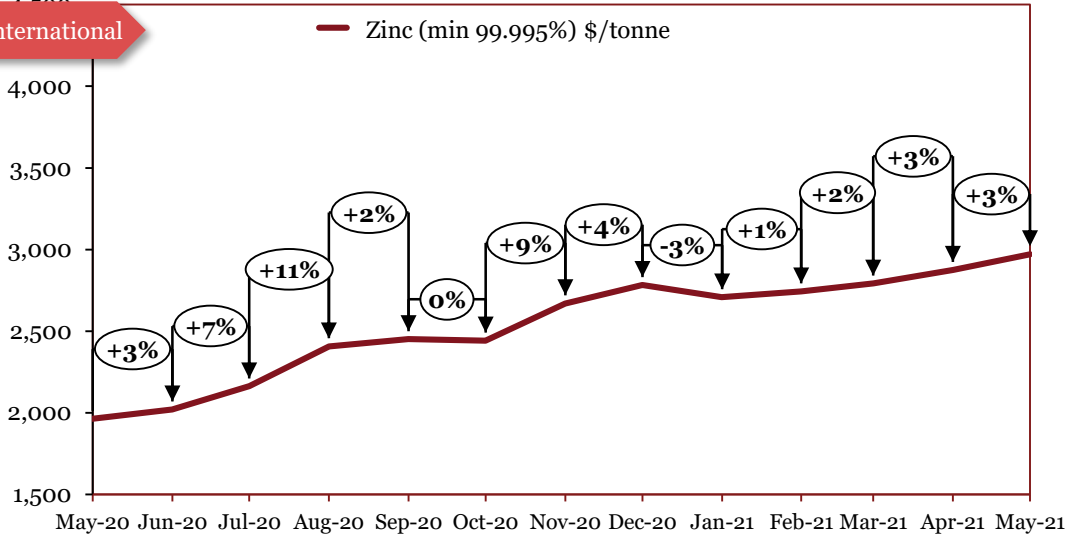
*The actual prices may vary depending on city, player, grade etc.

Outlook

In August, international and domestic prices rose as demand returned to normal around the world. In September, prices rose internationally and domestically as labor issues in Chile caused concerns about future supply. In October, international and domestic prices remained stable. In November, international prices rose on account of greater demand from China, reduced availability of supply. Domestic prices rose in tandem. In December, prices rose on the backs of a stronger economy and Chinese stockpiling. In January, global prices rose due to robust metal demand by China and weakening of the dollar. Domestic prices remain high on supply deficit. In February, international prices saw a spike due to increased demand from construction, electronics and auto sector. Domestic prices rose on tight supply amidst rising demand. In March, international prices continued to rise on demand from China's manufacturing sector. Domestic prices rose in tandem. In April, international prices rose as demand from renewable energy sector and electric vehicles picked up pace. Domestic prices rose in accordance. In May, international as well as domestic prices rose, due to supply disruptions in South America.

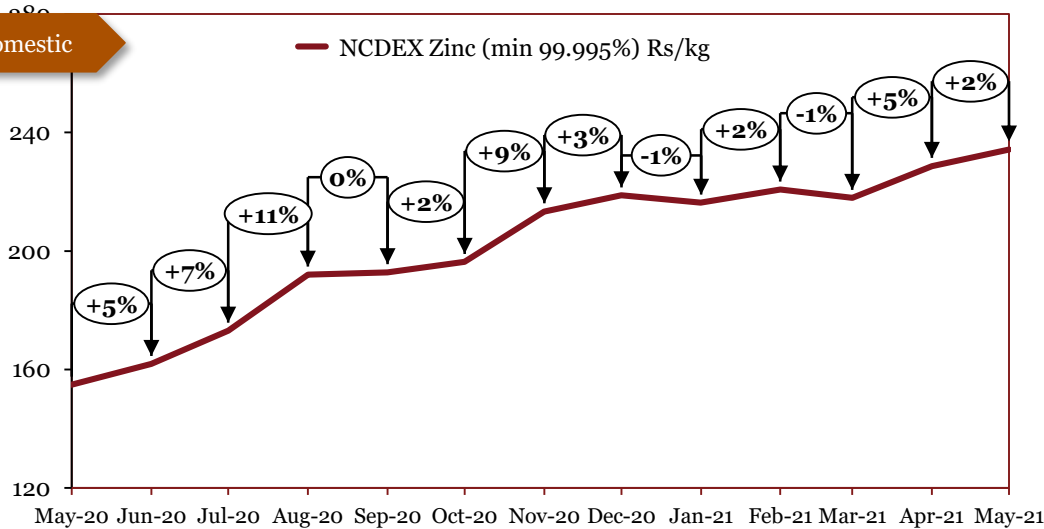
Zinc

International



Source: LME

Domestic



Source: MCX*

*Source updated in July 2019

Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/kg)
May-20	1963	155
Jun-20	2021	162
Jul-20	2162	173
Aug-20	2407	192
Sep-20	2451	193
Oct-20	2442	196
Nov-20	2670	213
Dec-20	2782	219
Jan-21	2708	216
Feb-21	2743	221
Mar-21	2792	218
Apr-21	2875	229
May-21	2970	234

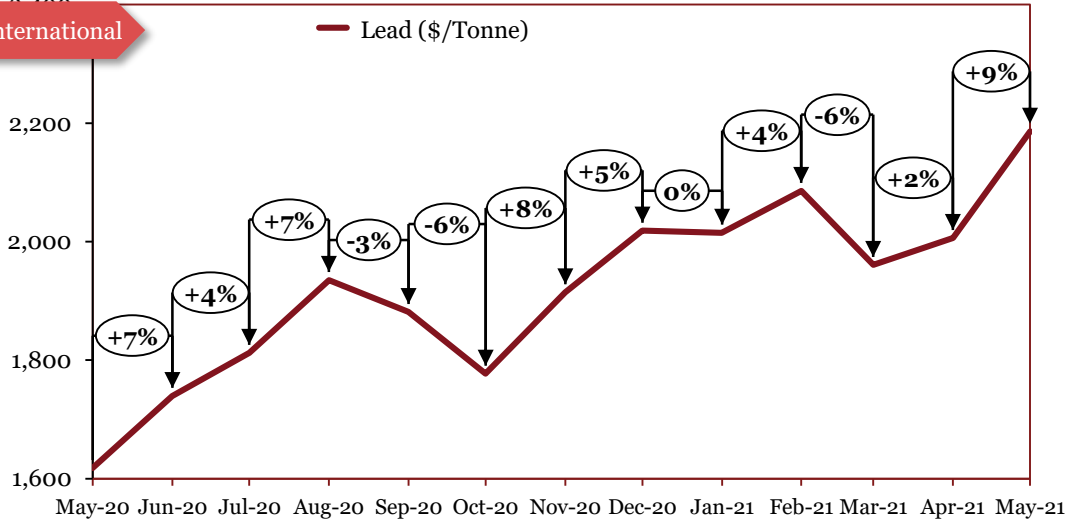
*The actual prices may vary depending on city, player, grade etc.

Outlook

. In August, prices rose internationally as well as domestically as restrictions on mining were eased globally, and supply concerns regarding South America persisted. In September, international prices rose on stronger Chinese demand, while domestic prices remained stable. In October, international prices remained stable, while domestic prices rose on account of greater demand from consuming industries. In November, international as well as domestic prices rose on higher demand, reduced availability. In December, prices rose internationally on strong demand, while domestic prices benefited from a stronger rupee. In January, international and domestic prices dipped due to weakened demand despite constrained supply in constrained in top-producing countries. In February, international remained stable, while domestic prices rose on a pick-up in demand. In March, international prices rose on the back of tight supply and shipping delays in the US, while domestic prices dipped due to weakened demand. In April, international Zinc price increase has been supported by Chinese infrastructure demand and rebounding global auto output. Domestic prices increased on tight supply. In May, international and domestic prices rose despite growing unsold inventory, as investors continued to be bullish about the global recovery.

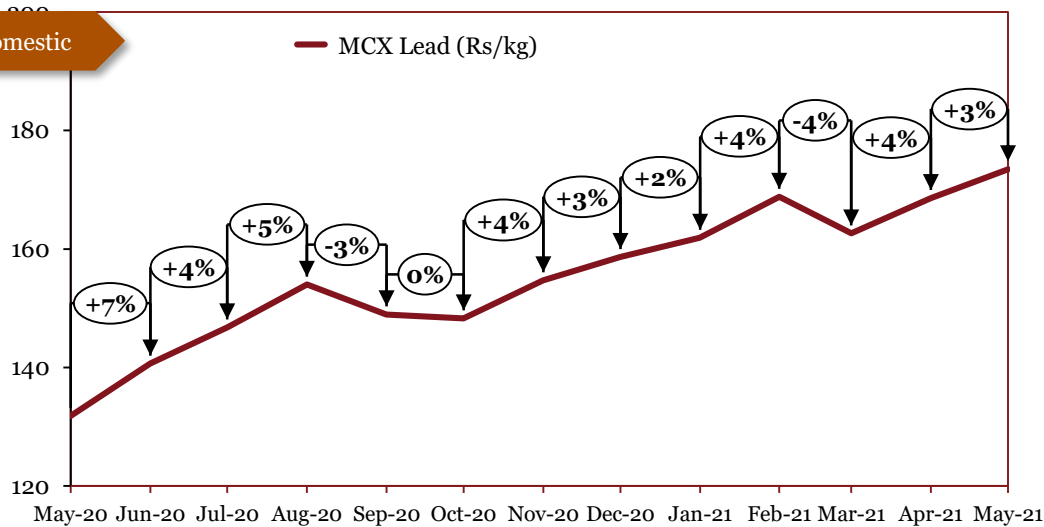
Lead

International



Source: LME

Domestic



Source: MCX

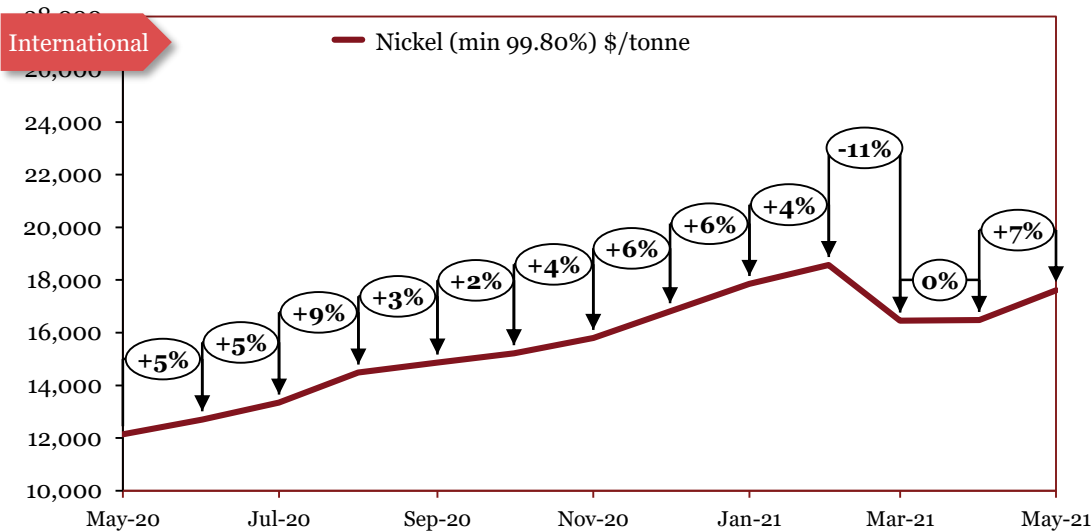
Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/kg)
May-20	1618	132
Jun-20	1739	141
Jul-20	1812	147
Aug-20	1935	154
Sep-20	1881	149
Oct-20	1777	148
Nov-20	1914	155
Dec-20	2019	159
Jan-21	2015	162
Feb-21	2086	169
Mar-21	1961	163
Apr-21	2006	169
May-21	2186	173

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

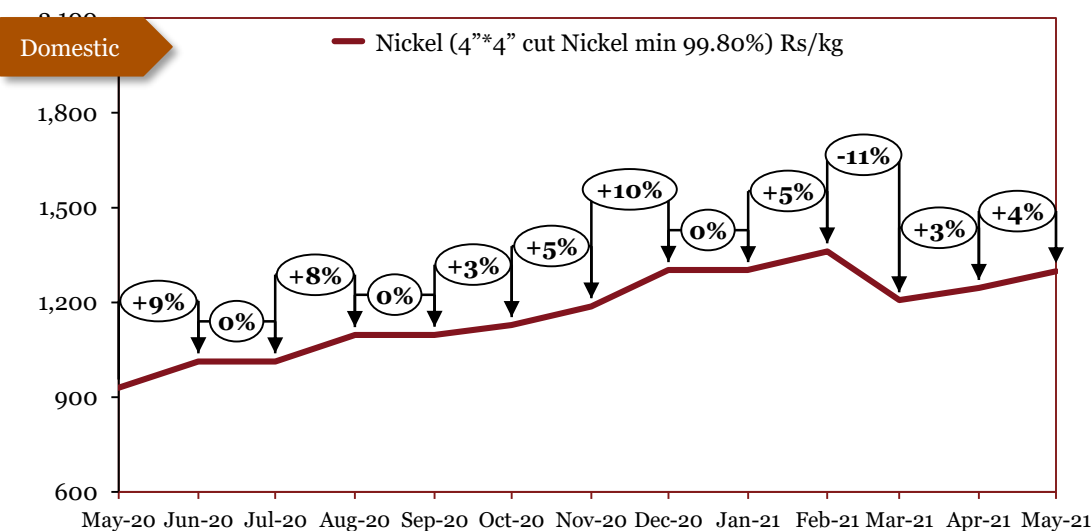
Outlook

In August, international and domestic prices rose in tandem to higher demand as industries returned to pre-COVID normality. In September, international as well as domestic prices declined as inventory levels rose following months of upward price movement. In October, international prices fell on weak demand while domestic prices remained stable. In November, prices rose on the back of an economic upturn, and demand from battery developers. Domestic prices rose in tandem as the economy continued to recover. In December, prices rose internationally, buoyed by continued low supply in the market. Domestic prices rose as the economic recovery continued. In January, international prices remained stable while domestic prices continued to rise due to increased demand in the domestic market. In February, prices rose on the back of strong demand from North America, Europe and China, whilst domestic prices rose on the back of international surging prices. In March, international and domestic prices fell on weakened demand in spite of supply tightness. In April, international and domestic prices increased, owing to increased demand in batteries. In May, international as well as domestic prices rose on account of continued bullishness from investors and fears of supply disruptions.

Nickel



Source: LME



Source: MCX*

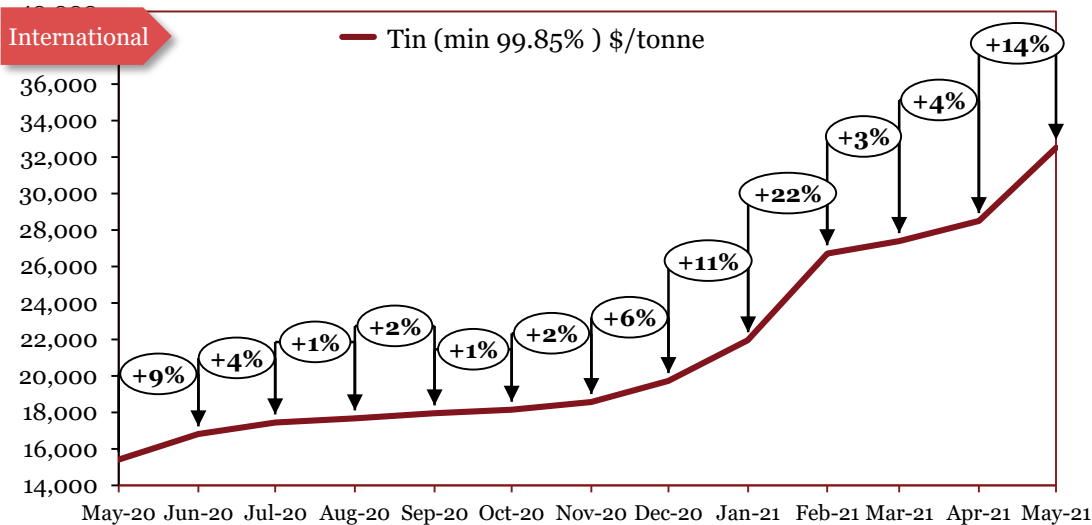
Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/kg)
May-20	12135	930
Jun-20	12703	969
Jul-20	13341	1013
Aug-20	14487	1097
Sep-20	14866	1097
Oct-20	15219	1129
Nov-20	15796	1187
Dec-20	16807	1268
Jan-21	17848	1302
Feb-21	18568	1361
Mar-21	16461	1207
Apr-21	16481	1245
May-21	17605	1298

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

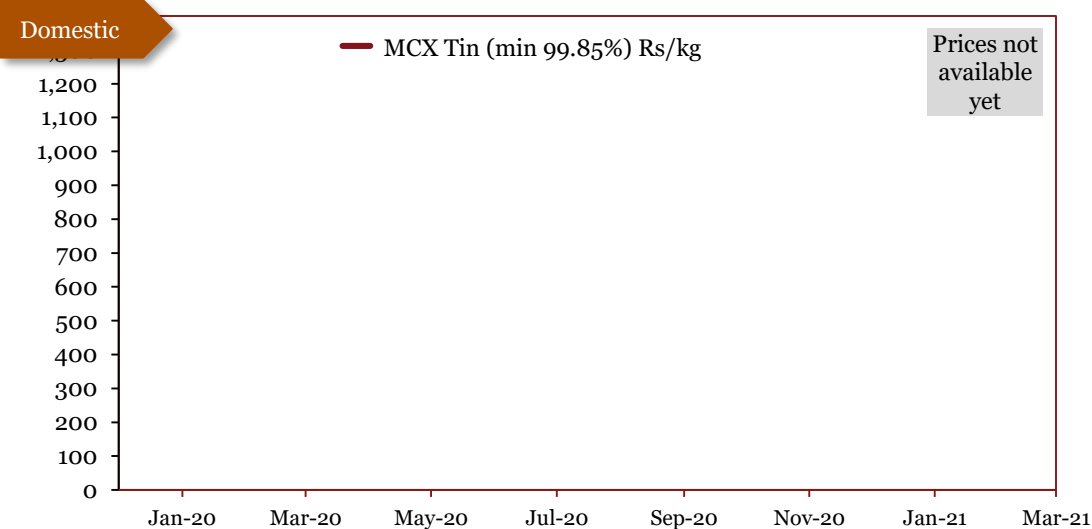
Outlook

In September, international prices rose on strong Chinese demand whilst domestic prices remained stable. In October, international prices rose due to robust demand from the stainless steel industry, and concurrently rose domestically too. In November, international prices rose on account of greater Chinese demand, with the continued Indonesian export ban and typhoons in Philippines impacting supply. Domestic prices rose in tandem. In December, international prices rose as demand for batteries remained exceptionally bullish, taking prices close to their previous high. Domestic prices rose simultaneously. In January, international prices went up due to continued demand for batteries and in transportation. Domestic prices remained consistent. In February, international prices rose on material shortages and expectations of higher demand for nickel batteries. Domestic prices rose on the back of greater demand from alloy makers. In March, international and domestic prices declined on the back of cautious investors amidst weak demand. In April, international prices remained unchanged, domestic prices rose on tight supply. In August, Nickel prices rose as part of the trend of higher metals prices.

Tin



Source: LME



Source: Bloomberg

Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/kg)
May-20	15409	
Jun-20	16806	
Jul-20	17453	
Aug-20	17672	
Sep-20	17946	
Oct-20	18154	
Nov-20	18568	
Dec-20	19727	
Jan-21	21955	
Feb-21	26717	
Mar-21	27396	
Apr-21	28508	
May-21	32524	

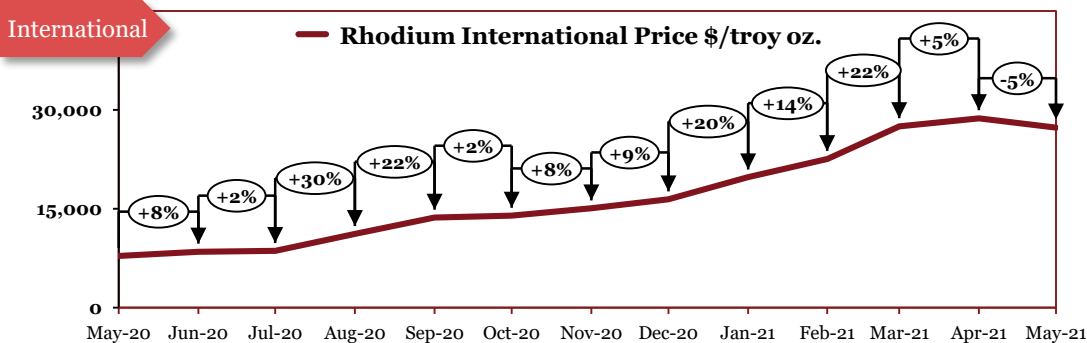
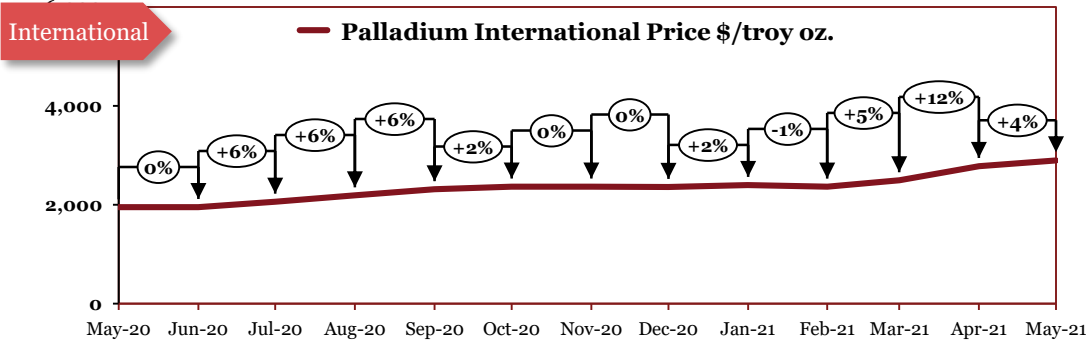
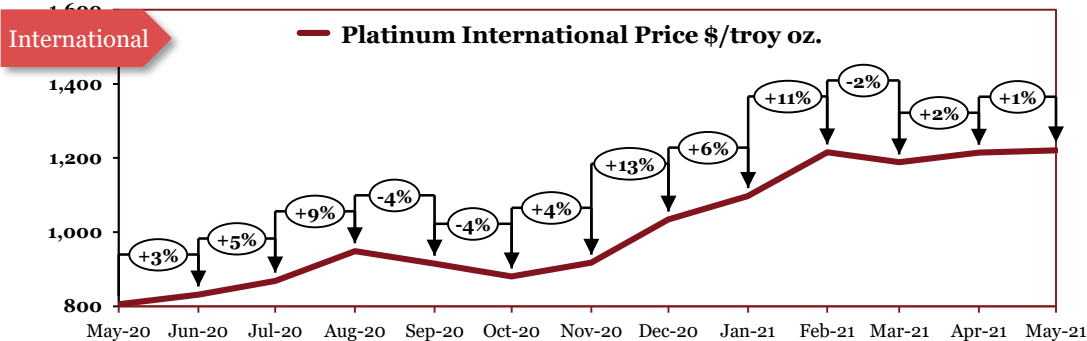
*The actual prices may vary depending on city, player, grade etc.

Outlook

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. In August, international prices rose slightly. In September, prices rose internationally on account of stronger demand for electronics, particularly in Mainland China. In October, international prices rose slightly on In October, prices rose as supply was constrained due to lockdown in Peru. In November, international prices rose on the back of a resurgent global economy, particularly in China, along with continued strong demand for electronic products during the pandemic. In December, international prices surged due to a major shortfall in supply not expected to be filled for months. In January, international prices surged further as consumers continued to boost global demand for electronics. In February, prices surged on the back of low supply and inventories, coupled with resurgent consumer electronics demand. In March, international tin prices rose due to tight supply and increased demand from China's electronic industry. In April, international prices rose on tight supply amidst reduced supply from Indonesia. In May, international prices surged on increased demand, mainly from the electronics sector.

Precious Metals

Precious Metals



Monthly Average Prices (\$/Oz)			
Period	Pt	Pd	Rh
May-20	805	1949	7824
Jun-20	831	1952	8474
Jul-20	869	2062	8603
Aug-20	949	2191	11177
Sep-20	915	2314	13647
Oct-20	881	2369	13977
Nov-20	918	2368	15078
Dec-20	1034	2362	16436
Jan-21	1097	2398	19763
Feb-21	1215	2367	22549
Mar-21	1189	2495	27484
Apr-21	1215	2782	28737
May-21	1221	2896	27325

Source: Johnson Matthey

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

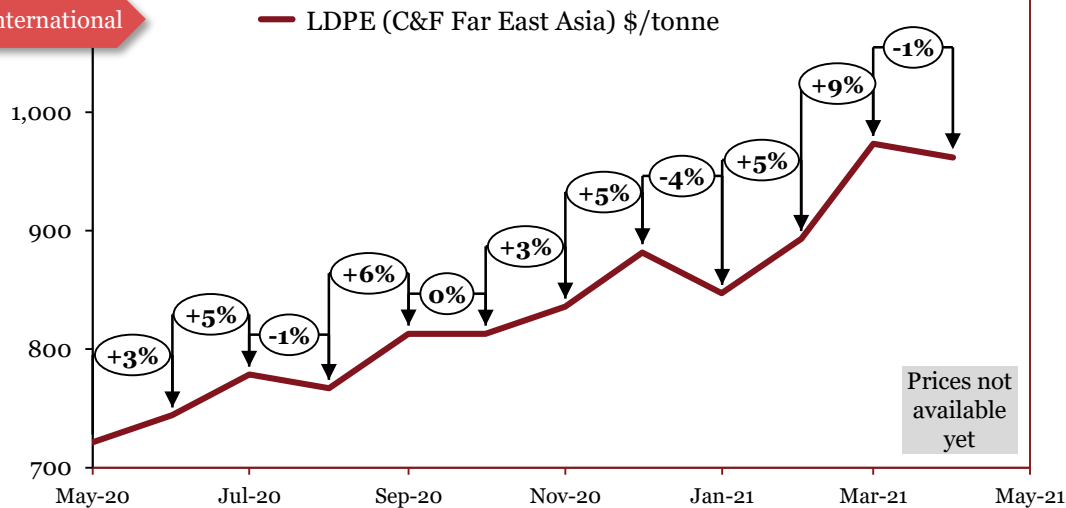
Outlook

In December, Rhodium prices returned to hit their pre-pandemic highs, while Platinum prices rose aggressively on investor interest. Palladium remained constant. In January, Platinum and Palladium prices, internationally, rose due to continuous industrial demand. Rhodium prices saw due to increased demand from China and continued supply tightness. In February, Platinum prices rose on the back of demand from China as palladium's substitution, while palladium prices remained constant. Rhodium prices surged amid supply tightness, existing deficit, stricter emissions regulation standards implemented worldwide and strong demand from China and Europe. In March, Platinum prices declined on reduced buying, while palladium prices rose on tight inventories and increased demand from Automotive, industrial, and electric power sectors Rhodium prices continued to surge on the back of supply deficit as global economies look to meet emission norms. In April, platinum, palladium and rhodium prices rose on increased demand from the auto industry as governments became stricter on emission norms. In May, Platinum, Palladium and Rhodium prices trended upwards due to continued demand.

Polymers & Rubber

Low density polyethylene (LDPE)

International

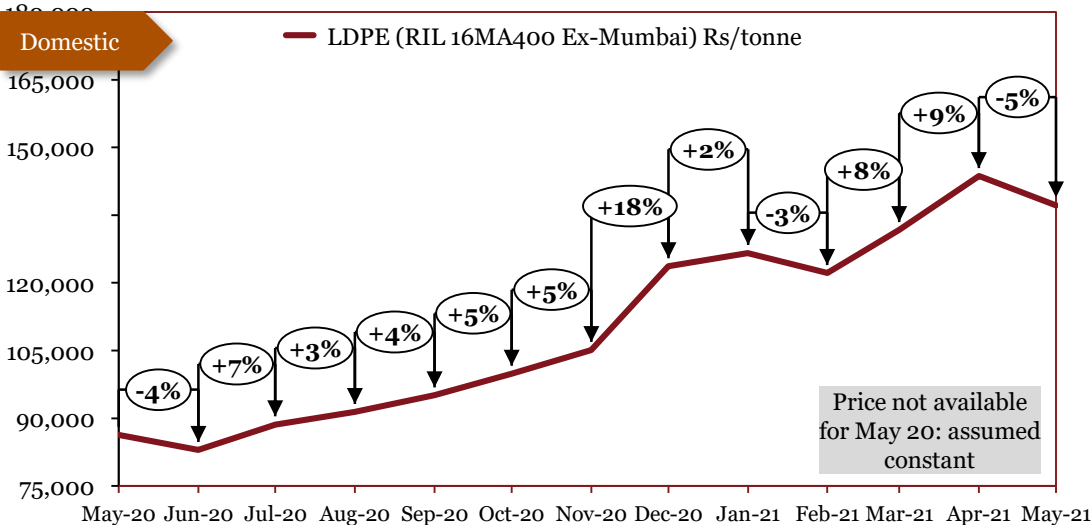


Source: Crisil

Monthly Average Prices

Period	*Int'l (\$/tonne)	*Dom (Rs/tonne)
May-20	721	86309
Jun-20	744	83005
Jul-20	779	88626
Aug-20	767	91403
Sep-20	813	95103
Oct-20	813	99879
Nov-20	836	105106
Dec-20	882	123653
Jan-21	847	126609
Feb-21	893	122180
Mar-21	973	131732
Apr-21	962	143661
May-21		137145

Domestic



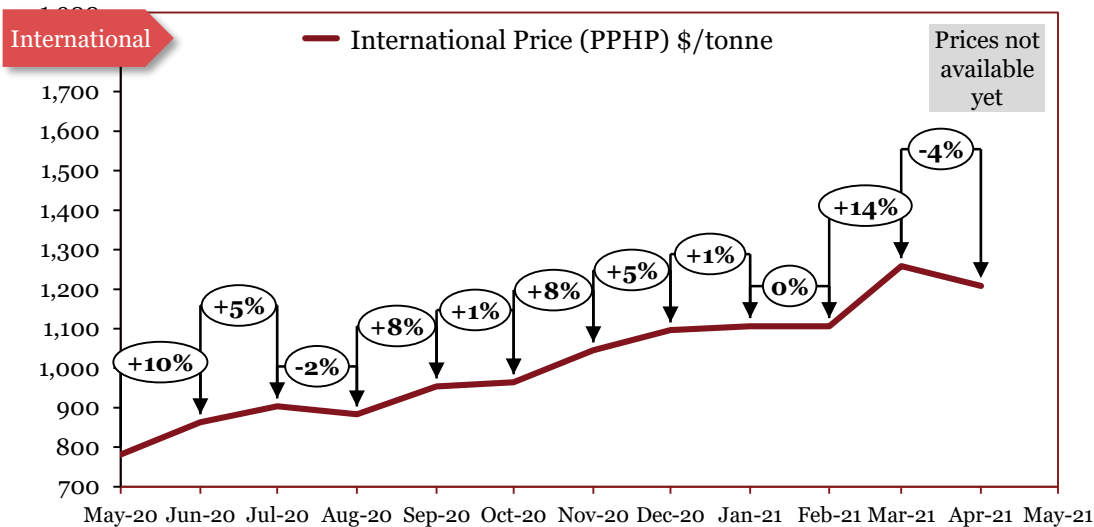
Source: Reliance Industries Ltd.

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

Outlook

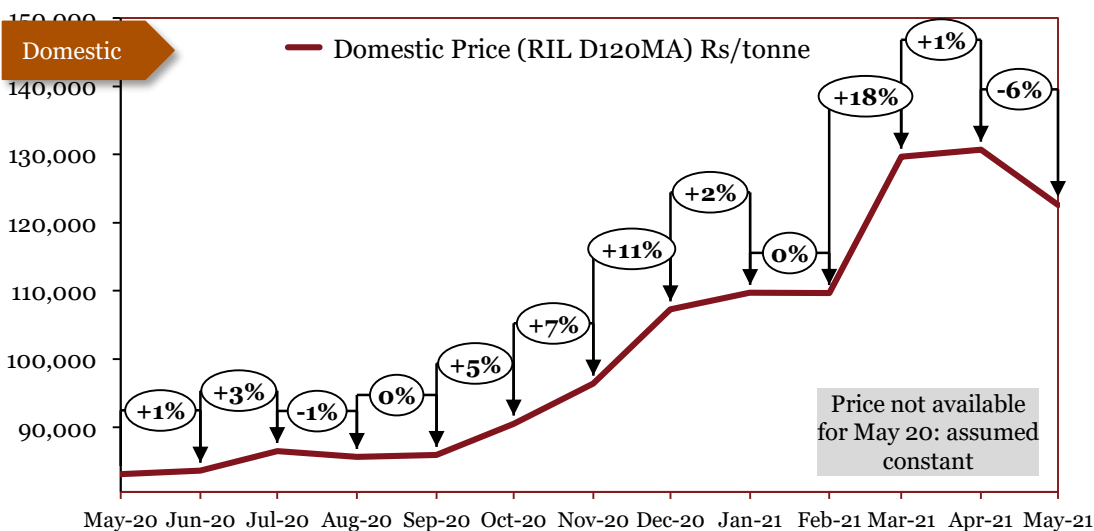
In February, domestic prices remained unchanged. In March, international prices declined as a result of the fall in crude oil prices and the COVID-19 lockdown. In April, low crude prices caused further decline in international prices. In June, international prices rose, corresponding with the rise in oil prices. In July, domestic prices continued their upturn. In August, international prices declined slightly, while domestic prices rose on account of higher oil prices. In September, domestic prices rose on the backs of higher consumer goods sales as the festive season approaches. In October, domestic prices continued to rise as producers receive higher export demand, with limited availability and high shipping costs. In November, domestic prices rose on the back of higher crude oil prices. In December and January, domestic prices rose on increased crude oil prices. In February, international prices rose on the back of increased crude oil prices, domestic prices dropped on the back of limited demand amidst sufficient supply. In March, domestic prices rose in conjunction with ethylene prices amidst tight supply. In April, domestic prices increased on supply tightness amidst reduced production from US. In May, prices fell on the back of stable movement of raw material and decreased margins

Polypropylene (PP)



Source: Crisil

Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/tonne)
May-20	782	83120
Jun-20	863	83616
Jul-20	903	86491
Aug-20	883	85636
Sep-20	954	85917
Oct-20	964	90503
Nov-20	1045	96407
Dec-20	1096	107261
Jan-21	1106	109697
Feb-21	1106	109658
Mar-21	1259	129681
Apr-21	1208	130673
May-21		130673



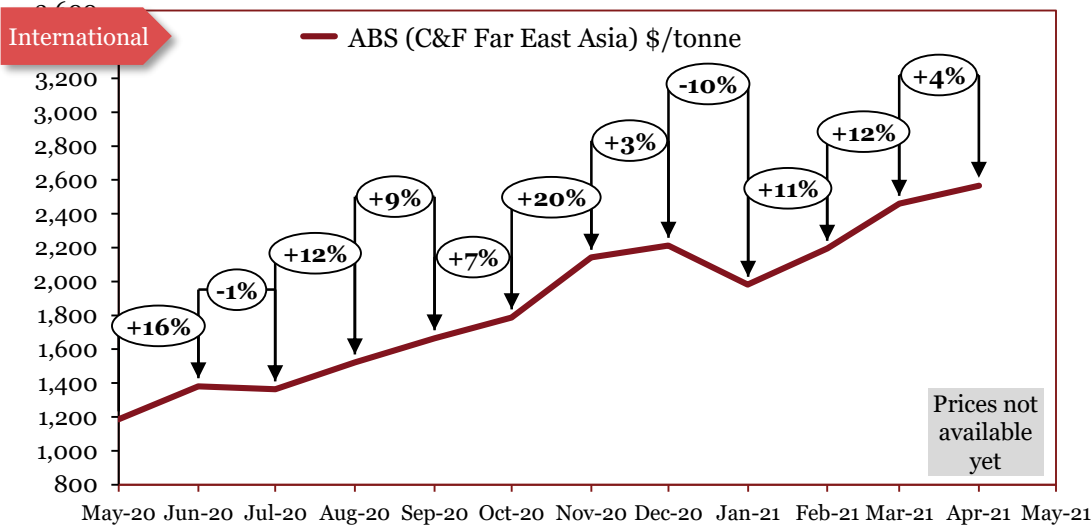
Source: Reliance Industries Ltd.

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

Outlook

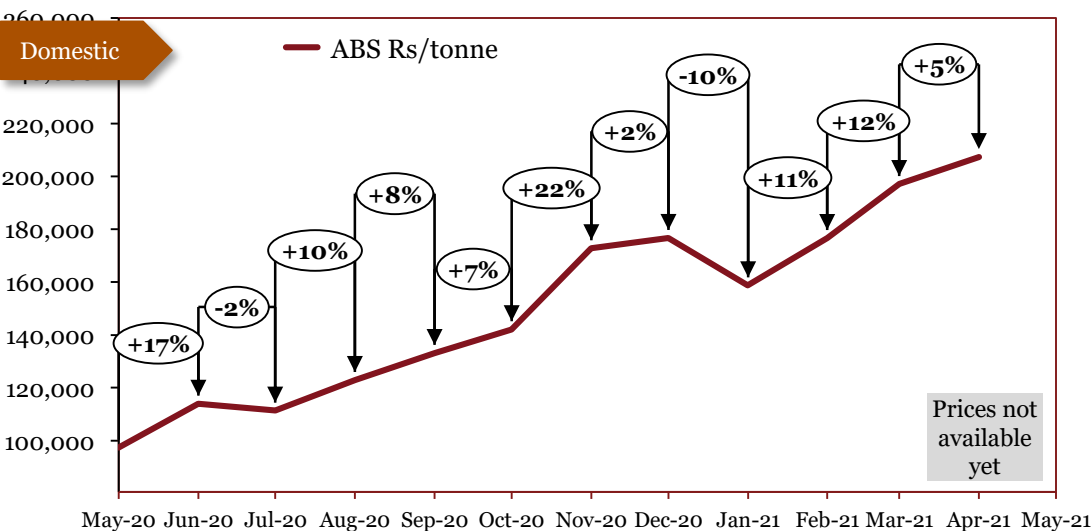
In January, the trend of falling international prices continued thanks to a production surge in China, while domestic prices rose on tighter availability of product in the domestic market. In February, domestic prices remained unchanged. In March, the dramatic decrease in crude oil prices led to the 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 followed suit. In July, domestic prices rose on account of higher oil prices. In July, domestic prices continued their upturn. In August, prices rose on account of higher oil prices. In September, domestic prices remained stable. In October, domestic prices rose on greater demand from exports, as well as a shortage of supply in the market. In November, domestic prices continued to trend upwards. In December, international prices rose alongside the spurt in oil prices. In January, domestic prices rose on the back of increased crude oil prices. In February, international prices rose on demand, while domestic prices remained constant. In March, domestic prices surged on high demand and tight supply. In April, domestic prices increased slightly due to supply tightness. In May, prices dipped due to ease in demand and supply tightness.

Acrylonitrile Butadiene Styrene (ABS)



Source: Crisil

Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/tonne)
May-20	1186	97280
Jun-20	1381	113920
Jul-20	1363	111360
Aug-20	1522	122880
Sep-20	1664	133120
Oct-20	1788	142080
Nov-20	2142	172800
Dec-20	2213	176640
Jan-21	1982	158720
Feb-21	2195	176640
Mar-21	2460	197120
Apr-21	2567	207360
May-21		



Source: Crisil

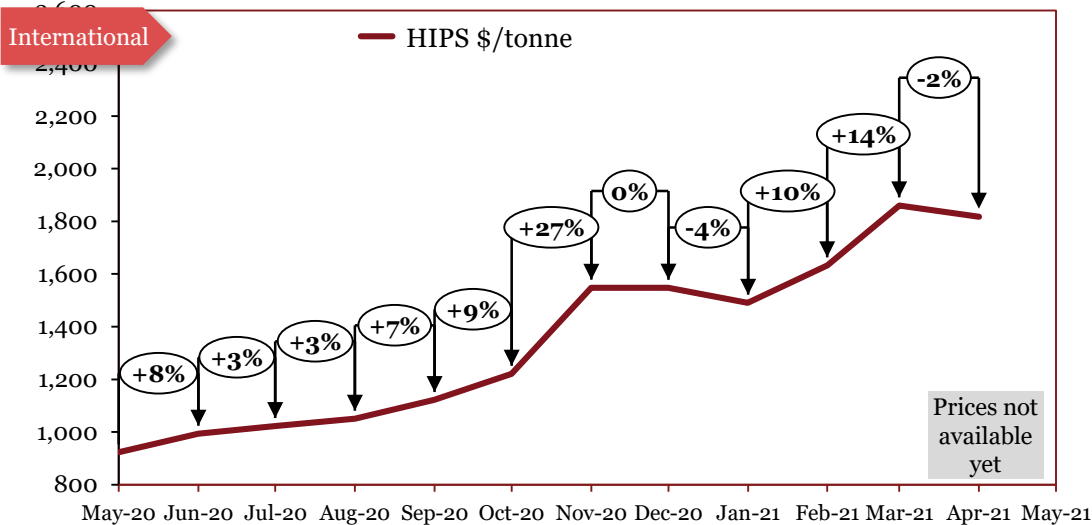
Outlook

Acrylonitrile Butadiene Styrene (ABS) is a rigid thermoplastic polymer that provides properties such as flexibility, resilience to temperature and good appearance. It is popular due to its low production cost and the ease with which the material is machined by manufacturers. It is made by polymerizing styrene and acrylonitrile.

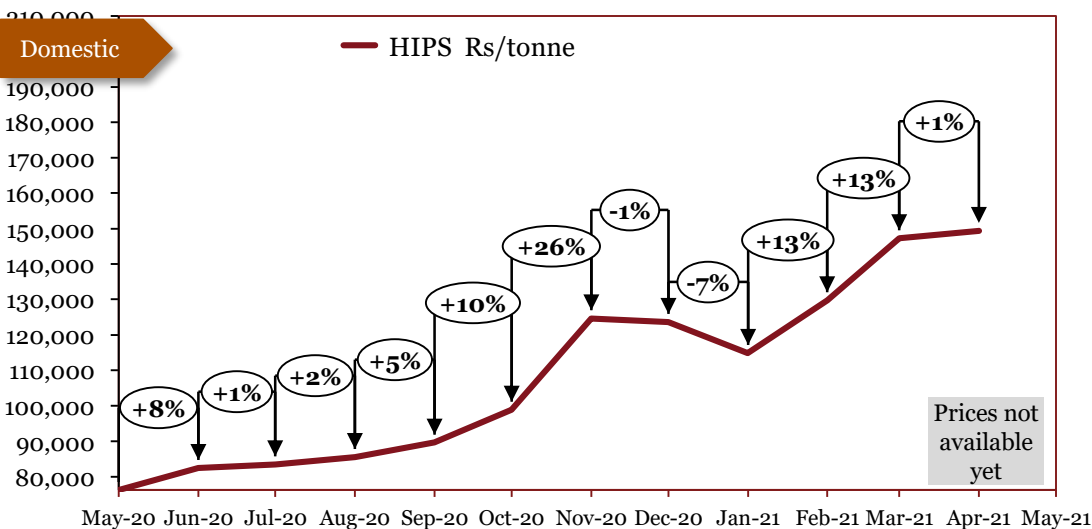
Its applications can be found in dashboards, wheel covers as well as other automotive body parts. It is also used in automotive covers, shrouds, and housings.

In March and April, international prices rose on the back of increased demand from consumption in appliances and consumer goods. Domestic prices followed suit.

High Impact Polystyrene (HIPS)



Source: Crisil



Source: Crisil

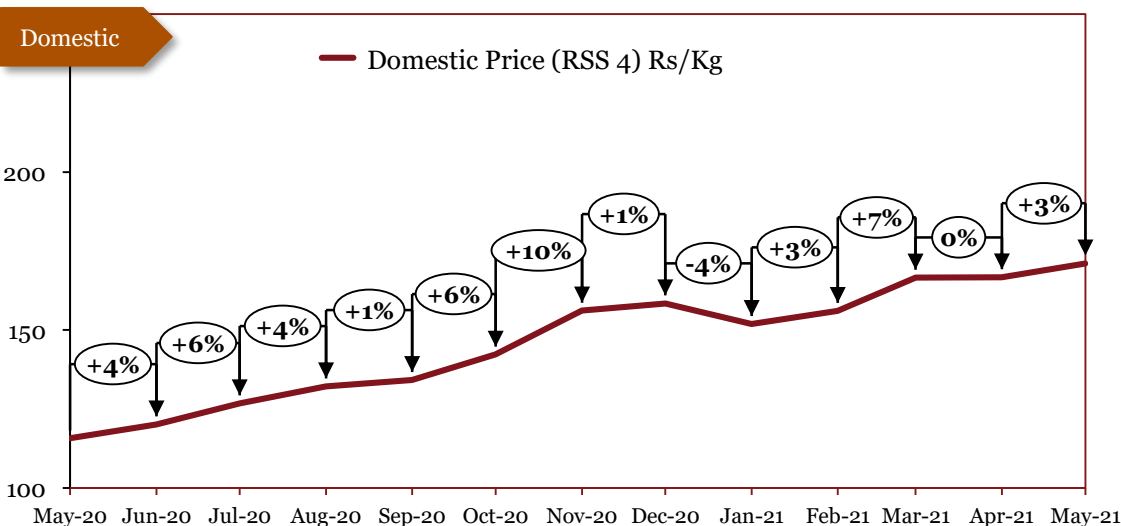
Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/tonne)
May-20	923	76220
Jun-20	994	82400
Jul-20	1022	83430
Aug-20	1051	85490
Sep-20	1122	89610
Oct-20	1221	98880
Nov-20	1548	124630
Dec-20	1548	123600
Jan-21	1491	114845
Feb-21	1633	129780
Mar-21	1860	147290
Apr-21	1818	149350
May-21		

Outlook

Polystyrene exhibits electrical and chemical resistance. It is easy to manufacture, highly elastic and softens when heated beyond its glass transition temperature. Its mechanical properties include its impact strength, elongation, toughness, and modulus. It is mainly used in car fittings, display bases, and buttons. High Impact Polystyrene is commonly used in automotive instrument panels and petrol tanks.

In March, international as well as domestic prices rose in line with ABS. In April, international prices declined due to subdued demand, while domestic prices rose marginally.

Rubber



Source: Rubber board

Monthly Average Prices	
Period	*Dom (Rs/kg)
May-20	116
Jun-20	120
Jul-20	127
Aug-20	132
Sep-20	134
Oct-20	142
Nov-20	156
Dec-20	158
Jan-21	152
Feb-21	156
Mar-21	167
Apr-21	167
May-21	171

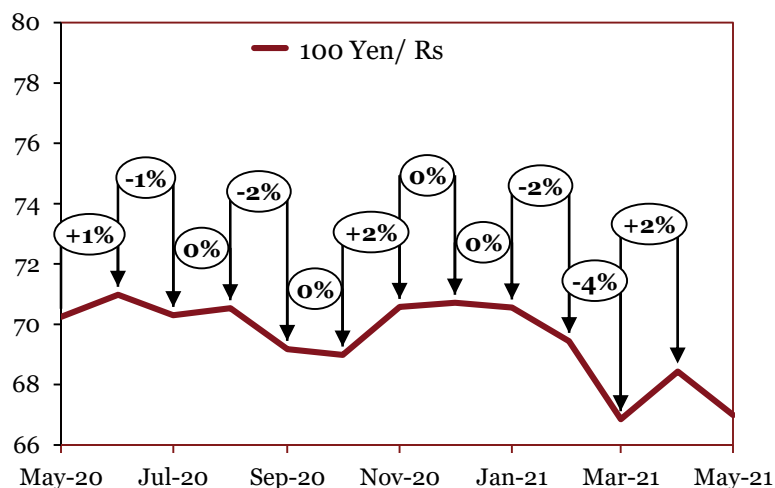
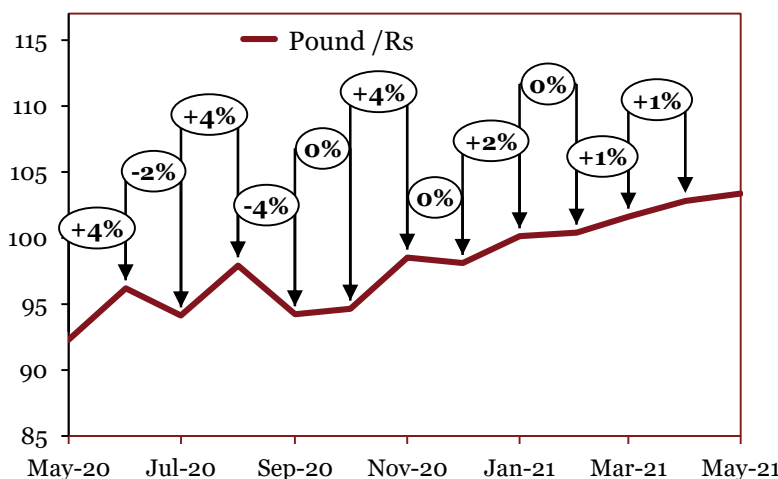
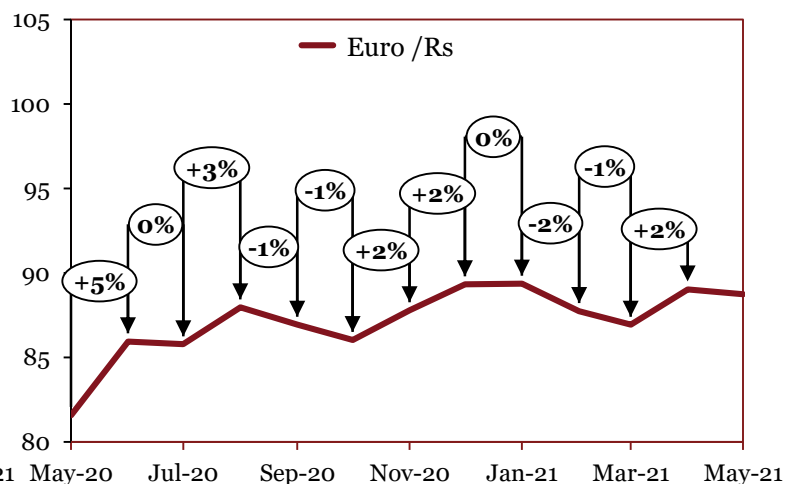
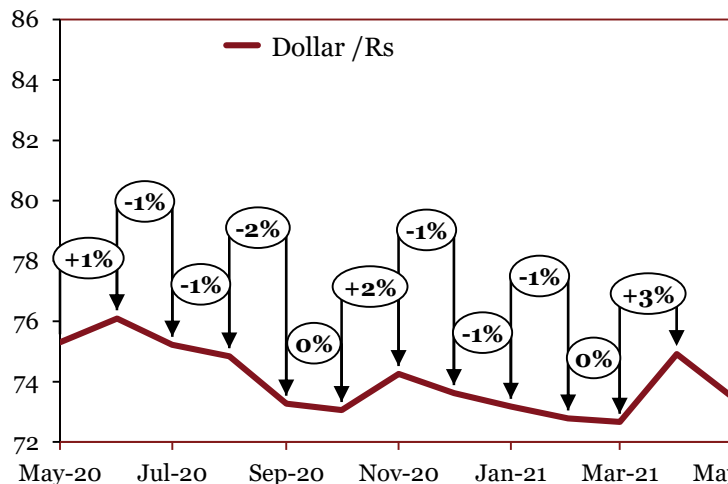
*The actual prices may vary depending on city, player, grade etc.

Outlook

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. In August, prices rose mirroring a continued upward trend in global markets. In September, prices rose on strong Chinese demand and supply challenges in Southeast Asia. In October, prices continued to move upwards due to continued demand in China. In November, domestic prices continued to move upwards, with strong demand from China along with supply constraints in Thailand and other parts of Southeast Asia partly responsible. In December, international prices rose alongside the spurt in oil prices. In December, prices rose slightly, stabilising after months of upward movement. In January, domestic rubber prices saw a dip due to reduced demand. In February, prices rose on the back of reluctance shown by growers to sell their produce at the prevailing levels in anticipation of future prices. In March, domestic prices rose due to higher oil prices and due to chronic labor shortages in regional rubber-growing areas of Kerala. In April, domestic rubber prices remained unchanged. In May, prices rose on the back fall in production in Kerala due to the Covid-19 pandemic.

Appendices

Forex Movement

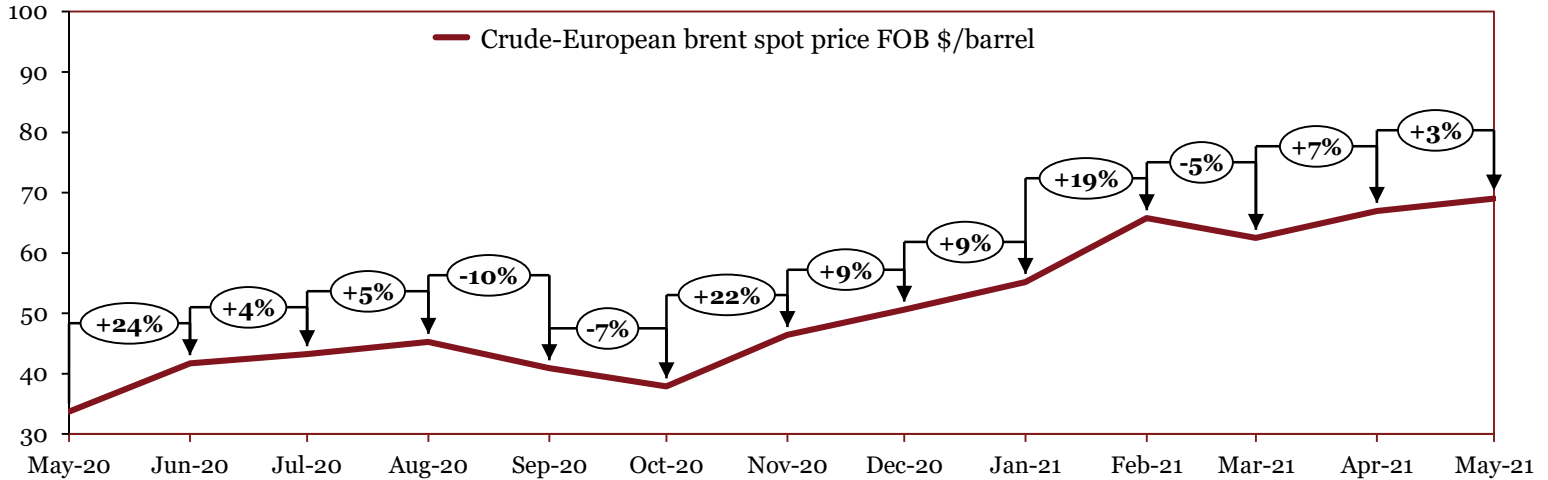


Source: Reserve Bank of India

Monthly Average Prices (Rs)

	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21
\$	75	76	75	75	73	73	74	74	73	73	73	75	73
£	92	96	94	98	94	95	99	98	100	100	101	102	103
€	82	86	86	88	87	86	88	89	89	88	87	89	89
¥	70	71	70	71	69	69	71	71	71	69	67	68	67

Crude Oil



Source: EIA

Monthly Average Prices (\$/barrel)

	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21
	34	42	43	45	41	38	46	51	55	66	63	67	69

Commodity Specifications

Commodity	International	Domestic
Iron Ore	IOECI635 Index (CIF China) - (Fe63.5%) CIF China	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 <i>Previously: Bloomberg Black Sea Steel Billet Spot FOB</i>	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 chrome	Crisil : FOB Hong Kong Cr 50%	Crisil: Ex-factory Cr 60%
Ferro silicon	Crisil - FOB China Si 75%	Crisil - Ex-factory Si 70%

Commodity Specifications

Commodity	International	Domestic
Aluminium	<p>LME</p> <p>-Primary aluminium with impurities no greater than the chemical composition of one of the registered designations:</p> <ul style="list-style-type: none"> •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” 	<p>NCDEX, MCX (July’19 onwards)</p> <p>-Primary aluminium 99.7% purity (minimum) form: ingots, T-bars,</p>
Copper	<p>LME</p> <p>-Grade A copper must conform to the chemical composition of one of the following standards:</p> <ul style="list-style-type: none"> •BS EN 1978:1998 - Cu-CATH-1 •GB/T 467-2010 - Cu-CATH-1 •ASTM B115-10 - cathode Grade 1 	<p>MCX</p> <p>- Grade 1 electrolytic copper as per B115 specification</p>
Zinc	<p>LME</p> <p>-Special high-grade zinc of 99.995% purity (minimum) must conform to the chemical composition of one of the following standards:</p> <ul style="list-style-type: none"> •BS EN 1179:2003 - 99.995% grade •ISO 752:2004 - ZN-1 grade •ASTM B6-12 - LME grade •GB/T 470-2008 - Zn99.995 grade 	<p>NCDEX, MCX (July’19 onwards)</p> <p>- 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</p>
Lead	<p>LME</p> <ul style="list-style-type: none"> - Lead of 99.97% purity (minimum) conforming to BS EN 12659:1999 - GB/T 469/2005 	<p>MCX</p> <ul style="list-style-type: none"> - Lead ingots with minimum purity of 99.97%

Commodity Specifications

Commodity	International	Domestic
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
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
Acrylonitrile Butadiene Styrene (ABS)	International price (C&F FEA) \$/tonne	Landed Cost Rs/tonne
High Impact Polystyrene (HIPS)	International price \$/tonne	Landed Cost Rs/tonne
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)	



Disclaimer

This document has been prepared solely for *[ACMA] Automotive Component Manufacturers Association of India*, being the express addressee to this document. PwC does not accept or assume any liability, responsibility or duty of care for any use of or reliance on this document by anyone, other than (i) ACMA, to the extent agreed in the relevant contract for the matter to which this document relates (if any), or (ii) as expressly agreed by PwC in writing in advance.

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, PwC, its members, employees and agents accept no liability, and disclaim all responsibility, for the consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

This publication contains certain examples extracted from third party documentation and so being out of context from the original third party documents; readers should bear this in mind when reading the publication. The copyright in such third party material remains owned by the third parties concerned, and PwC expresses its appreciation to these companies for having allowed it to include their information in this publication. For a more comprehensive view on each company's communication, please read the entire document from which the extracts have been taken. Please note that the inclusion of a company in this publication does not imply any endorsement of that company by PwC nor any verification of the accuracy of the information contained in any of the examples.

This publication contains various forward looking statements, which by their nature involve numerous assumptions, inherent risks and uncertainties, both general and specific, and risks that predictions, forecasts, projections and other forward looking statements will not be achieved. We caution readers of this publication not to place undue reliance on these forward looking statements, as a number of important factors could cause actual future results to differ materially from the plans, objectives, expectations, estimates, and intentions expressed in such forward looking statements.

This publication (and any extract from it) may not be copied, paraphrased, reproduced, or distributed in any manner or form, whether by photocopying, electronically, by internet, within another document or otherwise, without the prior written permission of PwC. Further, any quotation, citation, or attribution of this publication, or any extract from it, is strictly prohibited without PwC's prior written permission.

PwC contacts for ACMA Knowledge Partnership

- Kavan Mukhtyar, Partner & Leader-Automotive, PwC India - kavan.mukhtyar@in.pwc.com / +912261198735
- Somnath Chatterjee, ACMA Knowledge Partnership Manager –somnath.chatterjee@in.pwc.com / +91124620724

© 2021 PricewaterhouseCoopers Private Limited. All rights reserved. In this document, "PwC" refers to PricewaterhouseCoopers Private Limited (a limited liability company in India), which is a member firm of PricewaterhouseCoopers International Limited, each member firm of which is a separate legal entity.