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Commodity price monitor April-22

Prepared for ACMA

Strictly private and confidential

April 2022





Contents

Com	Commodity trend dashboard		
Iron & Steel			
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	o-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	e 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
Preciou	s Metals	28
20	Precious Metals	29
Polyme	rs & 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
Append	ices	36
26	Forex Movement	37
27	Crude Oil	38
28	Commodity Specifications	39

Commodity trend dashboard

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

Calendar Year 2022: Qvs. Qupdate

Commodity	Region	Q-o-Q Up	Q-o-Q Down
Iron & Steel			
Iron Ore	International	28.51% ▲	
	Domestic low grade		
	Domestic high grade		
PigIron	International	12.87%	
	Domestic	10.11%	
Stainless steel	Domestic		-7 . 01% ▼
	Domestic		-6.59% V
Wirerod	International	31.96% ▲	
	Domestic	8.85%	
Steel Billets	International	11.30%	
	Domestic	3.88% ▲	
Hot-rolled coils	International	30.79% ▲	
	Domestic	22.76%	
Cold-rolled coils	International	35.15% ▲	
	Domestic	23.57%	
Steel Scrap	Domestic	15.45%	
EN8	Domestic	8.08%	
20MnCr5	Domestic	7.97% ▲	
Ferro chrome	International		-2.52% V
rerro chrome	Domestic	1.08%	
Forms silings	International	10.55%	
Ferro silicon	Domestic	18.32%	

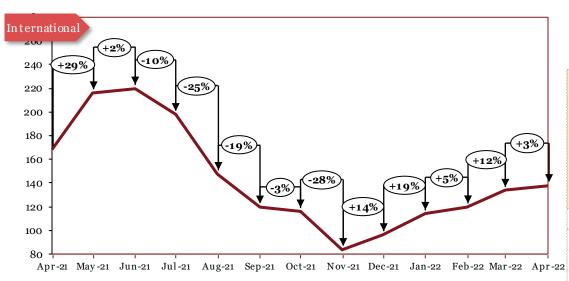
Commodity trend dashboard Quarter-on-Quarter changes (2/2)- Rolling view

Calendar Year 2022: Qvs. Qupdate

Commodity	Region	Q-o-Q Up	Q-o-Q Down
Base Metals			
Aluminum	International	14.69%	
Alummum	Domestic	13.58%	
Connor	International	14.53%	
Copper	Domestic	13.67%	
7inc	International	6.71%	
Zinc	Domestic	6.83%	
Land	International	5.28 % ▲	
Lead	Domestic	4.18%	
Niekol	International		-1.60%
Nickel	Domestic		-0.03%
Т: -	International	23.19%	
Tin	Domestic	N/A	
Precious Metals			
Platinum	International	1.93% ▲	:
Palladium	International	15.90%	
Rhodium	International	11.49%	:
Polymers			
	International	0.84%	:
Low density polyethylene (LDPE)	Domestic	6.61%	:
2 (22)	International		-2.92%
Polypropylene (PP)	Domestic	5.57% ▲	:
	International	12.53%	
Acryl onitrile Buta diene Styrene (ABS)	Domestic	13.70%	:
2 (26)	International	10.54%	
Polystyrene (PS)	Domestic	14.59%	:
Rubber	Domestic	6.82%	
Currency Exchange			
Dollar	International	1.25%	
Pound	International	0.92%	
Euro	International	2.37%	
Yen	International		-2.12%

Iron & Steel

Iron Ore



	*Int'l	t'l *Dom	
Period	\$/tonne	Rs/t	onne
		65% & below	65% & above
Apr-21	168	4652	5936
May-21	216	5462	7089
Jun-21	220	6040	7589
Jul-21	198	6146	8047
Aug-21	148	6271	8124
Sep-21	120	5070	7286
Oct-21	116	4518	6733
Nov-21	84	4779	6721
Dec-21	96	4779	6721
Jan-22	114	4113	5667
Feb-22	120	4259	5874
Mar-22	134		
Apr-22	138		

Source: Crisil

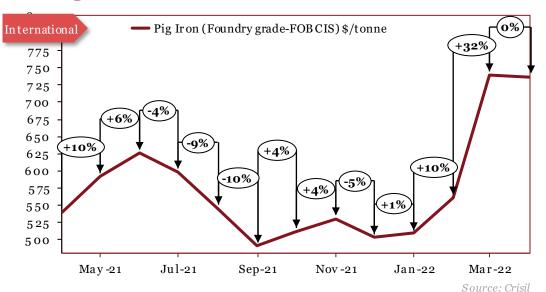
Dom estic 15,000 14,000 13,000 12,000 11,000 10,000 9,000 8,000 7,000 6,000 5,000 4,000 3,000 2,000	+7%) +11% +2%	+1% +2% +2%	-8%		-16% -14% +4% +4%	Prices not released by the source as on 18/05/22 Dec'21 data unavailable; assumed to be same as Nov'21
May	y-21 Ju	l-21 S	ep-21	Nov -21	Jan-22	Mar-22

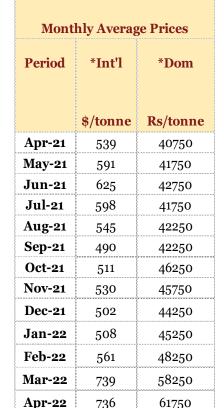
*The actual prices may vary depending on city, player, grade etc.

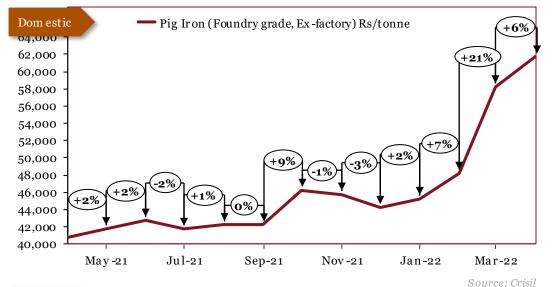
Outlook

In September, China's decision to cut steel production by 10% through the months of August-December continued to place the iron ore market in a surplus, and prices declined even more. In October, international prices remained unaffected. In November, international prices fell to their lowest levels in 18 months, after demand outlook for steel products and raw materials in China plummeted, owing to planned production cuts. In December, international prices underwent a correction due to a rise in stell mill margins and a recovery in Chinese steel production. In January, international prices continued to rise steeply due to an increase in operating and input (e.g., coking coal) costs, as well as increased demand caused by a rampup in Chinese infrastructure projects. In February, international prices continued to rally upwards due to renewed Chinese demand, alongside ramp up in operations in the infrastructure, construction and automobile sectors across the globe. In March, international prices continued to soar as expectations of policy support in China outweighed concerns of weaker demand amid lockdowns. In April, prices rose slightly as a rise in demand was offset by a fall in prices – amidst rising Covid cases in China – towards the end of the month.

Pig Iron





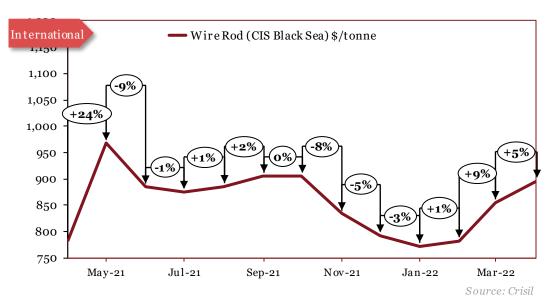


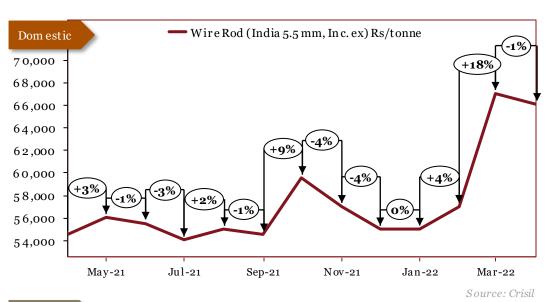
*The actual prices may vary depending on city, player, grade etc.

Outlook

In August, international prices fell in tandem with iron ore prices. Domestic prices remained comparatively stable. In September, international prices declined due to a decline of iron price indicators caused by a cut in China's steel supply. Domestic prices remained unaffected. In October, both international and domestic prices rose as a result of increasing production costs; prices of coking coal and metallurgical coke – an essential ingredient in blast furnace iron-making – have been soaring. In November, international prices increased amid bullishness from suppliers, primarily in the US. Domestic prices remained relatively unaffected. In December, both international and domestic prices fell as a result of low demand caused by soft markets during the holiday season. In January, domestic prices rose marginally in tandem with iron ore prices. International prices remained stable. In February, both international and domestic prices rose sharply in tandem with iron ore prices. In March, both international and domestic prices rose sharply due to disruptions in the supply chain – caused by geopolitical tensions – and China stimulus hopes, amid a surge in Covid-19 cases. In April, domestic prices continued to rise on account of a slight rise in demand, coupled with persistent supply disruptions. International prices remained stable.

Wire Rod





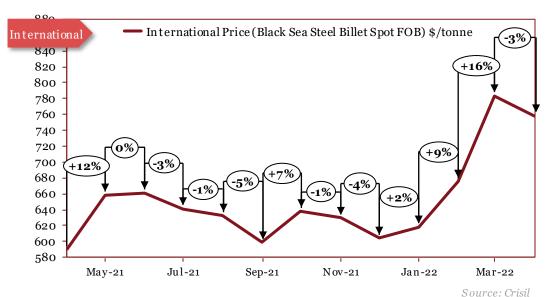
Monthly Average Prices			
Period	^*Int'l	*Dom	
	(\$/tonne)	(Rs/tonne)	
Apr-21	782	54494	
May-21	967	55994	
Jun-21	885	55494	
Jul-21	875	53994	
Aug-21	885	54994	
Sep-21	906	54494	
Oct-21	906	59494	
Nov-21	833	56994	
Dec-21	792	54994	
Jan-22	772	54994	
Feb-22	782	56994	
Mar-22	854	66994	
Apr-22	895	65994	

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

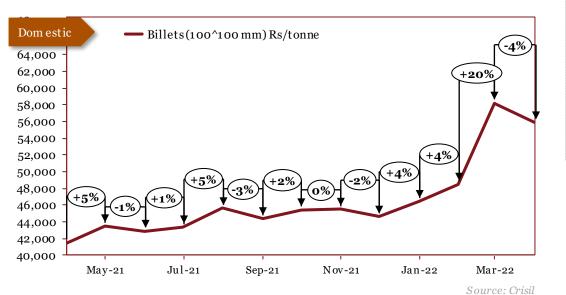
Outlook

In June, international price fell on the back of decreased demand from China and Southern Europe. Domestic prices remained stable. In August, a mid-month increase in transaction prices from various steelmakers drove prices slightly upwards. In September, production cuts in China caused a slight increase in international prices. Domestic prices slightly reduced on account of a market correction. In October, both international and domestic prices rose due to rising scrap and electricity costs, supported by positive market conditions. In November, both international and domestic prices fell in tandem with iron ore prices. In December, prices continued to slump as demand fell amid lower construction activity due to the Omicron variant. In January, domestic prices continued to fall amid an oversupply crisis. International prices remained stable. In February, domestic prices rose amidst a slight pick-up in demand, caused by strong consumption and limited imports, following a period of slow demand. International prices remained stable. In March, prices rose sharply due to high costs at mills, limited imports and availability concerns for buyers. In April, international prices continued to rise as a result of limited inventories at mills. Domestic prices fell slightly due to a drop in demand – caused by covid scares in China.

Steel Billets



Monthly Average Prices			
Period	^*Int'l	*Dom	
	(\$/tonne)	(Rs/tonne)	
Apr-21	590	41500	
May-21	658	43500	
Jun-21	661	42900	
Jul-21	641	43340	
Aug-21	633	45600	
Sep-21	599	44350	
Oct-21	638	45430	
Nov-21	630	45475	
Dec-21	604	44600	
Jan-22	618	46425	
Feb-22	675	48500	
Mar-22	784	58200	
Apr-22	758	55800	



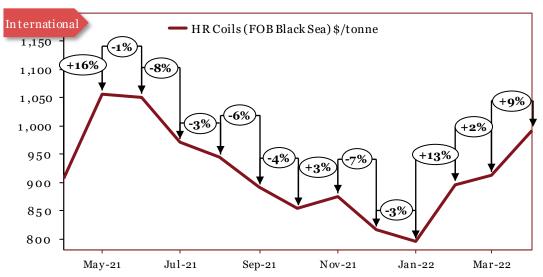
*The actual prices may vary depending on city, player, grade etc.

Outlook

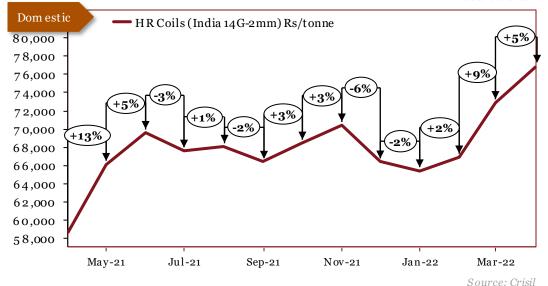
In September, international prices dipped due to a softening of demand. Domestic prices fell in tandem with international prices. In October, international prices rose on account of increasing scrap costs and reports of better power supply in China, along with solid performances by ferrous futures. Domestic prices slightly rose in tandem with international prices. In November, both domestic and international prices remained stable. In December, international prices fell due to a softening of demand amid reduced industrial and commercial activity. Domestic prices fell slightly less due to rising prices for directly reduced iron (DRI) and better finished long product demand in the first half of the month. In January, domestic prices increased on account of a rise in prices of DRI, the main raw material used for billet-making. International prices rose as demand kept outweighing supply throughout the month. In February, both international and domestic prices increased due to global logistics disruptions amid the conflict in Ukraine. In March, prices increased sharply due to uncertainty over supply of steel from China and Russia. In April, domestic prices fell due to subdued demand for finished steel from the construction sector. International prices decreased due to a fall in demand and lower scrap costs.

^International prices changed due to change in the grade

Hot-Rolled (HR) Coils







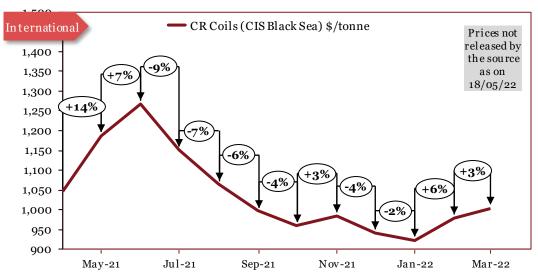
Monthly Average Prices			
Period	*Int'l	^*Dom	
	(\$/tonne)	(Rs/tonne)	
Apr-21	906	58550	
May-21	1055	66050	
Jun-21	1050	69550	
Jul-21	970	67550	
Aug-21	943	68050	
Sep-21	890	66350	
Oct-21	853	68350	
Nov-21	874	70350	
Dec-21	815	66350	
Jan-22	794	65350	
Feb-22	895	66850	
Mar-22	911	72850	
Apr-22	991	76850	

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

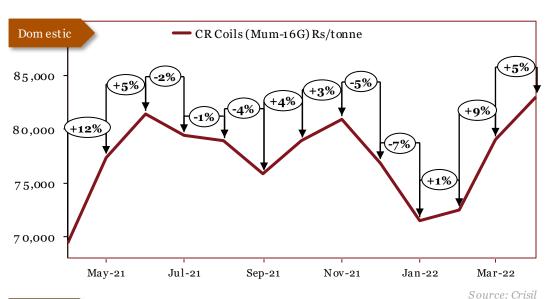
Outlook

In August, prices rallied back up marginally due to market forces and supply constraints. In September, international as well as domestic prices fell further as a result of growing automotive demand concerns. In October, international prices declined amid reduced end-user demand. Domestic prices surged as Mills raised their prices with demand increasing on active restocking by traders and a sharp increase in spot prices. In November, both international and domestic prices increased over growing concerns about production cuts in China, ahead of the Winter Olympics that are to be held there. In December, both domestic and international prices fell due to a seasonal slowdown of demand and weak consumption. In January, domestic prices fell owing to the government's decision to remove anti-dumping duty on HRC imports. International prices fell due to weak demand. In February, both international and domestic prices rose as steel mills raised their prices due to supply tightness. In March, both international and domestic prices rose amid Covid-19-imposed lockdowns in China, leading to a decrease in supply, as well as an increase in prices announced by European mills. In April, domestic prices continued to rise amid strong demand for HRC in the spot market. International prices rose due to supply disruptions caused by Covid lockdowns in China.

Cold-Rolled (CR) Coils



Source: Crisil



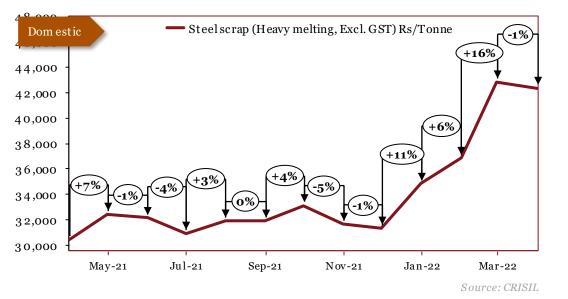
Monthly Average Prices				
Period	*Int'l	^*Dom		
	(\$/tonne)	(Rs/tonne)		
Apr-21	1046	69350		
May-21	1187	77350		
Jun-21	1267	81350		
Jul-21	1150	79350		
Aug-21	1064	78850		
Sep-21	996	75850		
Oct-21	959	78850		
Nov-21	984	80850		
Dec-21	941	76850		
Jan-22	923	71500		
Feb-22	978	72500		
Mar-22	1002	79000		
Apr-22		83000		

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

Outlook

In May, prices rose mirroring HR coil prices. In June, international as well as domestic prices rose in line with increasing flat steel prices. In July and August, international prices projected downwards due to a combination of correctional market forces and unfavourable Chinese duty rebates which halted South American imports. Domestic prices fell slightly due to lower demand levels. In September, prices fell due to thin trading liquidity amid lower demand. In October, both domestic and international prices fell in line with HRC prices, as international prices fell and domestic prices surged. In November, both international and domestic prices rose in tandem with HRC prices. In December, prices fell due to a fall in demand and low levels of industrial and commercial activity caused by lockdowns. In January, domestic prices fell owing to the government's decision to remove anti-dumping duty on CRC imports. International prices fell due to weak demand. In February, both international and domestic prices rose in tandem with HRC and steel prices. In March, international prices rose slightly, despite major supply chain disruptions — as buyers were reluctant to make new deals due to full credit lines. Domestic prices rose sharply on the back of an increase in raw material procurement costs. In April, domestic prices rose in tandem with HRC prices.

Steel Scrap (Heavy Melting)



Monthly Average Prices			
Period *Dom			
	(Rs/Tonne)		
Apr-21	30400		
May-21	32400		
Jun-21 32100			
Jul-21	30900		
Aug-21	31900		
Sep-21	31900		
Oct-21	33100		
Nov-21	31600		
Dec-21	31300		
Jan-22	34800		
Feb-22	36800		
Mar-22	42800		

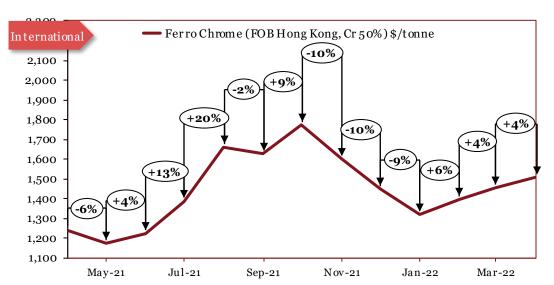
*The actual prices may vary depending on city, player, grade etc.

Outlook

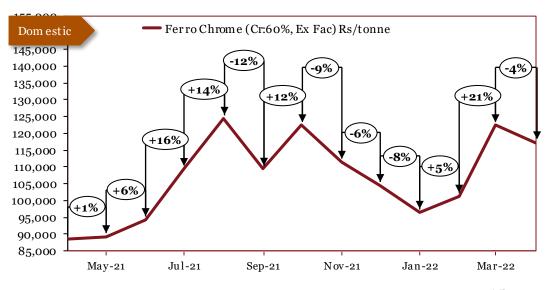
In March, prices rose in conjunction with steel prices. In April, domestic scrap prices increased, owing to rise in global steel prices. In May, domestic prices increased in line with global and domestic steel prices. In June, prices fell marginally due to better availability. In August, steel prices rose on account of a decline in China's steel supply. In September, prices remained unaffected. In October, prices increased as growing desperation for steel scrap imports at steel mills led to a sellers' market for bulk and container cargoes, along with a rise in Turkish prices and growing bullishness amongst American suppliers. In November, prices decreased on account of weak market sentiment, and an overall slowdown of growth in demand due to hot metal being more attractive to mills. In December, prices remained relatively unchanged as supply tightness was offset by a drop in demand due to a seasonal slowdown and concerns over the Omicron variant. In January and February, prices rose drastically due to a combinations of factors; a strong surge in demand amid normalization post COVID, and global logistics problems due to geo-political turmoil. In March, prices rose in tandem with steel prices. In April, prices fell slightly due to weaker demand from domestic steel mills and weaker prices into Turkey, which is a key buyer.

Ferro-alloys

Ferro chrome



Source: Crisil



Monthly Average Prices			
Period	*Int'l	*Dom	
	(\$/tonne)	(Rs/tonne)	
Apr-21	1241	88400	
May-21	1173	89297	
Jun-21	1224	94400	
Jul-21	1387	109400	
Aug-21	1661	124400	
Sep-21	1626	109400	
Oct-21	1772	122400	
Nov-21	1601	111400	
Dec-21	1447	104400	
Jan-22	1318	96400	
Feb-22	1395	101400	
Mar-22	1455	122400	
Apr-22	1507	117200	

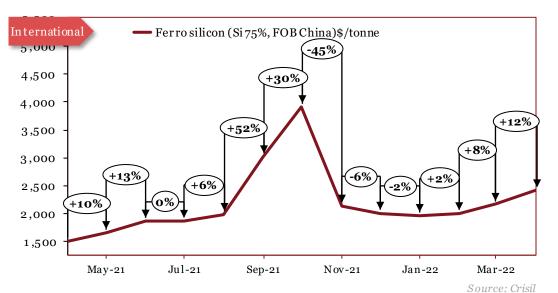
*The actual prices may vary depending on city, player, grade etc.

Source: Crisil

Outlook

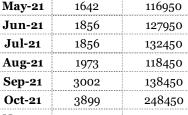
In September, domestic prices fell heavily due to production cuts. International prices weren't impacted as much, as China's electricity constraints caused a leap in prices towards the end of the month. In October, international prices continued to set new highs in response to tight supply and strong demand, along with rising electricity prices. Domestic prices followed suit. In November, both international and domestic prices fell by around 10%, as improved electricity supply in most parts of China forced sellers to cut their offers. In December, prices continued to drop due to a softening of demand, coupled with a persistent rise in supply and ample inventories at steel mills, leading to a slash in tender prices. In January, prices continued to fall amid rising supply and weak, aided by an underperforming downstream sector. In February, both international and domestic prices increased due to rising chrome ore prices, which were driven by lower inventories in China, strong consumption and a bright downstream outlook. In March, prices increased as tender prices were raised due to chrome ore prices reaching a four-year high. In April, international prices rose due to supply constraints caused by operational disruptions in South Africa and the warin Ukraine. Domestic prices decreased on a ccount of a fall in local demand.

Ferro silicon





Period



Monthly Average Prices

*Dom

*Int'l

 Sep-21
 3002
 138450

 Oct-21
 3899
 248450

 Nov-21
 2125
 235450

 Dec-21
 1994
 190450

 Jan-22
 1953
 169450

 Jan-22
 1953
 169450

 Feb-22
 1994
 167450

 Mar-22
 2153
 212450

 Apr-22
 2408
 192450

Dom estic		— Ferro silico	on (Si 70%, In d		tonne	
320,000			Γ	-5%)		
300,000			+79%			r(-9%)
280,000 -			1/9/0	(-19%)		
260,000 -			💆		(+27%
240,000					(a)	12//0
220,000		(+17%		-11%	🐧
200,000		_ 1		\	(-1%)	
180,000 -	(+9%)	(-11%)	/		1 170,	
ىلى 160,000	20%	(+4%)(-1176)	1/			
140,000	120%	,				
120,000 -	•					
100,000						
80,000 <u> </u>			1	<u> </u>		
,	May-21	Jul-21	Sep-21	Nov-21	Jan-22	Mar-22

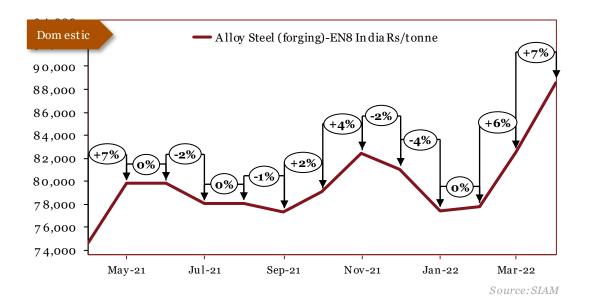
Source: Crisil

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

Outlook

In October, prices continued to shatter multi-year highs on the back of rising electricity prices – amidst power cuts – along with rising futures prices and increasing Chinese price of Magnesium – the key consumer of 75% ferro-silicon. In November, international prices fell by almost 50%, on account of weakened steel demand coupled with panic selling following the historic rise in previous months. Domestic prices fell in line with international prices. In December, prices continued to decrease sharply as a result of year end sell-offs and an extensive weakening of demand both in the domestic market as well as overseas. In January, domestic prices continued to spiral downwards due to a lull in demand. International prices remained relatively stable as higher costs of semi-coke pushed manufacturers to increase prices towards the latter half of the month. In February, international prices rose marginally due to a slight increase in demand after a period of slow demand. Domestic prices remained stable. In March, prices rose sharply due to disruptions in the supply chain, caused by the ongoing conflict in Ukraine. In April, international prices increased due to supply disruptions caused by severe flooding in South Africa. Domestic prices fell as a result of a drop in demand amid Covid scares in China.

EN8 Alloy Steel (Forging)



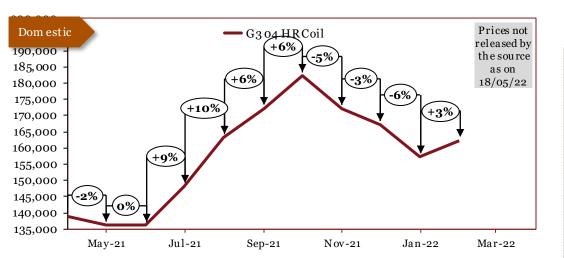
Monthly Average Prices		
Period	*Dom (Rs/tonne)	
Apr-21	74600	
May-21	79750	
Jun-21	79750	
Jul-21	78000	
Aug-21	78000	
Sep-21	77250	
Oct-21	79000	
Nov-21	82375	
Dec-21	81000	
Jan-22	77375	
Feb-22	77750	
Mar-22	82500	
Apr-22	88600	

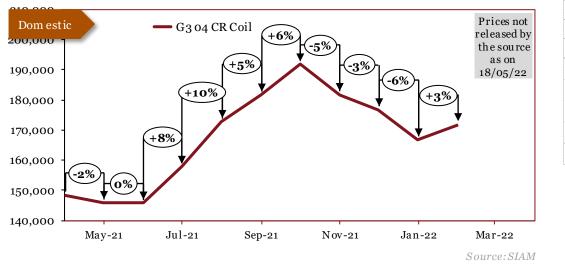
*The actual prices may vary depending on city, player, grade etc.

Outlook

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. In June, domestic prices remained stable. In July, prices fell on account of a market correction. In August, prices remained unaffected. In September, prices slightly dipped on account of a softening in demand. In October, prices rose in accordance with rising steel prices. In November, prices rose due to supply constraints. In December, prices fell in accordance with steel prices, amid rising inventories at steel mills and a softening of demand. In January, prices fell in conjugation with stainless steel prices. In February, prices remained stable. In March, prices increase in tandem with steel prices. In April, prices continued to rise amid supply disruptions caused by the situations in South Africa and Ukraine.

Stainless Steel





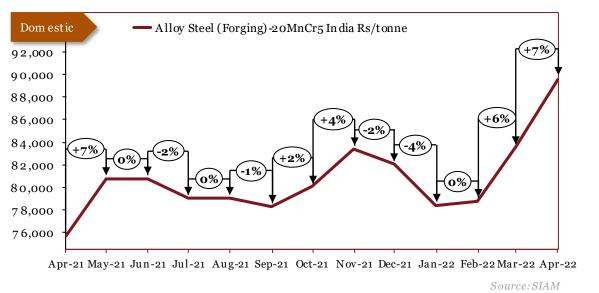
Monthly Domestic Average Prices				
	*G304 HR	*G304 CR		
Period	(Rs/tonne)	(Rs/tonne)		
Apr-21	138700	148250		
May-21	136200	145750		
Jun-21	136200	145750		
Jul-21	148200	157750		
Aug-21	163200	172750		
Sep-21	172200	181750		
Oct-21	182200	191750		
Nov-21	172200	181750		
Dec-21	167200	176750		
Jan-22	157200	166750		
Feb-22	162200	171750		
Mar-22				
Apr-22				

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

Outlook

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+9. In June, prices remained unaffected. In July, a decrease in China's steel supply resulted in a rise in prices. In August, prices continued to soar due to supply-related inflationary pressures. In September, the continued cuts in China's steel production — caused by energy consumption requirements — meant that prices were pushed even further up. In October, prices continued to soar as steel mills hiked prices on the back of rising power costs, despite a weakening of demand owing to the same. In November prices fell owing to a weakening of demand, as the Chinese real estate sector remained depressed in the light of the government's policy stance on rebalancing and environmental protection. In December, prices fell slightly further on account of concerns over the Omicron variant. In January, prices continued to decrease amid oversupply and weak demand. In February, prices rose marginally due to missing volumes from Russia and Ukraine, coupled with rising production costs.

20MnCr5 Alloy Steel (Forging)



Monthly Average Prices		
*Dom Period (Rs/tonne)		
Apr-21	75600	
May-21	80750	
Jun-21	80750	
Jul-21	79000	
Aug-21	79000	
Sep-21	78250	
Oct-21	80000	
Nov-21	83375	
Dec-21	82000	
Jan-22	78375	
Feb-22	78750	
Mar-22 83500		
Apr-22	89600	

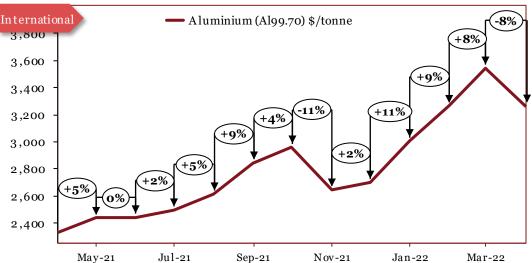
*The actual prices may vary depending on city, player, grade etc.

Outlook

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. In June, prices stayed stable in line with other steel alloys. In July, prices fell due to an increase in production. In August, prices remained stable. In September, prices slightly dipped due to a softening of demand. In October, prices rose amid a worsening of the power supply crisis. In November, prices rose amid speculations of steel production cuts in China. In December, prices fell in accordance with steel prices and a weakening of demand. In January, prices dropped in accordance with stainless steel prices. In February, prices rose on account of supply disruptions caused by severe flooding in South Africa and the warin Ukraine.

Base Metals

Aluminium







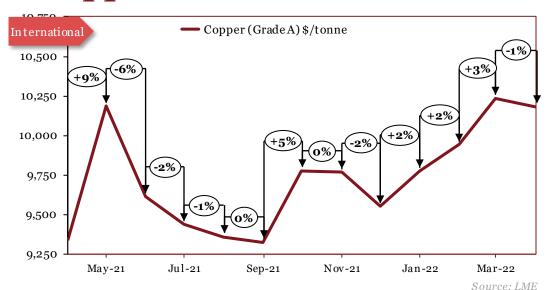
Monthly Average Prices				
	*Int'l	*Dom		
Period	(\$/tonne)	(Rs/kg)		
Apr-21	2324	188		
May-21	2434	194		
Jun-21	2439	193		
Jul-21	2492	199		
Aug-21	2611	208		
Sep-21	2839	227		
Oct-21	2955	238		
Nov-21	2641	211		
Dec-21	2695	218		
Jan-22	3003	238		
Feb-22	3260	261		
Mar-22	3537	290		
Apr-22	3256	268		

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

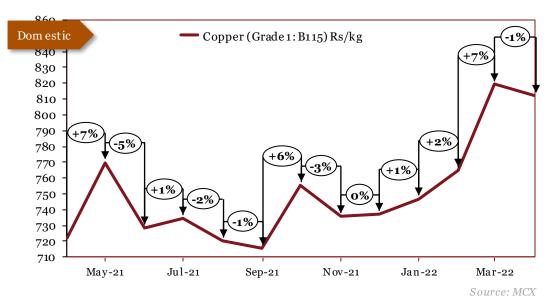
Outlook

In August, a supply-side bottleneck in China coupled with increasing Chinese imports of Aluminium resulted in a steep rise in prices. In September, both domestic and international prices rose by almost 10%, as soaring energy prices resulted in an increase in production costs. In October, both international and domestic prices continued to increase as LME Aluminium stocks hit their lowest levels since March 2020, provoking highly bullish market sentiment. This was aided by China's power restrictions. In November, both international and domestic prices fell by more than 10% due to year-end sell-offs and a backwardation effect n the London Metal Exchange, further aided by growing concerns over the Omicron variant. In December, prices rose slightly due to rising energy costs and low inventory volumes. In January, international prices fell drastically amid a seasonal drop in demand, particularly due to the Lunar New Year. Domestic prices rose due to supply concerns and growing geo-political tensions. In February, prices continued to rise on the back of tight supply and geo-political tensions. In March, prices rose sharply as Primary Foundry Alloy (PFA) premiums reached all-time highs in the United States and Europe. In April, prices fell as various smelters in China ramped up their production, thus leading to a rise in supply.

Copper





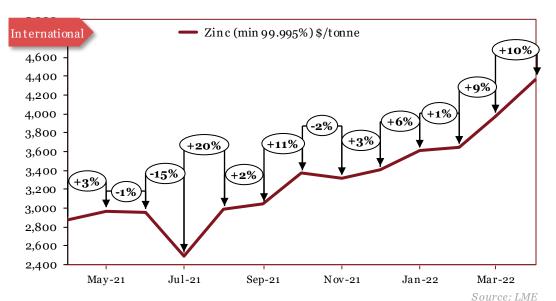


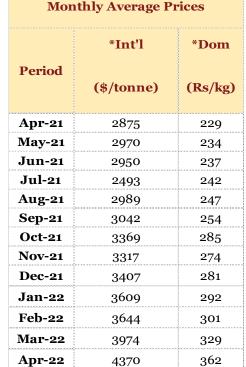
*The actual prices may vary depending on city, player, grade etc.

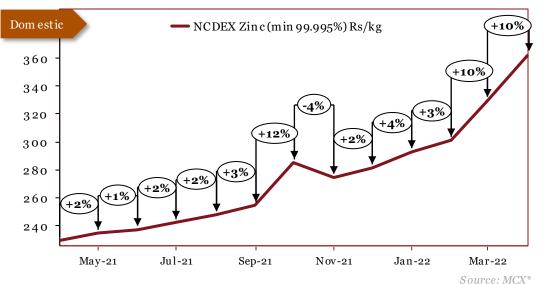
Outlook

In May, international as well as domestic prices rose, due to supply disruptions in South America. In June, international prices dropped due to excessive stock amidst reduced demand from China. Domestic prices followed suit. In July and August, international prices fell as a result of China selling 30,000 tonnes of Copper from its reserves. In September, both international and domestic prices remained largely unaffected. In October, both domestic and international prices fell as reports indicated copper production fell almost 10% Y-o-Y. In November, domestic prices decreased slightly as a result of a fractional drop in copper concentrate processing charges. International prices remained stable. In December, international prices rose due to a surge in supply during the latter half of the month, coupled with a seasonal slowdown of demand and trading activity. Domestic prices remained stable. In January, both international and domestic prices increased marginally amid growing geo-political tensions, aided by supply disruptions. In February, prices rose marginally yet again due to a rise in copper concentrate processing charges. In March, prices rose due to supply tightness caused by geo-political tensions. In April, both international and domestic prices fell due to low demand in China, caused by Covid lockdowns.

Zinc





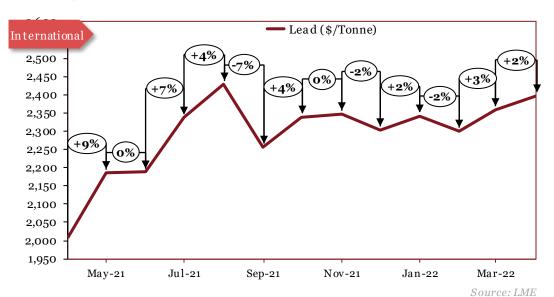


*The actual prices may vary depending on city, player, grade etc.

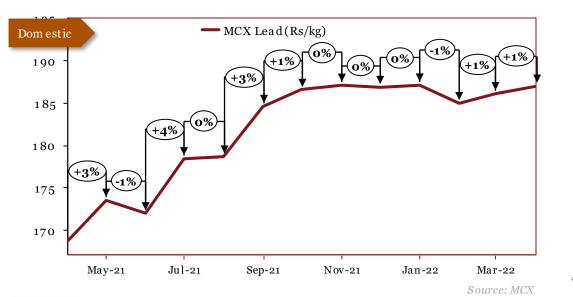
Outlook

Domestic prices increased marginally. In July, prices saw a decline on account of supply exceeding demand. In August, prices rose back up due to strong Chinese demand and shrinking global inventories. In September, prices rose slightly on account of rising input costs. In October, both domestic and international prices continued to post massive gains as reports indicate that Nyrstar - one of Europe and the world's major zinc producers - is set to cut production by up to 50% at its three European smelters in response to the surge in energy prices. In November, both international and domestic prices fell amid an uncertain macroecon omic picture, caused by the advent of the Omicron variant of COV ID-19. In December, prices increased slightly on account of persistently high energy prices and low volumes of inventory. In January, both international and domestic prices continued their upward trend as supply tightness coupled with geo-political tensions and growing demand pushed prices up. In February, prices rose marginally due to supply tightness caused by the conflict in Ukraine. In March, prices rose sharply as disruptions in the supply chain – caused by the conflict in Ukraine – have been resulting in price hikes. In April, both international and domestic prices rose sharply due to rising interest rates, inflation and energy costs.

Lead



Monthly Average Prices		
	*Int'l	*Dom
Period	(\$/tonne)	(Rs/kg)
Apr-21	2006	169
May-21	2186	173
Jun-21	2189	172
Jul-21	2337	178
Aug-21	2429	179
Sep-21	2257	185
Oct-21	2339	186
Nov-21	2347	187
Dec-21	2304	187
Jan-22	2342	187
Feb-22	2299	185
Mar-22	2358	186
Apr-22	2396	187

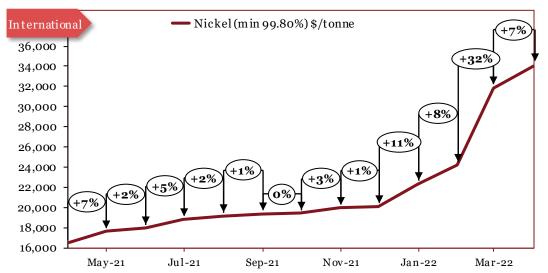


*The actual prices may vary depending on city, player, grade etc.

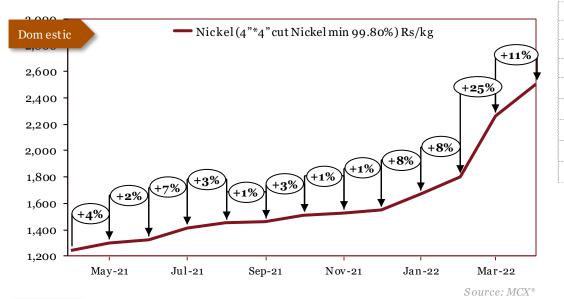
Outlook

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. In June, international prices remained stable. Domestic prices saw a minimal dip due improvement in supply. In August, international prices rose as a result of declining supply. Domestic prices remained stable. In September, international prices fell sharply due to a steep fall in demand. Domestic prices slightly increased due to soaring energy costs. In October, international prices rose on account of tight supply. Domestic prices remained largely unaffected. In November, prices remained stable as a growth in the lithium-ion battery industry offset the negative impact caused by the Omicron variant. In December, prices remained relatively stable. In January, international prices rose marginally on weak supply. Domestic prices remained stable. In February, international prices dipped marginally due to a drop in demand. Domestic prices remained stable. In March, prices remained stable. In April, prices remained relatively stable.

Nickel







Monthly Average Prices

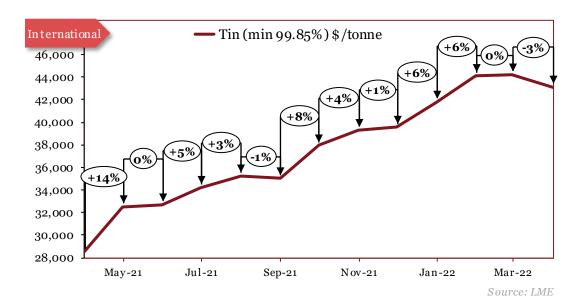
	*Int'l	*Dom
Period	(\$/tonne)	(Rs/kg)
Apr-21	16481	1245
May-21	17605	1298
Jun-21	17943	1326
Jul-21	18817	1414
Aug-21	19160	1450
Sep-21	19394	1462
Oct-21	19416	1512
Nov-21	19958	1529
Dec-21	20065	1549
Jan-22	22319	1671
Feb-22	24173	1804
Mar-22	31840	2261
Apr-22	34098	2504

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

Outlook

In June, international prices saw a spike due to demand from USA, Europe and China coupled with demand for EV batteries. Dome stic prices mirrored global trends. In July and August, persistent supply disruptions coupled with increasing demand continued to drive prices up. In September, both international and domestic prices remained relatively constant under stable market conditions. In October, international prices remained largely unaffected. Domestic prices rose on account of power supply concerns. In November, international prices increased by 4% - despite resistance from uncertainties over the Omicron variant – due to strengthening futures prices and tight supply conditions globally. Domestic prices followed suit. In December, prices rose slightly due to rising input prices and strong year-end demand for base metals. In January, Nickel prices rose to their highest levels since 2011, owing to declining inventories and strengthening demand for nickel batteries. In February, both international and domestic prices rose due to an increase in cost of raw materials like mixed hy droxide precipitates and nickel briquettes. In March, prices soared amid supply disruptions, caused by the conflict in Ukraine and lockdowns in China. In April, prices continued to rise amid supply disruptions and higher energy and raw material costs.

Tin



Monthly Average Prices		
Period	*Int'l (\$/tonne)	
Apr-21	28508	
May-21	32524	
Jun-21	32678	
Jul-21	34183	
Aug-21	35253	
Sep-21	35034	
Oct-21	37942	
Nov-21	39307	
Dec-21	39551	
Jan-22	41790	
Feb-22 44104 Mar-22 44221		
		Apr-22

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

Outlook

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. In June, global prices remained steady. In July and August, persistent supply disruptions coupled with increasing demand continued to drive prices up. In September, prices remained largely unaffected. In October, prices surged despite low demand due to continued tight supply, caused by power and supply issues. In November, prices continued to trend upwards as a result of year-long supply disruptions and strong economic data towards the end of the month. In December, prices remained stable. In January, prices reached an all-time high as a result of persistent supply shortage and supportive market dynamics all across the spectrum. In February, prices continue to trend upwards as a lack of Indonesian exports led to a supply crunch. In March, prices remained stable. In April, prices fell amid a slowdown in demand caused by the Covid lockdowns in China.

Precious Metals

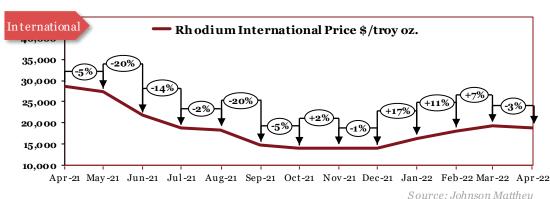
Period

Pt

Precious Metals







Apr-21 1215 2782 28737 May-21 1221 2896 27325 Jun-21 1133 2736 21752 Jul-21 18781 1094 2744 Aug-21 1016 18417 2550 Sep-21 982 14692 2137 Oct-21 1025 2030 13933 Nov-21 1043 2024 14157 Dec-21 1834 14031 954 Jan-22 998 2025 16422 Feb-22 2360 18183 1056 Mar-22 1054 2636 19402

Monthly Average Prices (\$/Oz)

Pd

Rh

18858

Apr-22

974

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

2364

Outlook

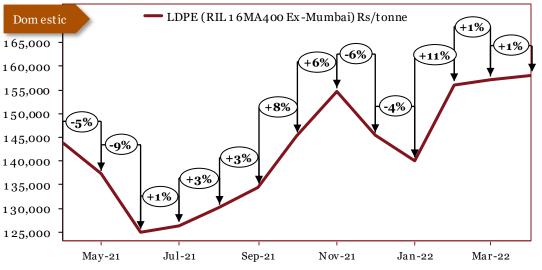
In October, prices of Palladium and Rhodium continued to fall amid the ongoing semiconductor shortages - which induced a lack of dem and. Platinum's price rose slightly due to supply tightness. In November, Platinum and Palladium prices increased marginally as a result of a recent increase in demand for precious metals in smelting circuit boards onto cell phones. Palladium prices remained stable. In December, prices decreased across all 3 precious metals due to a significant drop in demand, as commercial and industrial activity declined following concerns over the Omicron variant. In January, prices rose drastically due to a marginal rise in demand post the holiday season, cou pled with geo-political tensions globally. In February, prices of all precious metals rose drastically due to supply tightness, caused by geo-political conflicts, and renewed demand. In March, prices of palladium and rhodium increased sharply due to sustained supply tightness caused by the conflict in Ukraine, alongside recent lockdowns in China amid a surge in Covid-19 cases. In April, prices of all 3 precious metals fell sharply due to a steep decrease in demand – amid Covid scares in China – following a period of sustained growth.

Polymers & Rubber

Low density polyethylene (LDPE)



Source: Crisil



Monthly Average Prices				
Period	*Int'l	*Dom		
	(\$/tonne)	(Rs/tonne)		
Apr-21	962	143661		
May-21	905	137145		
Jun-21	870	124861		
Jul-21	893	126218		
Aug-21	927	129954		
Sep-21	927	134406		
Oct-21	973	145100		
Nov-21	985	154494		
Dec-21	950	145236		
Jan-22	939	139986		
Feb-22	973	155986		
Mar-22	1019	157028		
Apr-22		158026		

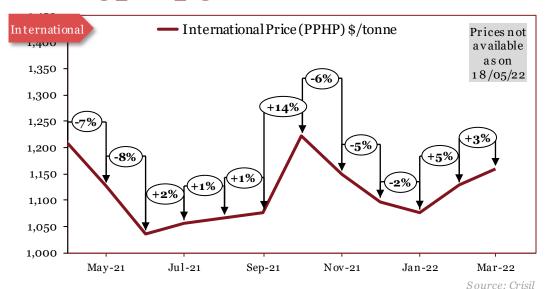
Source: Reliance Industries Ltd.

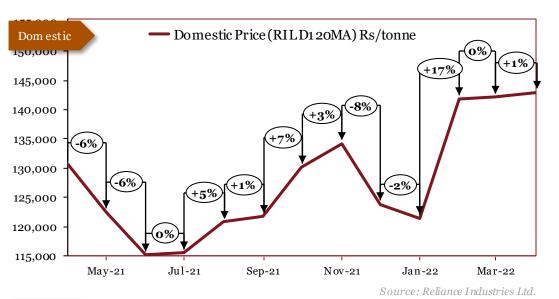
*The actual prices may vary depending on city, player, grade etc.

Outlook

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. In June, domestic prices fell further due to ease in supply tightness and continued demand from consumer industries. In July, both domestic and international prices rose in tandem with rising crude oil prices. In August, Reliance Industries Limited arbitrarily raised domestic prices, on the back of strong demand. In September, prices rose due to rising oil prices. In October, both domestic and international prices increased due to high energy prices, resulting in tight supply. In November, domestic prices continued their rise to record-highs amid concerns over a shortage in domestic supply, coupled with import disruptions. In December, domestic prices fell considerably, owing to a fall in demand and lower crude oil prices. In January, domestic prices continued to drop due to supply of ethylene (a key raw material in the synthesis of LDPE) outweighing demand. In February, prices rose by more than 10% due to a rise in crude oil prices coupled with the impact of the ongoing conflict in Ukraine. In March, prices increased slightly, primarily due to a 25% hike in crude oil prices. In April, domestic prices remained relatively stable.

Polypropylene (PP)





Monthly Average Prices				
Period	*Int'l	*Dom		
	(\$/tonne)	(Rs/tonne)		
Apr-21	1208	130673		
May-21	1127	122586		
Jun-21	1035	115206		
Jul-21	1056	115581		
Aug-21	1066	120813		
Sep-21	1076	121756		
Oct-21	1221	130200		
Nov-21	1149	134236		
Dec-21	1097	123845		
Jan-22	1076	121485		
Feb-22	1128	141919		
Mar-22	1159	142179		
Apr-22		142968		

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

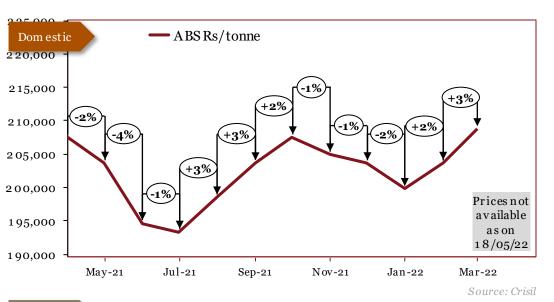
Outlook

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. In June, prices fell in line with LDPE. In July, international prices rose slightly due to higher crude oil prices whereas domestic prices remained stable. In August, domestic prices moved upwards due to increased demand for PP as a raw material in manufacturing Personal Protective Equipment (PPE). In October, prices rose in tandem with the steep rise in crude oil prices, and sustained levels of high energy prices. In November, domestic prices rose on account of a shortage in domestic supply and import disruptions. In December, prices decreased as demand significantly fell amid concerns over the Omicron variant. This was aided by a fall in crude oil prices. In January, domestic prices dipped marginally due to a supply-demand imbalance of poly propylene resins. In February, prices rose sharply due to a rise in crude oil prices. In March, domestic prices remained stable. International prices In April, domestic prices remained relatively stable.

Acrylonitrile Butadiene Styrene (ABS)





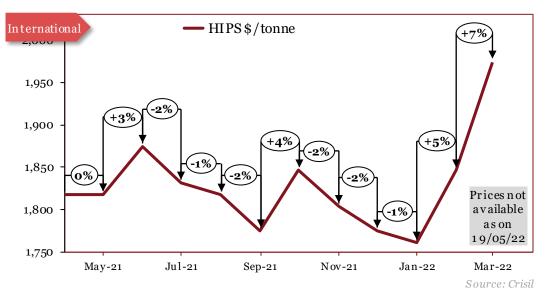


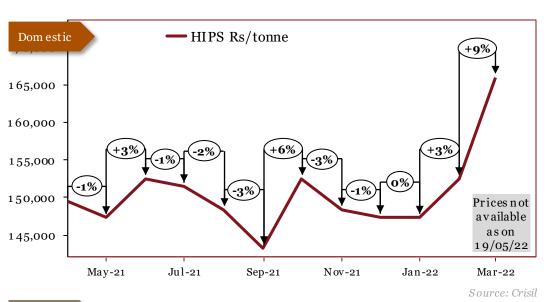
Monthly Average Prices				
Period	*Int'l	*Dom		
	(\$/tonne)	(Rs/tonne)		
Apr-21	2567	207360		
May-21	2513	203520		
Jun-21	2390	194560		
Jul-21	2354	193280		
Aug-21	2443	198400		
Sep-21	2513	203520		
Oct-21	2513	207360		
Nov-21	2496	204800		
Dec-21	2460	203520		
Jan-22	2425	199680		
Feb-22	2460	203520		
Mar-22	2478	208640		
Apr-22				

Outlook

In March and April, international prices rose on the back of increased demand from consumption in appliances and consumer goods. Do mestic prices followed suit. In May, international as well as domestic prices dropped due to contracted margins which was a result of increase in raw material prices of styrene. In July, international prices marginally fell due to lower demand. Do mestic prices followed suit. In August and September, both international and domestic prices increased due to rising oil prices. In October, domestic prices rose on account of high energy prices and a rise in crude oil prices. International prices remained stable. In November and December, prices remained relatively stable, dipping marginally due to weak demand amid concerns over the Omicron variant. In January, prices dipped marginally due to a seasonal slowdown in demand. In February, prices rose in tandem with crude oil prices. In March, prices continued to rise due to a steep increase in crude oil prices.

High Impact Polystyrene (HIPS)



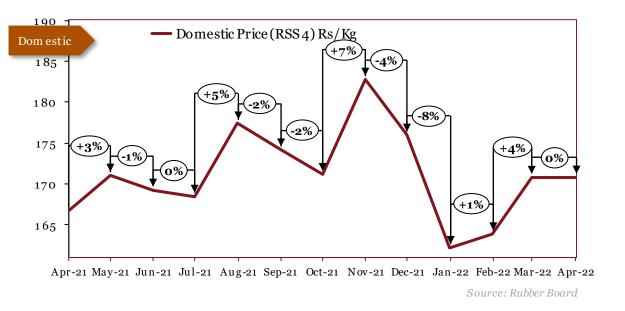


Monthly Average Prices			
Period	*Int'l	*Dom	
Period	(\$/tonne)	(Rs/tonne)	
Apr-21	1818	149350	
May-21	1818	147290	
Jun-21	1874	152440	
Jul-21	1832	151410	
Aug-21	1818	148320	
Sep-21	1775	143170	
Oct-21	1846	152440	
Nov-21	1803	148320	
Dec-21	1775	147290	
Jan-22	1761	147290	
Feb-22	1846	152440	
Mar-22	1974	165830	
Apr-22			

Outlook

In April, international prices declined due to subdued demand, while domestic prices rose marginally. In May, international prices remained stable, while domestic prices dipped in line with ABS. In July, both domestic and international prices fell in accordance with raw material and ABS prices. In August, domestic prices fell due to a lack of demand. International prices remained relatively stable. In September, both international as well as domestic prices dipped slightly due to a lack of demand. In October, prices increased due to sustained levels of high energy costs and a steep rise in crude oil prices. In November, prices fell slightly due to a softening of demand as well as a decline in crude oil prices. In December, international prices fell marginally due to a drop in demand, caused by a decline in industrial and commercial activity. Domestic prices remained stable. In January, prices continued to dip in tandem with prices of other polymers. In February, prices rose slightly due to an increase in crude oil prices. In March, prices continued to rise steeply along with crude oil prices.

Rubber



Monthly Average Prices				
Period	*Dom			
	(Rs/kg)			
Apr-21	167			
May-21	171			
Jun-21	169			
Jul-21	168			
Aug-21	177			
Sep-21	174			
Oct-21	171			
Nov-21	183			
Dec-21	176			
Jan-22	162			
Feb-22	164			
Mar-22	171			
Apr-22	171			

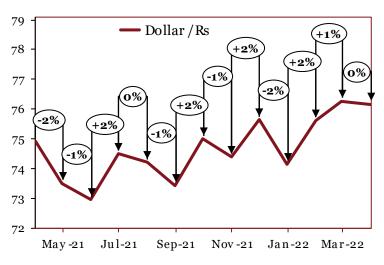
*The actual prices may vary depending on city, player, grade etc.

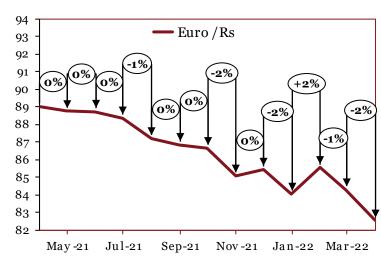
Outlook

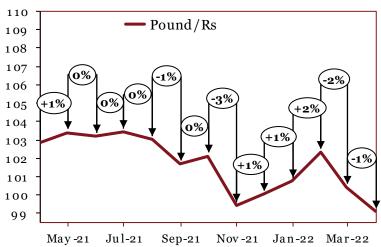
In April, domestic rubber prices remained unchanged. In May, prices rose on the back fall in production in Kerala due to the Covid-19 pandemic. In June, prices dipped marginally due to lower demand from automotive and rubber gloves manufacturing players. In July, prices continued to gradually fall as rubber production started to bounce back to pre-pandemic levels. In August, prices increased due to seasonal supply disruptions. In September, prices fell marginally due to soft demand, caused by lower exports to China. In October, prices continued to slip as demand from the automobile industry slowed down, owing to the semiconductor shortage. In November, prices continued to trend upwards due to disruptions in the global supply-chain and in imports from other countries, with a shortage of containers – owing to the second wave of COVID-19 – causing an increase in domestic demand. In December, prices decreased due to a seasonal downturn in demand, aided by a slowdown in commercial and industrial activity. In January, prices fell sharply due to lower demand for rubber in the manufacturing of tires. In February, prices remained stable. In March, prices rose due to sluggish production, import hurdles and rising crude oil prices. In April, prices remained stable.

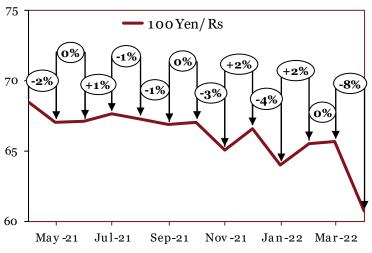
Appendices

Forex Movement





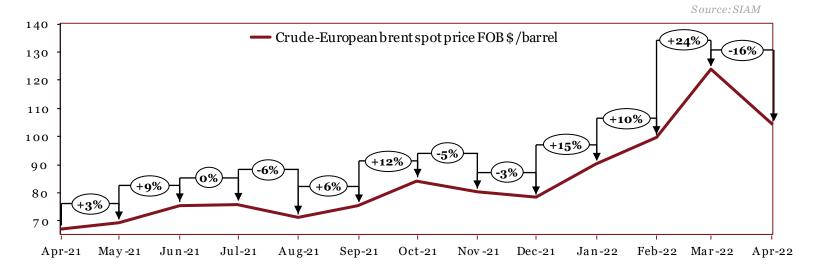




Source: SIAM

	Monthly Average Prices (Rs)												
	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-	Apr-22
\$	75	73	73	74	74	73	75	74	76	74	76	76	76
£	103	103	103	103	103	102	102	99	100	101	102	100	99
€	89	89	89	88	87	87	87	85	85	84	86	84	83
¥	68	67	67	68	67	67	67	65	67	64	66	66	61

Crude Oil



Monthly Average Prices (\$/barrel)												
Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22
67	69	75	76	71	75	84	80	78	90	99	124	104

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 Previously: Bloomberg Black Sea Steel Billet Spot FOB	Crisil -100^100 mm (Avg. prices collated from 2-3 locations)
Hot-rolled coils	Crisil -FOB Black Sea	Crisil - 14G 2mm (Avg. prices collated from 2-3 locations)
Cold-rolled coils	Crisil -(CIS) FOB Black Sea	Crisil - Mumbai 16G (Avg. prices collated from 2-3 locations)
Steel Scrap	NA	Crisil - Heavy melting (excl. GST)
EN 8	NA	PwC Research -EN8 Alloy forging
20MnCr5	NA	PwC Research -Alloy forging
Ferro 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	LME -Primary aluminium with impurities no greater than the chemical composition of one of the registered designations: •P1020A in the North American and International Registration Record entitled "International Designations and Chemical Composition Limits for Unalloyed Aluminium" (revised March 2007) •Al99.70 in the GB/T 1196-2008 Standard entitled "Unalloyed aluminium ingots for remelting"	NCDEX, MCX (July'19 onwards) -Primary aluminium 99.7% purity (minimum) form: ingots, T-bars,				
Copper	LME -Grade A copper must conform to the chemical composition of one of the following standards: •BS EN 1978:1998 - Cu-CATH-1 •GB/T 467-2010 - Cu-CATH-1 •ASTM B115-10 - cathode Grade 1	MCX - Grade 1 electrolytic copper as per B115 specification				
Zinc	LME -Special high-grade zinc of 99.995% purity (minimum) must conform to the chemical composition of one of the following standards: •BS EN 1179:2003 - 99.995% grade •ISO 752:2004 - ZN-1 grade •ASTM B6-12 - LME grade •GB/T 470-2008 - Zn99.995 grade	NCDEX, MCX (July'19 onwards) - Zinc of 99.995% minimum purity. Zinc must conform with the 99.995% graded chemical composition of BS EN 1179:1996 Standard entitled "Zinc and Zinc alloys primary Zinc" Form: ingots				
Lead	LME - Lead of 99.97% purity (minimum) conforming to BS EN 12659:1999 - GB/T 469/2005	MCX - Lead ingots with minimum purity of 99.97%				

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	Johnson Matthey						
Palladium	- Metal in sponge form with minimum purities of 99.95% for platinum and palladium, and 99.9% for rhodium						
Rhodium							
Low density polyethylene (LDPE)	Crisil - International price (C&F FEA) \$/tonne	RIL -16MA400 grade					
Polypropylene (PP)	Crisil - International Price (PPHP) \$/tonne	RIL -D120MA grade					
Acrylonitrile Butadiene Styrene (ABS)	Crisil - International price (C&F FEA) \$/tonne	Crisil - Landed Cost Rs/tonne					
High Impact Polystyrene (HIPS)	Crisil - International price \$/tonne	Crisil - 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)						



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