www.pwc.com

Commodity price monitor May-22

Prepared for ACMA

Strictly private and confidential

May 2022





Contents

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

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

13	Aluminium	23
14	Copper	24
15	Zinc	25
16	Lead	26
17	Nickel	27
18	Tin	28
Preciou	s Metals	29
19	Precious Metals	30
Polyme	rs & Rubber	31
20	Low density polyethylene (LDPE)	32
21	Polypropylene (PP)	33
22	Acrylonitrile Butadiene Styrene (ABS)	34
23	High Impact Polystyrene (HIPS)	35
24	Rubber	36
Append	ices	3 7
25	Forex Movement	38

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

26	Crude Oil	39
27	Commodity Specifications	40

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 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 s teel	Domestic		-7 .01% V
	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%	
5	International		-2.52% V
Ferro chrome	Domestic	1.08%	
	International	10.55%	
Ferro silicon	Domestic	18.32% ▲	

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

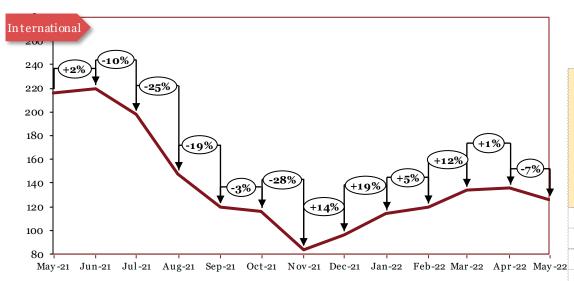
Calendar Year 2022: Qvs. Qupdate

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%	
Lood	International	5.28% ▲	
Lead	Domestic	4.18%	
Ni akal	International		-1.60%
Nickel	Domestic		-0.03%
 -	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%	
	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	9/	-2.12%

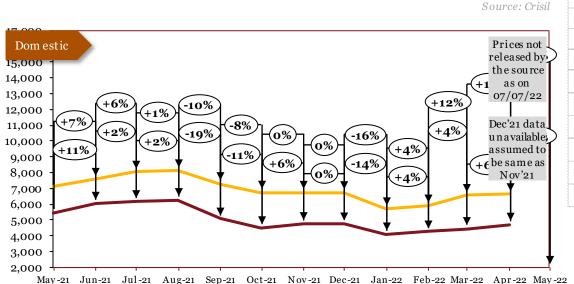
Iron & Steel

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

Iron Ore



	*Int'l	*D	om
Period	\$/tonne	Rs/tonne	
		65% & below	65% & above
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	4447	6579
Apr-22	136	4696	6632
May-22	126		

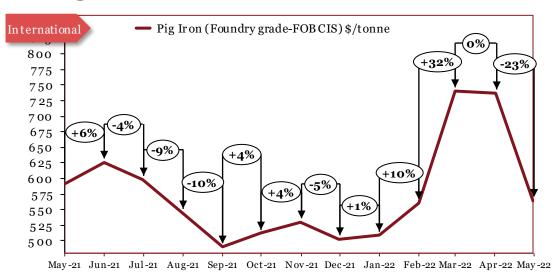


*The actual prices may vary depending on city, player, grade etc.

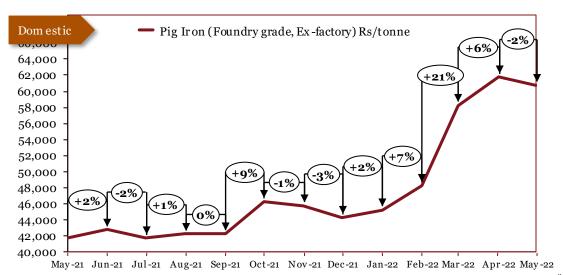
Outlook

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 ramp up 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. In May, international prices declined due to prolonged covid-19 restrictions in china which led to weaker spot demand.

Pig Iron



Source: Crisil



Monthly Average Prices			
Period	*Int'l	*Dom	
	\$/tonne	Rs/tonne	
May-21	591	41750	
Jun-21	625	42750	
Jul-21	598	41750	
Aug-21	545	42250	
Sep-21	490	42250	
Oct-21	511	46250	
Nov-21	530	45750	
Dec-21	502	44250	
Jan-22	508	45250	
Feb-22	561	48250	
Mar-22	739	58250	
Apr-22	736	61750	
May-22	564	60750	

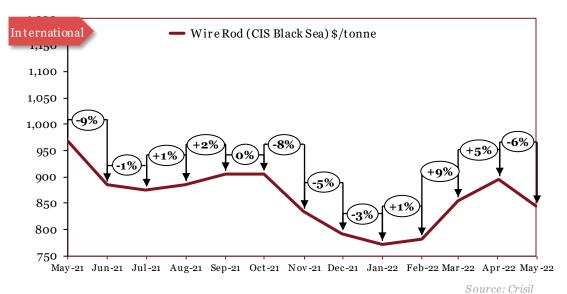
*The actual prices may vary depending on city, player, grade etc.

Source: Crisil

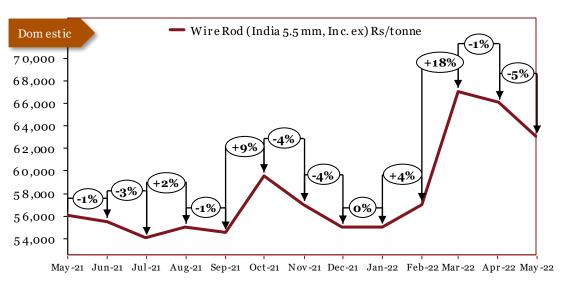
Outlook

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. In May, international prices fell steeply due to lower demand from US & Europe, along with the emergence of alternative lower cost supplies from Asian countries. Dom estic prices fell as a result of imposition of 15% export duty on Pig Iron in India.

Wire Rod







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

854

895

844

Mar-22

Apr-22

May-22

Source: Crisil

Outlook

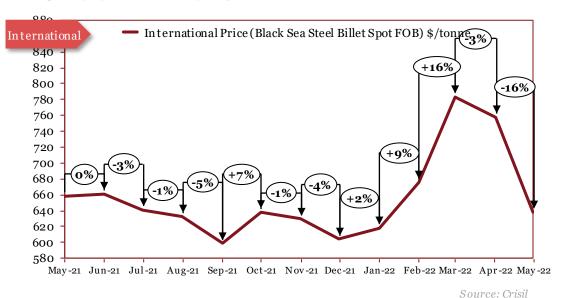
In September, production cuts in China caused a slight increase in international prices. Domestic prices slightly reduced on account of a market correction. In October, both international and domestic prices rose due to rising scrap and electricity costs, supported by positive market conditions. In November, 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. In May, international prices fell on the back of a drop in iron ore prices, coupled with weaker demand. Domestic prices fell as a result of imposition of 15% exportduty on wire rod in India.

66994

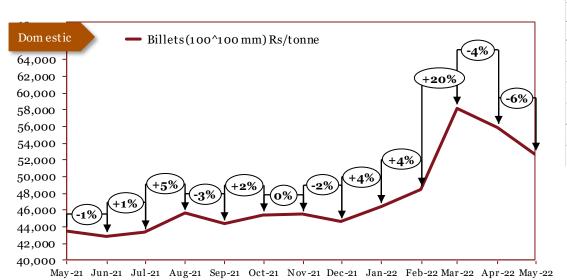
65994

62994

Steel Billets



Monthly Average Prices		
Period ^*Int'l *Dom		*Dom
	(\$/tonne)	(Rs/tonne)
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	55860
May-22	638	52650



Source: Crisil

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

Outlook

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. In May, international prices dipped due to weaker demand and high material availability. Domestic prices followed suit.

^International prices changed due to change in the grade

Monthly Average Prices

^*Dom

(Rs/tonne)

66050

69550

67550

68050

66350

68350

70350

66350

65350

66850

72850

76850

72350

*Int'l

(\$/tonne)

1055

1050

970

943

890

853

874

815

794

895

911

991

906

Period

May-21

Jun-21

Jul-21

Aug-21

Sep-21

Oct-21

Nov-21

Dec-21

Jan-22

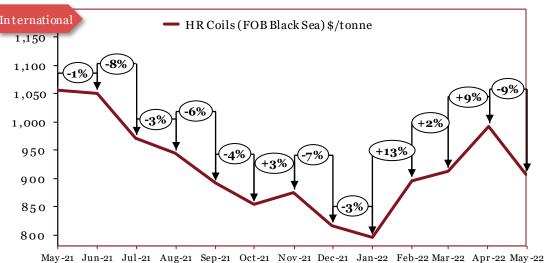
Feb-22

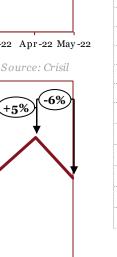
Mar-22

Apr-22

May-22

Hot-Rolled (HR) Coils





	Bource, Crisii
Dom estic HR Coils (India 14G-2mm) Rs/tonne	(-6%)
80,000 -	+5%
78,000	
76,000 -	
74,000 +3% (-6%)	↓
72,000 (+1%) (+3%)	
70,000	
68,000	
66,000	
64,000 -	
62,000 -	
60,000 -	
58,000 -	
May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-22 Ma	r-22 Apr-22 May-22

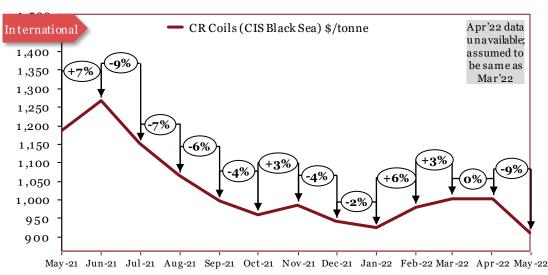
Source: Crisil

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

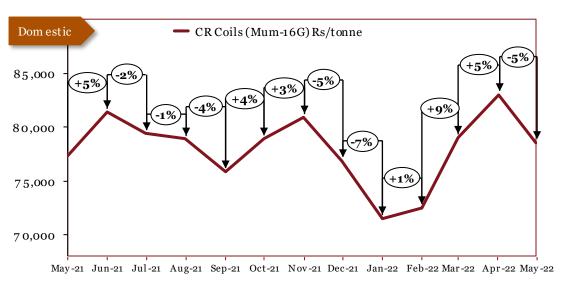
Outlook

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. In May, prices fell due to sluggish demand from the Asian m arket.

Cold-Rolled (CR) Coils



Source: Crisil



Monthly Average Prices			
Period	*Int'l	^*Dom	
	(\$/tonne)	(Rs/tonne)	
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	1002	83000	
May-22	910	78500	

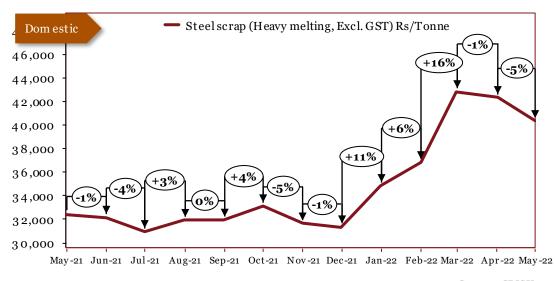
*The actual prices may vary depending on city, player, grade etc.

Source: Crisil

Outlook

In July and August, international prices projected downwards due to a combination of correctional market forces and unfav ourable 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. In May, both international and domestic prices fell in tandem with HRC prices.

Steel Scrap (Heavy Melting)



Monthly Average Prices		
Period *Dom		
	(Rs/Tonne)	
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	
Apr-22 42300		
May-22	40300	

Source: CRISIL

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

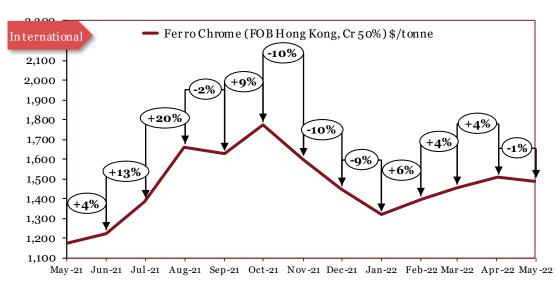
Outlook

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. In May, domestic prices fell due to weaker demand for finished steel.

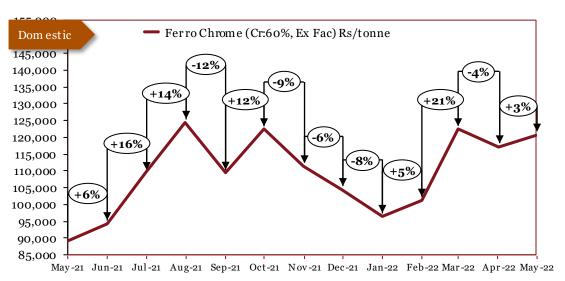
Ferro-alloys

Ferro-alloys		
8	Ferro chrome	17
9	Ferro silicon	18
10	EN8 Alloy Steel (Forging)	19
11	Stainless Steel	20
12	20MnCr5 Allov Steel (Forging)	21

Ferro chrome



Sc	nirce.	Crisil



Monthly Average Prices				
Period *Int'l *		*Dom		
	(\$/tonne)	(Rs/tonne)		
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		
May-22	1489	120600		

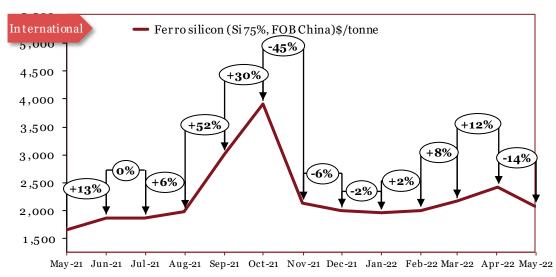
*The actual prices may vary depending on city, player, grade etc.

Source: Crisil

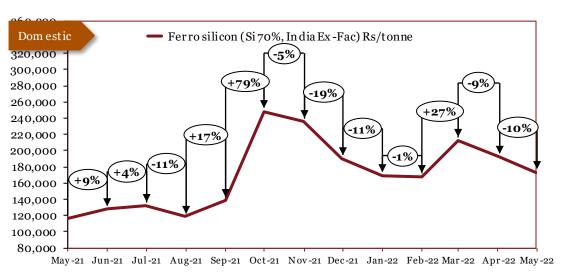
Outlook

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 war in Ukraine. Domestic prices decreased on account of a fall in local demand. In May, domestic prices rose slightly due to an increase in coal prices, as well as supply disruptions from South Africa. International prices remained relatively stable.

Ferro silicon







Monthly Average Prices			
Period *Int'l *Dom			
	(\$/tonne)	(Rs/tonne)	
May-21	1642	116950	
Jun-21	1856	127950	
Jul-21	1856	132450	
Aug-21	1973	118450	
Sep-21	3002	138450	
Oct-21	3899	248450	
Nov-21	2125	235450	
Dec-21	1994	190450	
Jan-22	1953	169450	
Feb-22	1994	167450	
Mar-22	2153	212450	
Apr-22	2408	192450	
May-22	2063	172450	

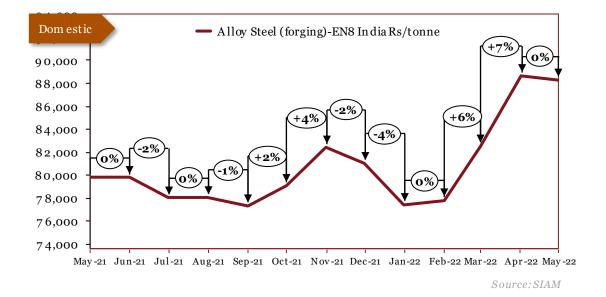
Source: Crisil

*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. In May, international and domestic prices fell due to a fall in steel production, which hereby led to lower consumption and a fall in demand.

EN8 Alloy Steel (Forging)



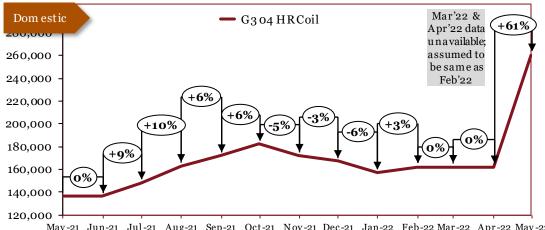
Monthly Average Prices		
Period (Rs/tonne)		
May-21	79750	
Jun-21	79750	
Jul-21	78000	
Aug-21	78000	
Sep-21	77250	
Oct-21	79000	
Nov-21	82375	
Dec-21	81000	
Jan-22	77375	
Feb-22	77750	
Mar-22	82500	
Apr-22	88600	
May-22	88250	

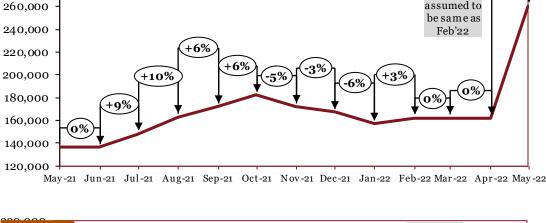
*The actual prices may vary depending on city, player, grade etc.

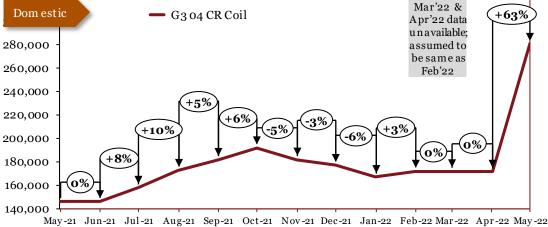
Outlook

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. In May, domestic prices remained stable.

Stainless Steel







Source: SIAM

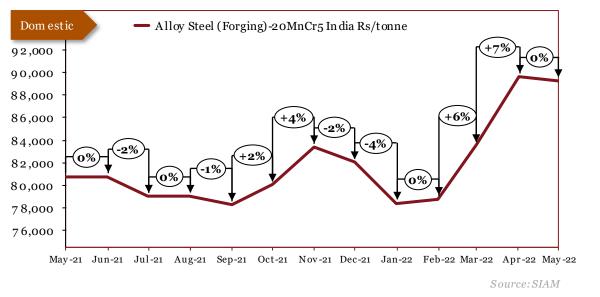
Monthly Domestic Average Prices *G304 HR *G304 CR Period (Rs/tonne) (Rs/tonne) **May-21** 136200 145750 Jun-21 136200 145750 Jul-21 148200 157750 Aug-21 163200 172750 Sep-21 172200 181750 Oct-21 182200 191750 Nov-21 172200 181750 Dec-21 167200 176750 Jan-22 157200 166750 Feb-22 162200 171750 Mar-22 162200 171750 Apr-22 162200 171750 **May-22** 260500 280500

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

Outlook

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. 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. In March and April, prices were assumed to be stable owing to unavailability of data.

20MnCr5 Alloy Steel (Forging)



Monthly Average Prices			
	*Dom		
Period	(Rs/tonne)		
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		
[<u>=</u>			

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

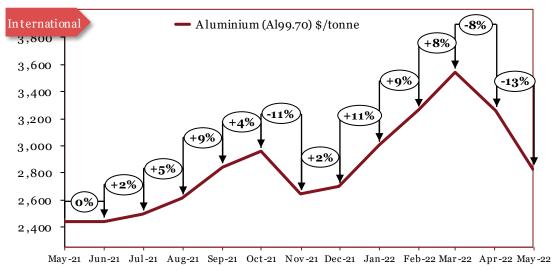
Outlook

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. In May, prices remained stable.

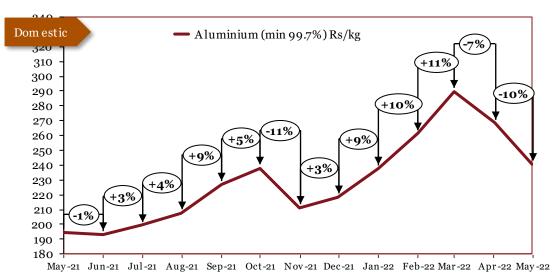
Base Metals

Base Metals		22
13	Aluminium	23
14	Copper	24
15	Zinc	25

Aluminium



Source: LME



Monthly Average Prices			
	*Int'l	*Dom	
Period	(\$/tonne)	(Rs/kg)	
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	
May-22	2826	241	

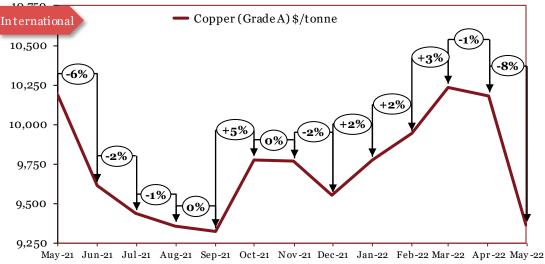
Source: MCX*
*Source updated in July 2019

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

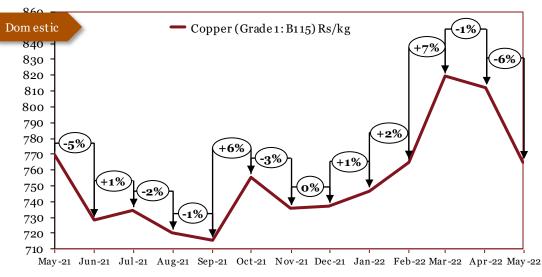
Outlook

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. In May, both international and domestic prices fell sharply due to weaker demand along with higher material availability.

Copper



Source: LME



Monthly Average Prices			
	*Int'l	*Dom	
Period	(\$/tonne)	(Rs/kg)	
May-21	10184	770	
Jun-21	9612	728	
Jul-21	9434	734	
Aug-21	9357	720	
Sep-21	9324	715	
Oct-21	9777	755	
Nov-21	9765	736	
Dec-21	9549	737	
Jan-22	9775	747	
Feb-22	9940	765	
Mar-22	10237	819	
Apr-22	10182	812	
May-22	9362	764	

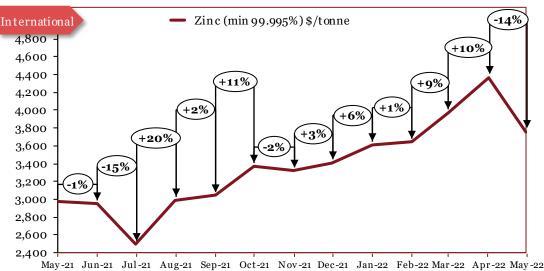
Source: MCX

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

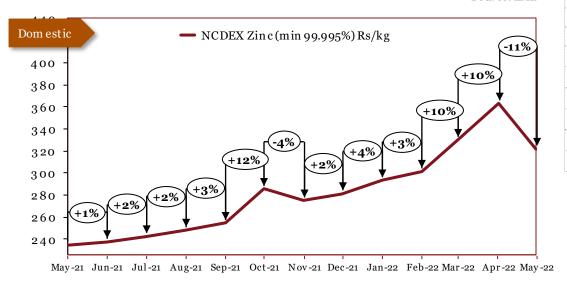
Outlook

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 tolow demand in China, caused by Covid lockdowns. In May, both international and domestic prices fell as a result of a fall in demand due to prolonged Covid-19 restrictions in China, which is one of the top consumers of Copper.

Zinc



Source: LME



Monthly Average Prices			
	*Int'l	*Dom	
Period	(\$/tonne)	(Rs/kg)	
May-21	2970	234	
Jun-21	2950	237	
Jul-21	2493	242	
Aug-21	2989	247	
Sep-21	3042	254	
Oct-21	3369	285	
Nov-21	3317	274	
Dec-21	3407	281	
Jan-22	3609	292	
Feb-22	3644	301	
Mar-22	3974	329	
Apr-22	4370	362	
May-22	3759	321	

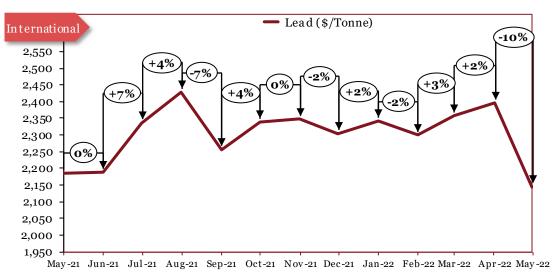
Source: MCX*

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

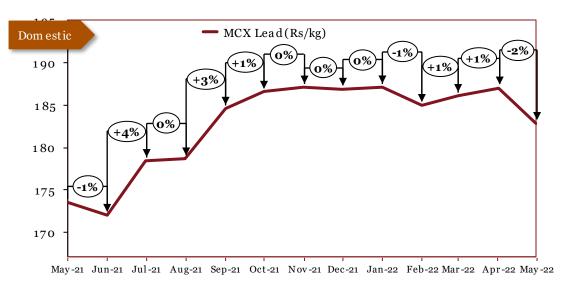
Outlook

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 COVID-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, in flation and energy costs. In May, both international and domestic prices fell due to muted demand from consumer industries.

Lead



Source: LME



Monthly Average Prices			
	*Int'l	*Dom	
Period	(\$/tonne)	(Rs/kg)	
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	
May-22	2144	183	

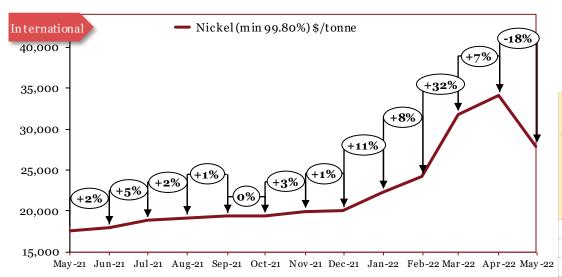
Source: MCX

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

Outlook

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. In May, international prices hit a 12 month low due to weak global demand, increased supply and a general slowdown in demand within automobile sector.

Nickel



IV.	Iont	thly	Aver	age F	rices

	*Int'l	*Dom
Period	(\$/tonne)	(Rs/kg)
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

Source	IMF

Dom estic	■ Nickel (4"*4" cut Nickel min 99.80%) Rs/kg
2,800 -	(+11%)
2,600 -	+25%
2,400	123.0
2,200	
2,000 -	+8%
1,800 -	(+1%) (+1%) (+1%) (+1%)
1,600 +2%	(+7%) (+3%)
1,400	
1,200 May-21 Ju	n-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22

Source: MCX*

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

27939

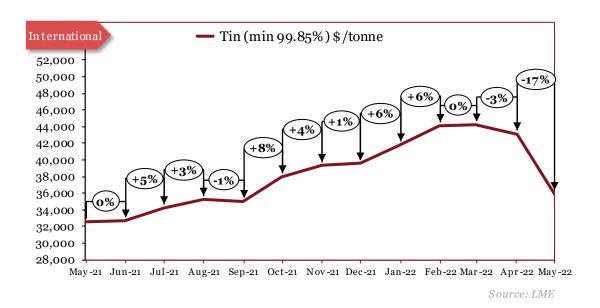
May-22

Outlook

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 a ccount 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 bat teries. In February, both international and domestic prices rose due to an increase in cost of raw materials like mixed hydroxide 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. In May, both international and domestic prices fell drastically due to higher supply of intermediate products (such as mixed hydroxide precipitate), thus leading to lower production cost.

2189

Tin



Monthly Average Prices					
Period	*Int'l (\$/tonne)				
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	43100				
May-22	35913				

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

Outlook

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. In May, international prices fell due to lower physical premium prices across the globe and subdued market sentiment.

Precious Metals

Precious	Metals	29
	Precious Metals	30

Precious Metals







Source: Johnson Matthey *The actual prices may vary depending

Monthly Average Prices (\$/Oz) **Period** Pd Pt Rh May-21 1221 2896 27325 Jun-21 1133 2736 21752 Jul-21 1094 18781 2744 Aug-21 1016 18417 2550 Sep-21 982 2137 14692 Oct-21 1025 2030 13933 Nov-21 1043 2024 14157 Dec-21 1834 954 14031 Jan-22 998 2025 16422 Feb-22 1056 2360 18183 Mar-22 1054 2636 19402 Apr-22 2352 18857 973 May-22 967 2091 16064

Outlook

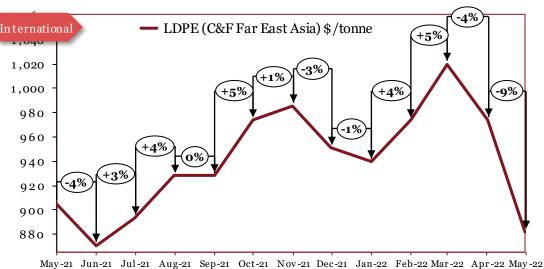
In October, prices of Palladium and Rhodium continued to fall amid the ongoing semiconductor shortages — which induced a lack of demand. Platinum's price rose slightly due to supply tightness. In November, Platinum and Palladium prices increased marginally as a result of a recent increase in demand for 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, coupled 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. In May, prices of all three precious metal fell owing to a fall in demand caused by Covid-19 imposed lockdowns in China.

on city, player, grade etc.

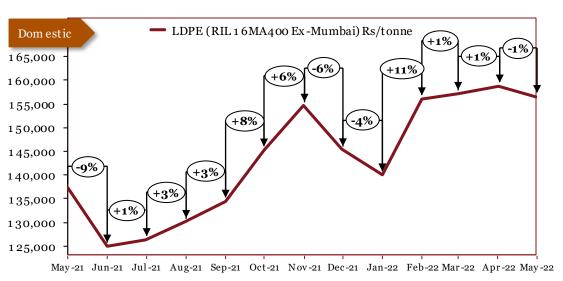
Polymers & Rubber

Polyı	mers & Rubber	31
20	Low density polyethylene (LDPE)	32
21	Polypropylene (PP)	33
22	Acrylonitrile Butadiene Styrene (ABS)	34
23	High Impact Polystyrene (HIPS)	35
24	Rubber	36

Low density polyethylene (LDPE)



Source: Crisil



Monthly Average Prices									
Period	*Int'l	*Dom							
	(\$/tonne)	(Rs/tonne)							
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	973	158692							
May-22	882	156359							

Source: Reliance Industries Ltd.

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

Outlook

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. In May, international prices decreased due to sluggish demand, higher availability of raw materials and a downtrend in the futures market.

Monthly Average Prices

*Dom

(Rs/tonne)

122586

115206

115581

120813

121756

130200

134236

123845

121485

141919

142179

142968

142968

*Int'l

(\$/tonne)

1127

1035

1056

1066

1076

1221

1149

1097

1076

1128

1159

1180

1128

Period

May-21

Jun-21

Jul-21

Aug-21

Sep-21

Oct-21

Nov-21

Dec-21

Jan-22

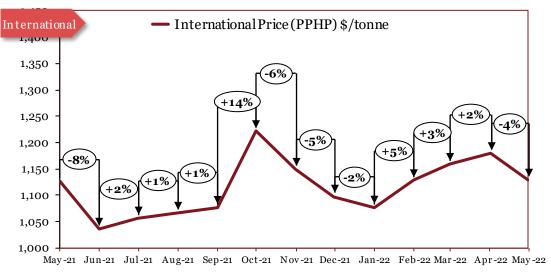
Feb-22

Mar-22

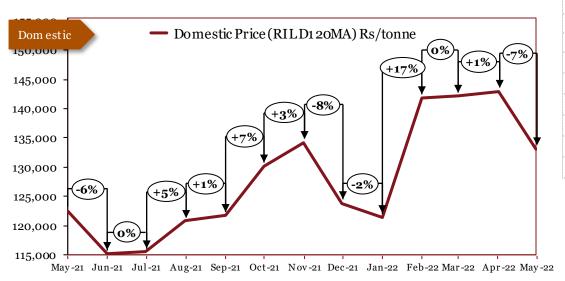
Apr-22

May-22

Polypropylene (PP)







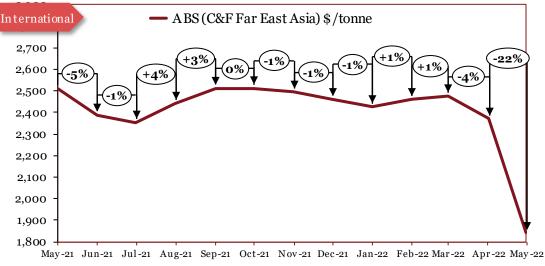
_			_	
*The ac	ctual prices	s may v a	ry depen	lding
	on c	itu, plau	er, arade	etc.

Source: Reliance Industries Ltd.

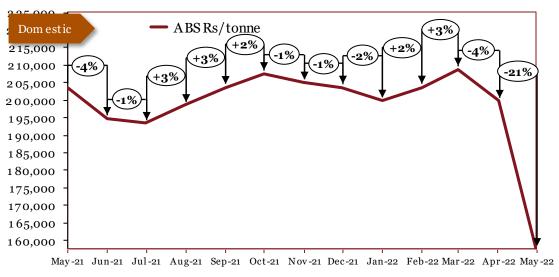
Outlook

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 polypropylene resins. In February, prices rose sharply due to a rise in crude oil prices. In March, domestic prices remained stable. In April, domestic prices remained relatively stable. In May, both international and domestic prices decreased due to a subdued demand for imports.

Acrylonitrile Butadiene Styrene (ABS)







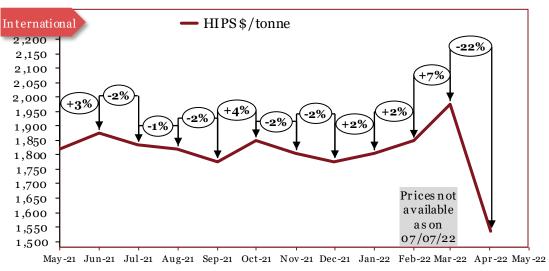
Monthly Average Prices												
	*Int'l	*Dom										
Period	(\$/tonne)	(Rs/tonne)										
May-21	2513	203520										
Jun-21	2390	194560										
Jul-21	2354	193280										
Aug-21	2443	198400										
Sep-21	2513	203520										
Oct-21	2513	207360										
Nov-21	2496	204800										
Dec-21	2460	203520										
Jan-22	2425	199680										
Feb-22	2460	203520										
Mar-22	2478	208640										
Apr-22	2372	199680										
May-22	1841	157440										

Source: Crisil

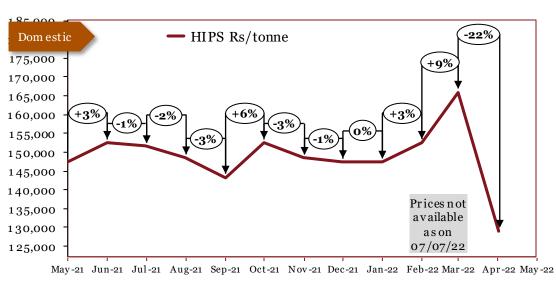
Outlook

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. In April, prices decreases in tandem with crude oil prices. In May, both international and domestic fell sharply due to weakened demand across global markets and prolonged Covid-19 restrictions in China.

High Impact Polystyrene (HIPS)





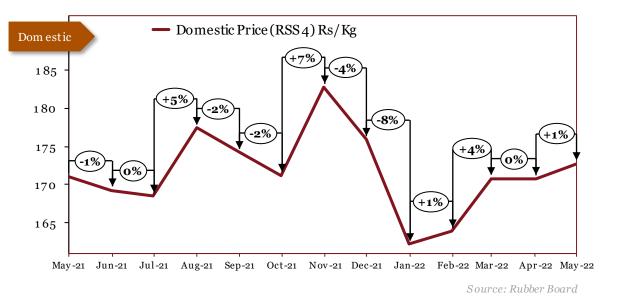


Monthly Average Prices *Int'l *Dom **Period** (\$/tonne) (Rs/tonne) **May-21** 1818 147290 Jun-21 1874 152440 Jul-21 1832 151410 1818 Aug-21 148320 Sep-21 1775 143170 Oct-21 1846 152440 Nov-21 1803 148320 Dec-21 1775 147290 **Jan-22** 1803 147290 Feb-22 1846 152440 **Mar-22** 1974 165830 Apr-22 1534 128750 **May-22**

Source: Crisil

Outlook
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. In April, prices decreases along with decrease in crude oil prices

Rubber



Monthly Average Prices						
Period	*Dom					
	(Rs/kg)					
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					
May-22	173					

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

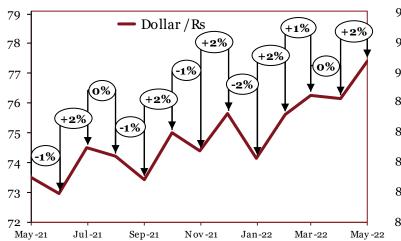
Outlook

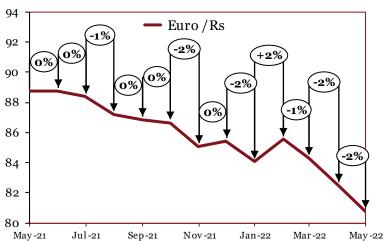
In July, prices continued to gradually fall as rubber production started to bounce back to pre-pandemic levels. In August, prices increased due to seasonal supply disruptions. In September, prices fell marginally due to soft demand, caused by lower exports to China. In October, prices continued to slip 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 tyres. 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. In May, prices increased slightly in tandem with crude oil prices.

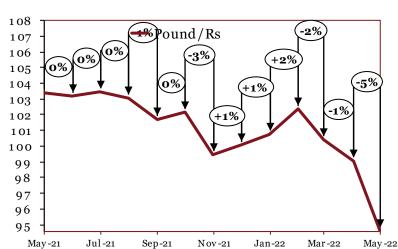
Appendices

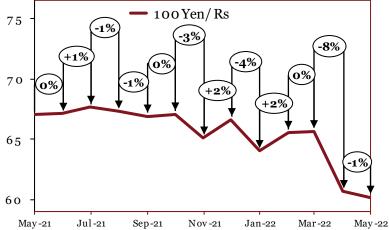
Apper	Appendices			
25	Forex Movement	38		
26	Crude Oil	39		
27	Commodity Specifications	40		

Forex Movement





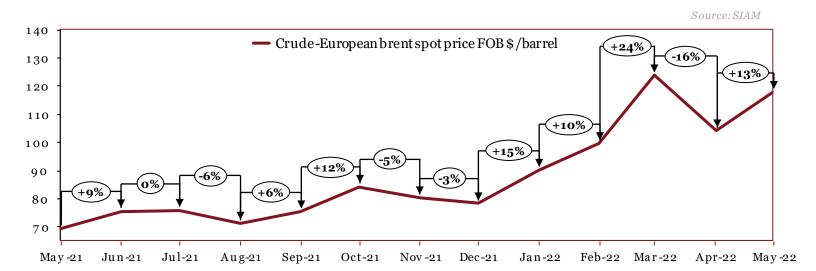




Source: SIAM

	Monthly Average Prices (Rs)												
	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22
\$	73	73	74	74	73	75	74	76	74	76	76	76	77
£	103	103	103	103	102	102	99	100	101	102	100	99	95
€	89	89	88	87	87	87	85	85	84	86	84	83	81
¥	67	67	68	67	67	67	65	67	64	66	66	61	60

Crude Oil



Monthly Average Prices (\$/barrel)												
May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22
69	75	76	71	75	84	80	78	90	99	124	104	118

Commodity Specifications

Commodity	International	Domestic
Iron Ore	IOECI635 Index (CIFChina) - (Fe63.5%) CIFChina	Crisil - Grade 1:58% to below 60% Fe Fines - Grade 2:60% to below 62% Fe Fines - Grade 3:62% to below 65% Fe Fines - Grade 4:65% and above Fe Fines
Pig Iron	Crisil -Foundry grade FOB CIS	Crisil -Foundry grade ex-factory, India
Stainless steel	NA	PwC Research -G 304 CR Coil -G 304 HR Coil
Wire rod	Crisil -CIS Black Sea (US \$/Tonne)	Crisil - Wire rods: 5.5 mm (Prices are inclusive of excise duty by exclusive of VAT/Sales tax)
Steel Billets	Crisil -FOB CIS Black Sea Previously: Bloomberg Black Sea Steel Billet Spot FOB	Crisil -100^100mm (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 Metal in groups form with minimum purities of 60, 65% for pletinum and pelledium					
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)				



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
- Akhilesh Oberoi, ACMA Knowledge Partnership Manager akhilesh.oberoi@in.pwc.com/+91124620724

© 2022 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.