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Commodity price monitor July-22

Prepared for ACMA

Strictly private and confidential

July 2022





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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		-22.85% V
	Domestic low grade		
	Domestic high grade		
PigIron	International		-7.02% ▼
	Domestic	0.80%	
Sta inless steel	Domestic	17.64%	
	Domestic	16.49%	
Wirerod	International	1.17%	
	Domestic		-1.51% V
Steel Billets	International		-1.94% ▼
	Domestic	4.21%	
Hot-rolled coils	International		- 6.90% ▼
	Domestic	4.02%	
Cold-rolled coils	International		-8.26% ▼
	Domestic	2.63%	
Steel Scrap	Domestic		-0.21% V
EN8	Domestic		-0.36% V
20MnCr5	Domestic		-0.36% V
Ferro-alloys			
Ferro chrome	International	28.47% ^	
rerrochrome	Domestic	26.13%	
Ferro silicon	International	36.93% ▲	
rem o smicon	Domestic	13.73%	

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

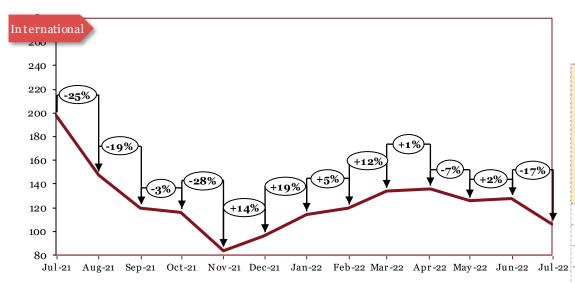
Calendar Year 2022: Qvs. Qupdate

Commodity	Region	Q-o-Q Up	Q-o-Q Down
Base Metals			
Aluminum	International	10.36%	
Alummum	Domestic	10.07%	
Connor	International		-3.49% V
Copper	Domestic		-2.23% V
7: 0.0	International		-3.09%
Zinc	Domestic	6.18%	
l a a d	International	10.05%	
Lead	Domestic	5.34%	
Alt al	International	10.27%	
Nickel	Domestic	11.80%	
	International	11.48%	
Tin	Domestic	N/A	
Precious Metals			
Platinum	International		-13.35% V
Palladium	International		-11.68% V
Rhodium	International		-33.32% V
Polymers			
	International	0.42%	
Low density polyethylene (LDPE)	Domestic		-3.72% V
- 1 ()	International		-5.12% V
Polypropylene (PP)	Domestic		-2.80% V
(450)	International		-2.13% V
Acryl onitrile Buta diene Styrene (ABS)	Domestic		-1.69% V
	International		-1.55% V
Polystyrene (PS)	Domestic		-1.38% V
Rubber	Domestic	2.57%	
Currency Exchange			
Dollar	International	0.35%	
Pound	International		-1.54% V
Euro	International		-0.39% V
Yen	International		-0.40% V

Iron & Steel

Source: Crisil

Iron Ore



	*Int'l	*D	om
Period	\$/tonne	Rs/t	onne
		65% & below	65% & above
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		
Jun-22	128		
Jul-22	106		

Dom estic 15,000 14,000 13,000 11,000 10,000 9,000 8,000 7,000 6,000	Prices not released by the source as on 25/08/22 Dec'21 data unavailable; assumed to be same as Nov'21
7,000	N ov '21

Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22 Jun-22 Jul-22

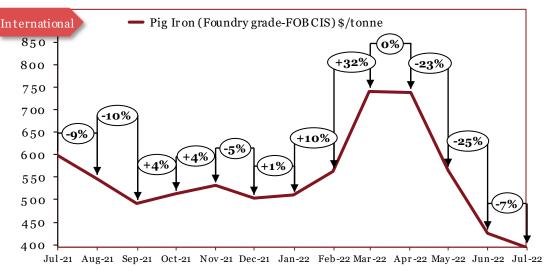
*The actual prices may vary depending on city, player, grade etc.

Outlook

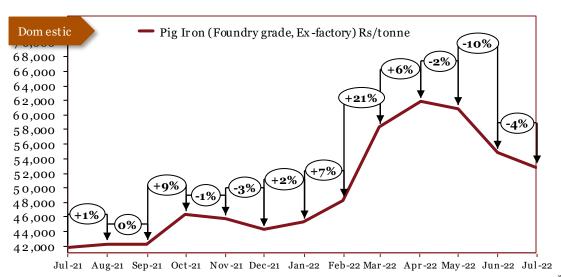
2.000

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, along side 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. In June, International prices rose slightly due to sentiment in future markets and demand from top steel producers in China. In July, international prices fell sharply due to recessionary fears in global markets.

Pig Iron







Monthly Average Prices			
Period	*Int'l	*Dom	
	\$/tonne	Rs/tonne	
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	
Jun-22	425	54750	
Jul-22	394	52750	

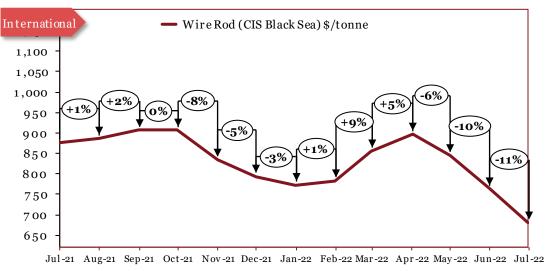
*The actual prices may vary depending on city, player, grade etc.

Source: Crisil

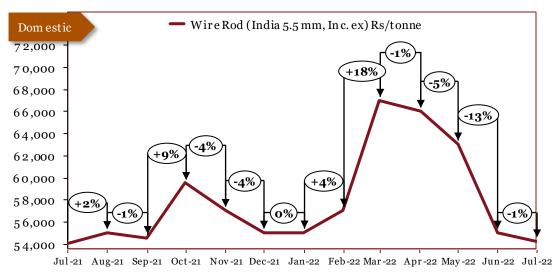
Outlook

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 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. Domestic prices fell as a result of imposition of 15% export duty on Pig Iron in India. In June, international prices hit a 12 month low due to sentiment of oversupply of steel in China and weak demand. Domestic prices fell as a result of decline in exports and weak market sentiment post export duty. In July, international prices fell down owing to weak demand and supply of steel. Domestic prices fell due to decline in domestic demand and sustained effect of imposition of higher export duties.

Wire Rod







Monthly Average Prices			
Period	^*Int'l	*Dom	
	(\$/tonne)	(Rs/tonne)	
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	
May-22	844	62994	
Jun-22	761	54994	
Jul-22	679	54194	

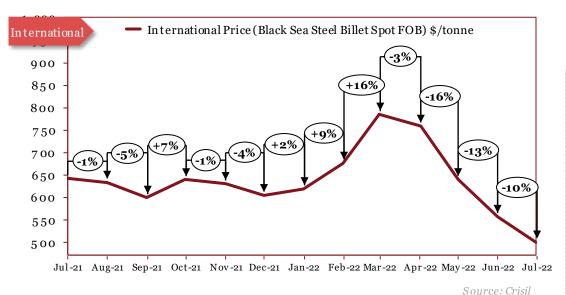
Source: Crisil

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

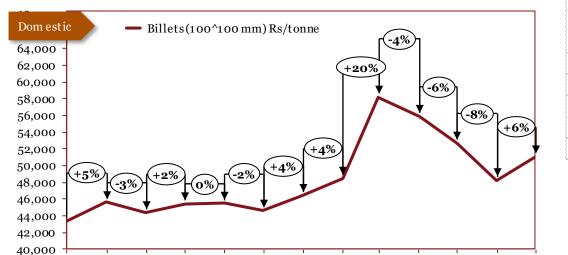
Outlook

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% export duty on wire rod in India. In June, international continued to fall due to slow economic growth, weak demand and scrap price reduction in European countries. Domestic prices tumbled as result of decrease in exports. In July, international prices fell on account of weaker demand in major countries due to fears of an approaching global recession. Domestic prices declined slightly due to a lack of buying enquiries from end use industries.

Steel Billets



Monthly Average Prices			
Period	^*Int'l	*Dom	
	(\$/tonne)	(Rs/tonne)	
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	
Jun-22	556	48250	
Jul-22	499	51067	



Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22 Jun-22 Jul-22

Source: Crisil

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

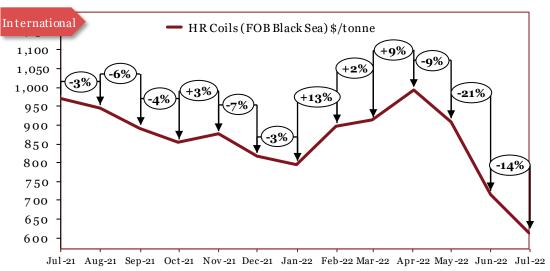
Outlook

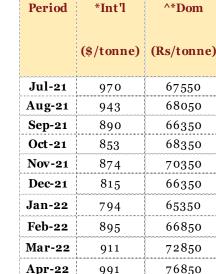
In December, international prices fell due to a softening of demand amid reduced industrial and commercial activity. Domestic prices fell slightly less due to rising prices for directly reduced iron (DRI) and better finished long product demand in the first half of the month. In January, domestic prices 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. In June, international prices fell due to limited trade and lower price offerings from Russia. Dom estic prices also fell due to low demand from key import nations. In July, international prices fell to their lowest level in 12 months on account of weaker demand for finished steel. Domestic prices rose sharply due to a rise in input cost.

^International prices changed due to change in the grade

Monthly Average Prices

Hot-Rolled (HR) Coils





906

714

613

72350

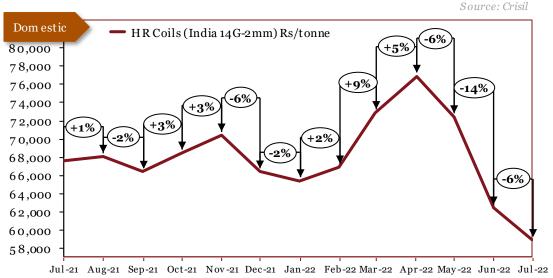
62350

58850

May-22

Jun-22

Jul-22



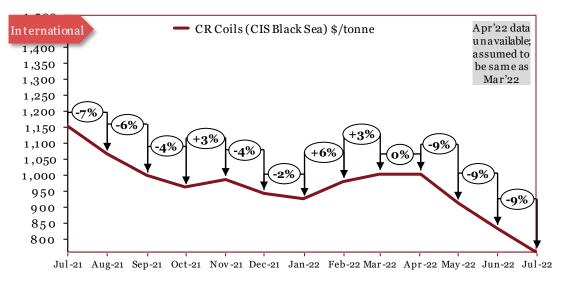
Source: Crisil

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

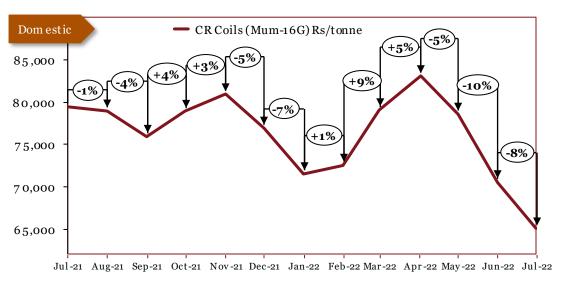
Outlook

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 Covidlockdowns in China. In May, prices fell due to sluggish demand from the Asian market. In June, international prices fell sharply due to oversupply of HRC in European countries. Domestic prices fell as a result of export duty. In July, both international and domestic prices fell to their lowest level in 12 m on ths due to poor demand in domestic and foreign markets.

Cold-Rolled (CR) Coils







Monthly Average Prices			
Period	*Int'l	^*Dom	
	(\$/tonne)	(Rs/tonne)	
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	
Jun-22	830	70500	
Jul-22	756	65000	

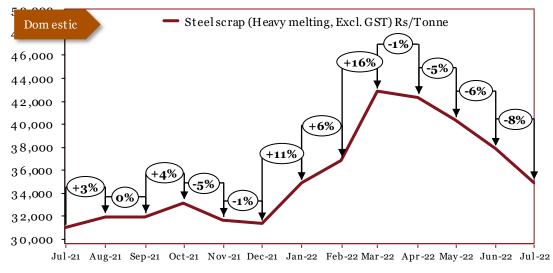
*The actual prices may vary depending on city, player, grade etc.

Source: Crisil

Outlook

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 tomake 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. In June, international prices fell on back with lack of bookings. Domestic prices fell in tandem with HRC prices. In July, both international and domestic prices fell sharply due to weaker demand from China, coupled with inflationary pressures in Europe.

Steel Scrap (Heavy Melting)



Source: CRISIL

Monthly Average Prices		
Period *Dom		
	(Rs/Tonne)	
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	
Jun-22	37800	
Jul-22	34800	

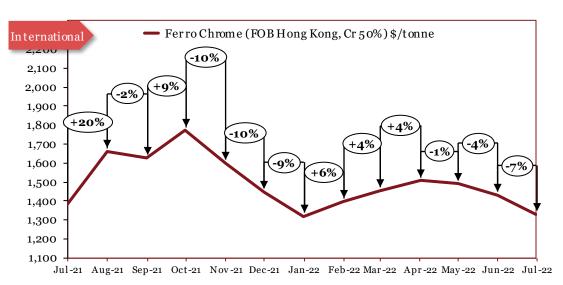
*The actual prices may vary depending on city, player, grade etc.

Outlook

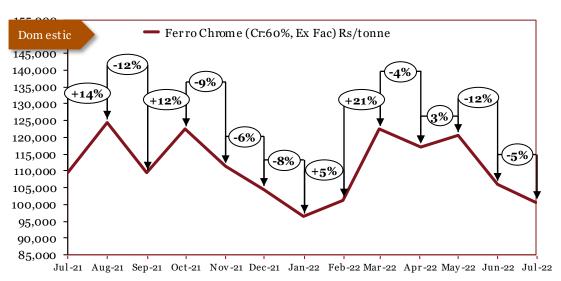
In June, prices fell marginally due to better availability. In August, steel prices rose on account of a decline in China's steel supply. In September, prices remained unaffected. In October, prices increased as growing desperation for steel scrap imports at steel mills led to a sellers' market for bulk and container cargoes, along with a rise in Turkish prices and growing bullishness amongst American suppliers. In Nov ember, prices decreased on account of weak market sentiment, and an overall slowdown of growth in demand due to hot metalbeing more attractive to mills. In December, prices remained relatively unchanged as supply tightness was offset by a drop in demand due to a sea sonal 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. In June, domestic prices fell due to low in gots sales. In July, prices fell amid an oversupply crisis, weakening of demand and seasonal monsoon pressures.

Ferro-alloys

Ferro chrome







Monthly Average Prices			
Period	*Int'l	*Dom	
	(\$/tonne)	(Rs/tonne)	
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	
Jun-22	1430	106100	
Jul-22	1327	100600	

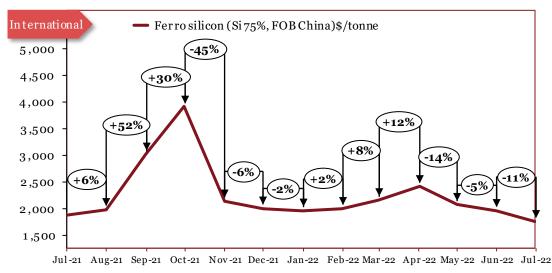
*The actual prices may vary depending on city, player, grade etc.

Source: Crisil

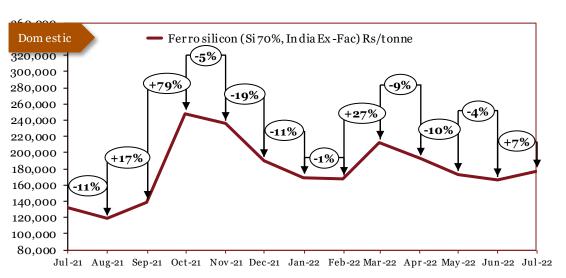
Outlook

In. 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. In June, both international and domestic prices fell due to extremely sluggish demand. In July, domestic prices fell owing to a lack of demand from stainless steel makers and decrease in export orders. International prices fell due to a weakening of demand caused by on going inflationary pressures.

Ferro silicon







Monthly Average Prices			
Period	*Int'l	*Dom	
	(\$/tonne)	(Rs/tonne)	
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	
Jun-22	1953	165950	
Jul-22	1739	177450	

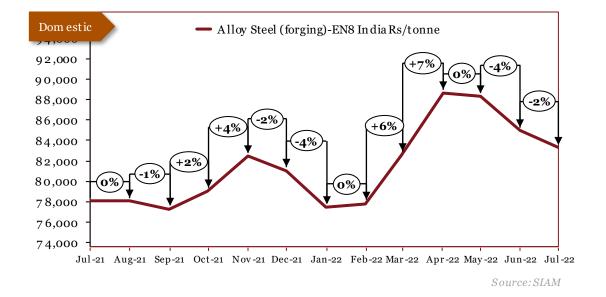
Source: Crisil

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

Outlook

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. In June, international and domestic prices fell due to oversupply significant products during Russia-Ukraine invasion which now remains unused in warehouses. In July, international prices fell due to a fall in demand caused by reduction in steel consumption, and the ongoing energy crisis. Domestic prices rose on account of higher input costs.

EN8 Alloy Steel (Forging)



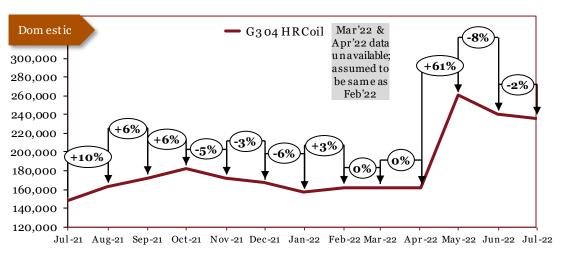
Monthly Average Prices		
*Dom Period (Rs/tonne		
Jul-21	78000	
Aug-21	78000	
Sep-21	77250	
Oct-21	79000	
Nov-21	82375	
Dec-21 81000		
Jan-22	77375	
Feb-22	77750	
Mar-22	82500	
Apr-22	88600	
May-22	88250	
Jun-22	84875	
Jul-22 83200		

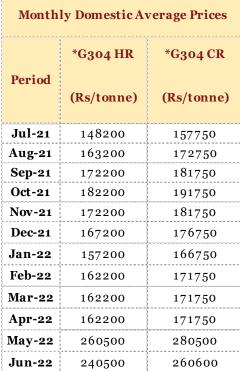
*The actual prices may vary depending on city, player, grade etc.

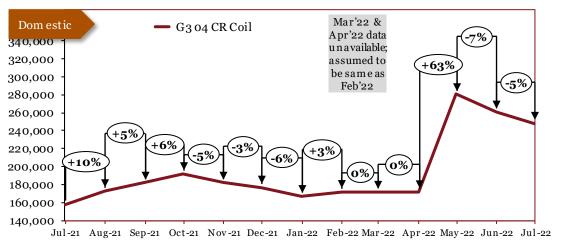
Outlook

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. In June, Decline in prices is due to plunge in exports and stagnant demand. In July, domestic prices fell slightly due to lower demand on account of a lack of export orders.

Stainless Steel







Source: SIAM

Jul-22

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

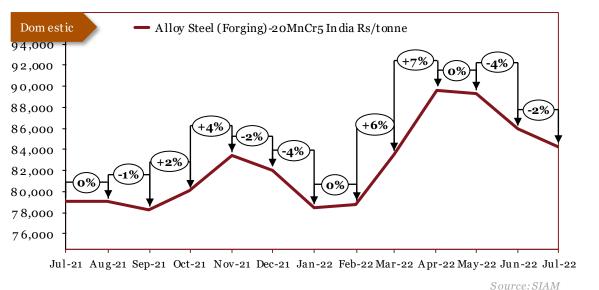
235750

Outlook

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. In June, prices fell on back of imposition of export duty and crash in domestic steel prices. In July, weaker demand from construction and automobile industries led to decrease in both international and domestic prices.

247750

20MnCr5 Alloy Steel (Forging)



Monthly Average Prices		
Period	*Dom (Rs/tonne)	
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	
May-22	89250	
Jun-22	85875	
Jul-22	84200	

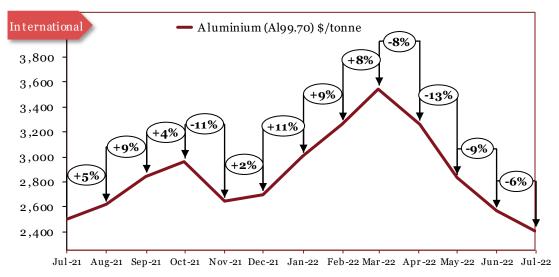
*The actual prices may vary depending on city, player, grade etc.

Outlook

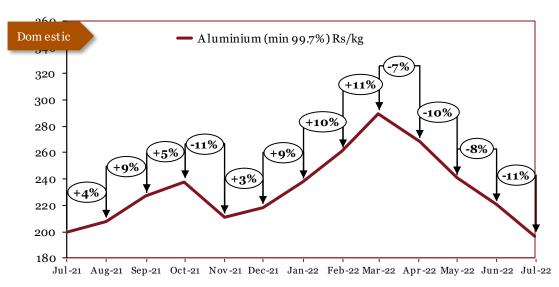
. In January, surging steel prices globally along with short supply were key drivers to price rise. In February, prices dipped in conjunction with global and domestic steel prices amidst weaker demand. In March, domestic prices remained stable. In April, domestic prices rose in tandem with global steel 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 remained stable. In March, prices rose in tandem with steel prices. In April, prices rose on account of supply disruptions caused by severe flooding in South Africa and the war in Ukraine. In May, prices remained stable. In June, prices fell in tandem with other steel alloys. In July, prices fell on account of a lack of buying enquiries from buyers and decrease in exports.

Base Metals

Aluminium



Source: LME



Monthly Average Prices		
	*Int'l	*Dom
Period	(\$/tonne)	(Rs/kg)
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
Jun-22	2563	221
Jul-22	2401	197

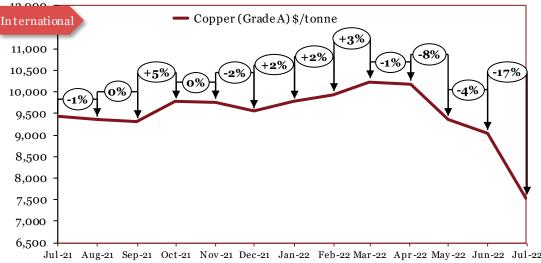
Source: MCX*
*Source updated in July 2019

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

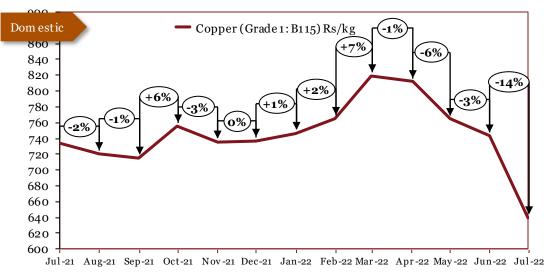
Outlook

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. In June, international prices continued to soar due to bearish sentiments and uncertain conditions from buyers. Domestic prices fell due to lower demand from major industries. In July, international prices fell due to weaker demand, caused by weaker premiums and recession concerns.

Copper



22	5 u 11-22	. Jui-
C		TATE
2	ource:	LIVIE



Monthly Average Prices		
Period	*Int'l	*Dom
	(\$/tonne)	(Rs/kg)
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
Jun-22	9032	743
Jul-22	7529	639

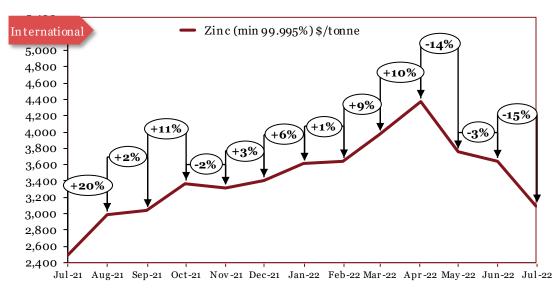
Source: MCX

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

Outlook

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 fractional drop in copper concentrate processing charges. International prices remained stable. In December, international prices rose due to 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. 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. In June, domestic and international prices fell due to poor demand as countries raised interest rates to curb inflation. In July, both international and domestic prices fell to their lowest level in 12 months on account of concerns of recession in Europe and U.S, leading to monetary tightening.

Zinc



Period	(\$/tonne)	(Rs/kg)
Jul-21	2493	242
Aug-21	2989	247
_		2

Monthly Average Prices

Source: LME

Dom estic	— NCDEX Zin c (min 99.995%) Rs/kg
400 -	
380 -	+10%
360 -	+10%
340 -	
320 -	+12% +4% +3%
300 -	
280 +	2% (+3%)
260 -	
240	
Jul-21	1 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22 Jun-22 Jul-2

Period	*Int'l	*Dom
	(\$/tonne)	(Rs/kg)
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
Jun-22	3643	313
Jul-22	3097	275

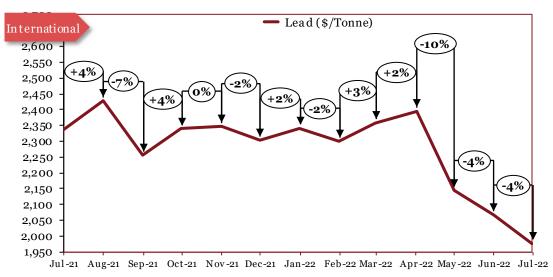
Source: MCX*

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

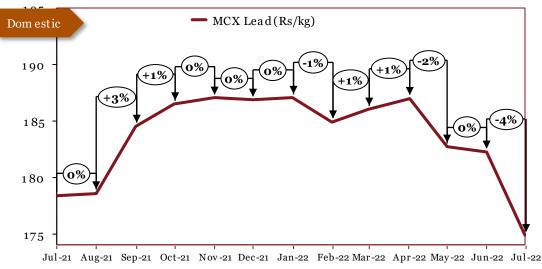
Outlook

In October, 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 surge in energy prices. In November, both international and domestic prices fell amid uncertain macroeconomic picture, caused by advent of 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 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 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. In June, prices fell slightly due to slow demand, crackdown of supply chain by governments to fight inflation. In July, prices continued to fall due to oversupply and a weakening in demand.

Lead



Source:	TATE
DOULER.	I JIVII I'



Monthly Average Prices		
Period	*Int'l	*Dom
	(\$/tonne)	(Rs/kg)
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
Jun-22	2067	182
Jul-22	1976	175

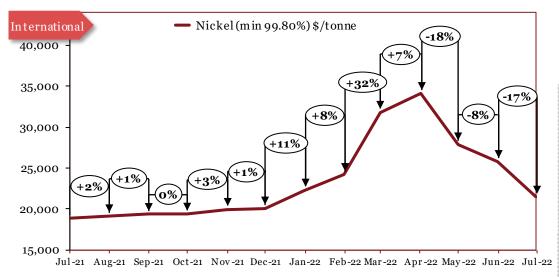
Source: MCX

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

Outlook

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. In June, domestic prices remained stable. International prices going further low due to actions taken to confront inflation. In July, both international and domestic prices fell to their lowest levels in 12 months as a result of oversupply and inflation concerns.

Nickel

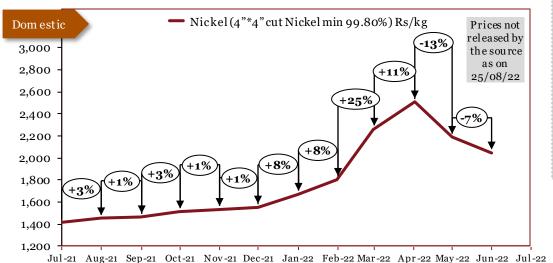


Period	(\$/tonne)	(Rs/kg)
Jul-21	18817	1414
Aug-21	19160	1450
Sep-21	19394	1462
Oct-21	19416	1512
Nov-21	19958	1529
Dec-21	20065	1549

Monthly Average Prices

*Int'l

*Dom



	(\$/tonne)	(Rs/kg)
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
May-22	27939	2189
Jun-22	25825	2046
Jul-22	21471	

Source: MCX*

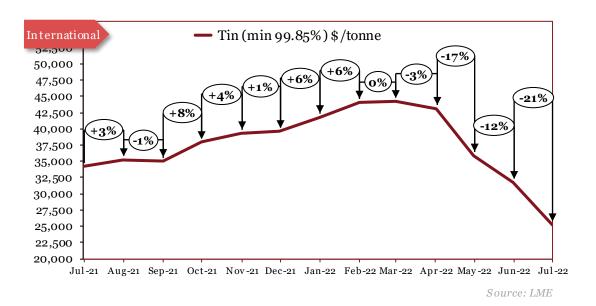
Source: LME

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

Outlook

In October, international prices remained largely unaffected. In November, international prices increased by 4% - despite resistance from un certainties 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 in ternational 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 a mid 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. In June, international and domestic prices fell on back of economic concerns stemming from rising inflation, interest rates and energy costs. In July, international prices fell sharply due to lower industrial demand.

Tin



	Monthly Average Prices				
Period	*Int'l (\$/tonne)				
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				
Jun-22	31750				
Jul-22	25147				

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

Outlook

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. In June, international prices continued to fall due to supply chain concerns and weak market sentiment in China and London. In July, prices hit their lowest level in 12 months on account of weaker demand for finished products.

Precious Metals

Precious Metals







Source: Johnson Matthey

Monthly Average Prices (\$/Oz) Period Pt Pd Rh Jul-21 1094 2744 18781 Aug-21 1016 2550 18417 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 2360 18183 1056 Mar-22 1054 2636 19402 Apr-22 973 2352 18857 May-22 967 16064 2091 Jun-22 961 1939 14046 Jul-22 879 1996 14300

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

Outlook

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 and June, prices of all three precious metal fell owing to a fall in demand caused by Covid -19 imposed lockdowns in China. In July, both Rhodium and Palladium prices rose slightly due to increase in demand from the automotive sector, particularly from the electric vehicle space. Platinum prices declined due to lower demand caused by inflationary concerns.

Polymers & Rubber

Monthly Average Prices

*Dom

(Rs/tonne)

126218

129954

134406

145100

154494

145236

139986

155986

157028

158692

156359

149359

146934

*Int'l

(\$/tonne)

893

927

927

973

985

950

939

973

1019

973

882

916

Period

Jul-21

Aug-21

Sep-21

Oct-21

Nov-21

Dec-21

Jan-22

Feb-22

Mar-22

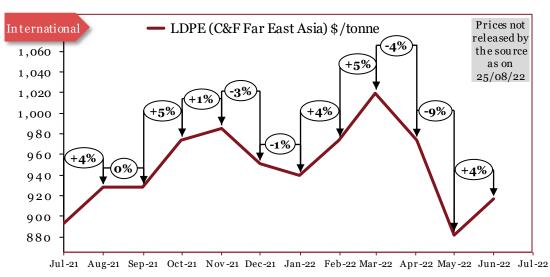
Apr-22

May-22

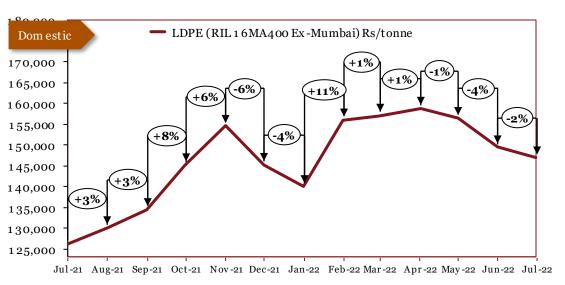
Jun-22

Jul-22

Low density polyethylene (LDPE)



Source: Crisil



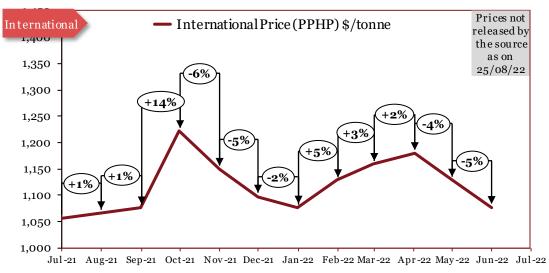
*The actual prices may vary dependin	g
on city, player, grade etc	Э.

Outlook

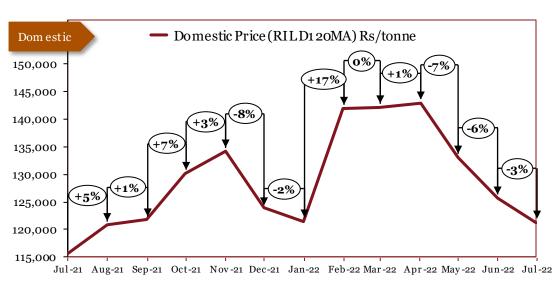
In November, domestic prices continued their rise to record-highs amid concerns over a shortage in domestic supply, coupled with import disruptions. In December, domestic prices fell considerably, owing to a fall in demand and lower crude oil prices. In January, domestic prices continued to drop due 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. In June, domestic prices fell slightly on account of decline in crude oil prices and lower consumer demand. In July, domestic prices fell slightly due to a reduction in crude oil prices and lower demand on account of the off-season.

Source: Reliance Industries Ltd.

Polypropylene (PP)



Source: Crisil



Period	*Int'l	*Dom
	(\$/tonne)	(Rs/tonne)
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	1180	142968
May-22	1128	142968
Jun-22	1076	125668
Jul-22		121279

Monthly Average Prices

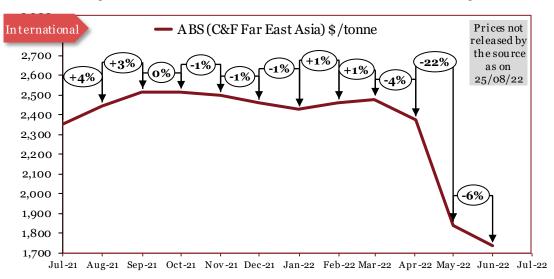
Source: Reliance Industries Ltd.

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

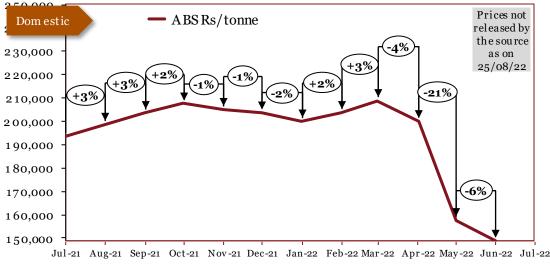
Outlook

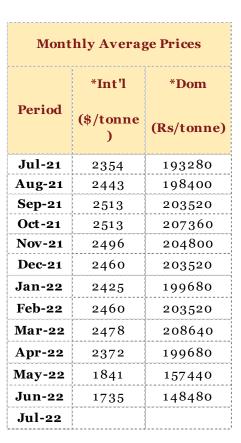
In August, domestic prices moved upwards due to increased demand for PP as a raw material in manufacturing Personal Protective Equipment (PPE). In October, prices rose in tandem with the steep rise in crude oil prices, and sustained levels of high energy prices. In November, domestic prices rose on account 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. In June, domestic prices fell due to lower demand and excess in availability of product. In July, domestic prices fell due to lower crude oil prices and an oversupply in the Chinese market.

Acrylonitrile Butadiene Styrene (ABS)







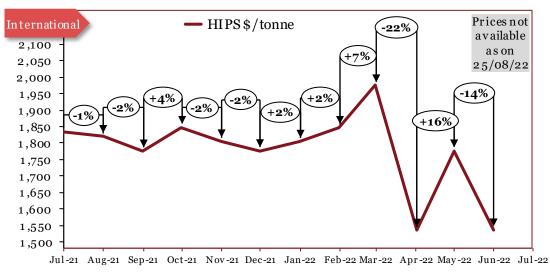


Source: Crisil

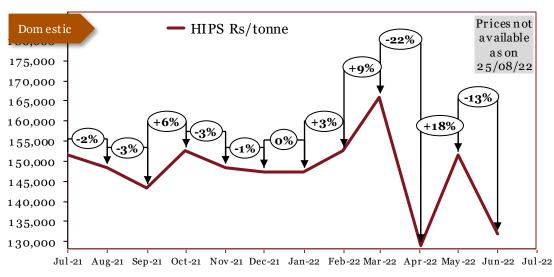
Outlook

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. In June. Both international and domestic prices fell to their lowest levels in 18 months due to lower crude oil prices, the ban on single-use plastics in many countries and excess supply.

High Impact Polystyrene (HIPS)







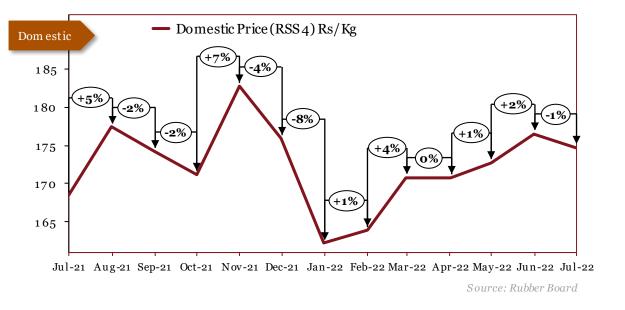
Monthly Average Prices

	1110 1	20111
Period	(\$/tonne)	(Rs/tonne)
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	1803	147290
Feb-22	1846	152440
Mar-22	1974	165830
Apr-22	1534	128750
May-22	1775	151410
Jun-22	1534	131840
Jul-22		

Source: Crisil

outlook 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. In April, prices decreases along with decrease in crude oil prices. In June, both international and domestic prices fell sharply due to decrease in crude oil prices, ban on single use plastics in various countries and excess supply.

Rubber



Monthly Average Prices				
Period	*Dom			
	(Rs/kg)			
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			
Jun-22	176			
Jul-22	175			

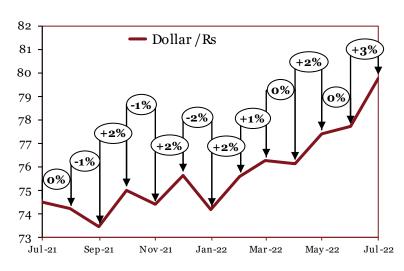
*The actual prices may vary depending on city, player, grade etc.

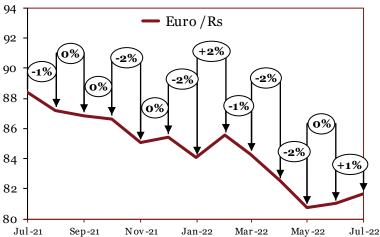
Outlook

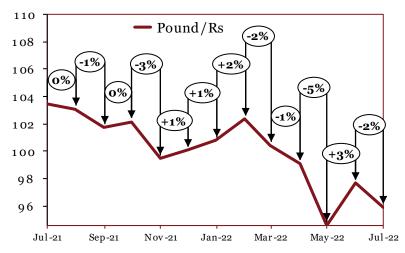
In September, prices fell marginally due to soft demand, caused by lower exports to China. In October, prices continued to slip as demand from the automobile industry slowed down, owing to the semiconductor shortage. In November, prices continued to trend upwards due to disruptions in the global supply-chain 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. In June, prices rose slightly due to higher input costs. In July, prices decreased slightly due to lower demand on account of the monsoon season.

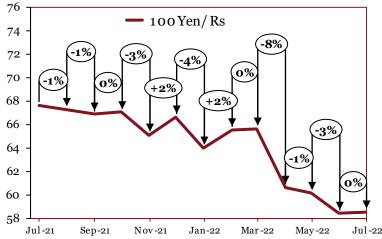
Appendices

Forex Movement







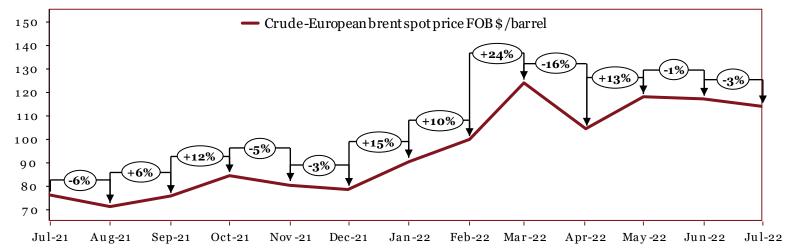


Source: SIAM

	Monthly Average Prices (Rs)												
	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
\$	74	74	73	75	74	76	74	76	76	76	77	78	80
£	103	103	102	102	99	100	1 01	102	100	99	95	98	96
€	88	87	87	87	85	85	84	86	84	83	81	81	82
¥	68	67	67	67	65	67	64	66	66	61	60	58	59

Crude Oil

Source: SIAM



	Monthly Average Prices (\$/barrel)											
Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
76	71	75	84	80	78	90	99	124	104	118	117	114

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		ities of 99.95% for platinum and palladium,	
Palladium	and 99.9% for rhodium		
Rhodium			
Low density polyethylene (LDPE)	International price (C&F FEA) \$/tonne	RIL-16MA400 grade	
Polypropylene (PP)	International Price (PPHP) \$/tonne	RIL-D120MA grade	
Acrylonitrile Butadiene Styrene (ABS)	International price (C&F FEA) \$/tonne	Landed Cost Rs/tonne	
High Impact Polystyrene (HIPS)	International price \$/tonne	Landed Cost Rs/tonne	
Rubber Prices	NA	NCDEX/Rubber board - RSS 4 (Ribbed Smoked Sheet 4) ex- warehouse Kochi exclusive of all taxes	
Forex Movement	RBI reference rates		
Crude	European Brent spot price FOB \$/barrel	– Energy Information Administration (EIA)	



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