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Commodity price monitor

June-23

Prepared for ACMA

Strictly private and confidential

June 2023

pwc

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Commodity trend dashboard

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

Calendar Year 2023: Q vs. Q update

Commodity	Region	Q-o-Q Up	Q-o-Q Down
Iron & Steel			
Iron Ore	International	28.51% ▲	
	Domestic low grade		
	Domestic high grade		
Pig Iron	International	12.87% ▲	
	Domestic	10.11% ▲	
Stainless steel	Domestic		-7.01% ▼
	Domestic		-6.59% ▼
Wire rod	International	31.96% ▲	
	Domestic	8.85% ▲	
Steel Billets	International	11.30% ▲	
	Domestic	3.88% ▲	
Hot-rolled coils	International	30.79% ▲	
	Domestic	22.76% ▲	
Cold-rolled coils	International	35.15% ▲	
	Domestic	23.57% ▲	
Steel Scrap	Domestic	15.45% ▲	
EN8	Domestic	8.08% ▲	
20MnCr5	Domestic	7.97% ▲	
Ferro-alloys			
Ferro titanium	International	N/A	
Ferro chrome	International		-2.52% ▼
	Domestic	1.08% ▲	
Ferro molybdenum	International	N/A	
Ferro vanadium	International	N/A	
Ferro silicon	International	10.55% ▲	
	Domestic	18.32% ▲	

ND: Not disclosed by the source

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

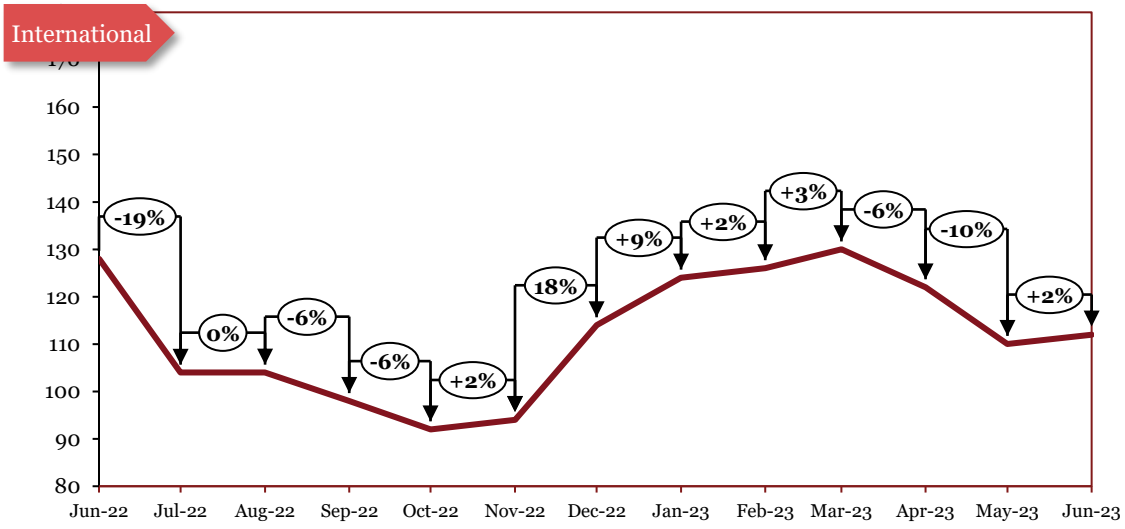
Calendar Year 2023: Q vs. Q update

Commodity	Region	Q-o-Q Up	Q-o-Q Down
Base Metals			
Aluminum	International	14.69% ▲	
	Domestic	13.58% ▲	
Copper	International	14.53% ▲	
	Domestic	13.67% ▲	
Zinc	International	6.71% ▲	
	Domestic	6.83% ▲	
Lead	International	5.28% ▲	
	Domestic	4.18% ▲	
Nickel	International		-1.60% ▼
	Domestic		-0.03% ▼
Tin	International	23.19% ▲	
	Domestic	N/A	
Magnesium	International	N/A	
Precious Metals			
Platinum	International	1.93% ▲	
Palladium	International	15.90% ▲	
Rhodium	International	11.49% ▲	
Polymers			
Low density polyethylene (LDPE)	International	0.84% ▲	
	Domestic	6.61% ▲	
Polypropylene (PP)	International		-2.92% ▼
	Domestic	5.57% ▲	
Acrylonitrile Butadiene Styrene (ABS)	International	12.53% ▲	
	Domestic	13.70% ▲	
Polystyrene (PS)	International	10.54% ▲	
	Domestic	14.59% ▲	
Rubber	Domestic	6.82% ▲	
Currency Exchange			
Dollar	International	1.25% ▲	
Pound	International	0.92% ▲	
Euro	International	2.37% ▲	
Yen	International		-2.12% ▼

Iron & Steel

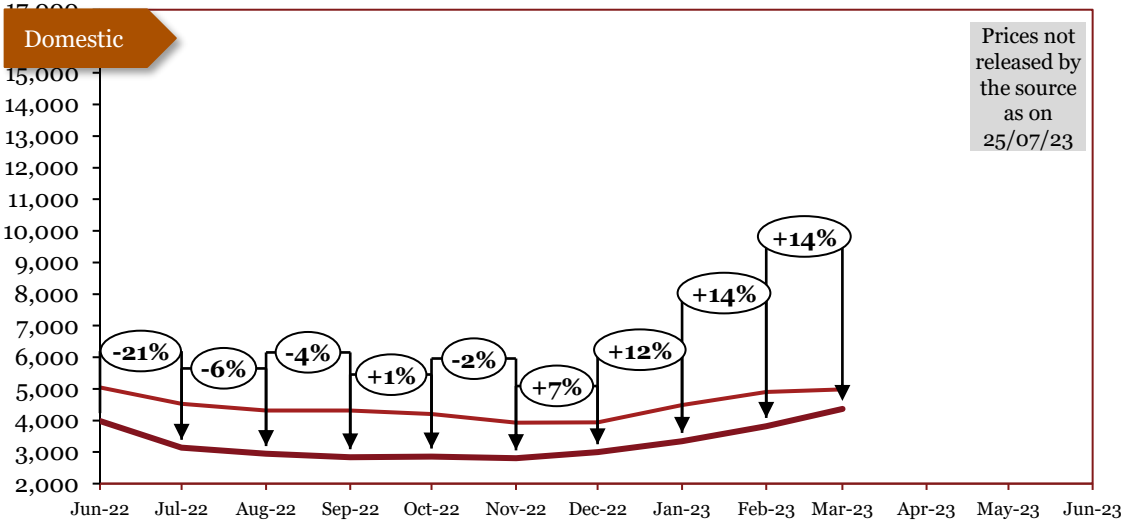
Iron Ore

International



Source: Crisil

Domestic



Prices not released by the source as on 25/07/23

Source: Crisil

Monthly Average Prices

Period	*Int'l	*Dom	
	$/tonne	Rs/tonne	
		65% & below	65% & above
Jun-22	128	3981	5046
Jul-22	104	3139	4524
Aug-22	104	2943	4317
Sep-22	98	2835	4314
Oct-22	92	2860	4204
Nov-22	94	2803	3931
Dec-22	114	2996	3936
Jan-23	124	3346	4484
Feb-23	126	3821	4906
Mar-23	130	4361	4980
Apr-23	122		
May-23	110		
Jun-23	112		

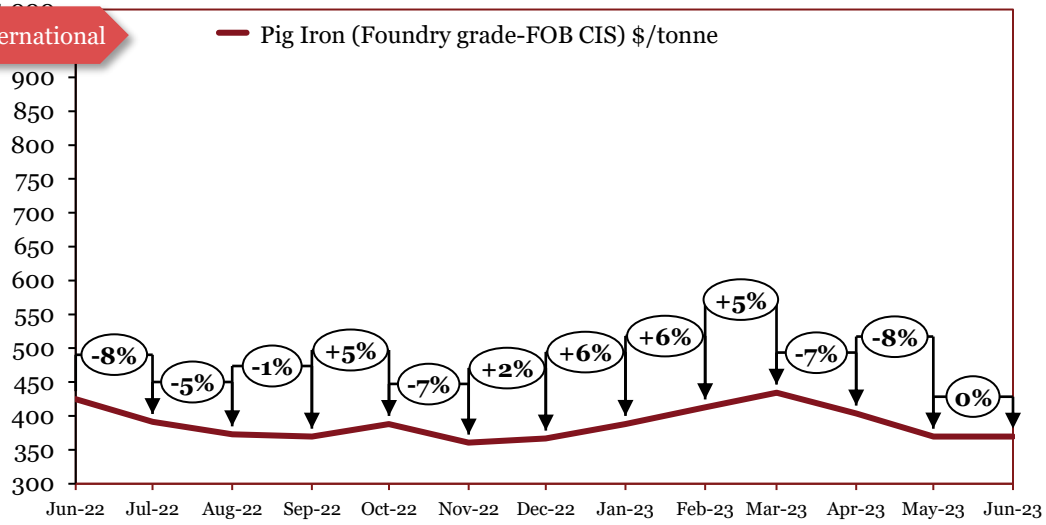
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In October, international and domestic prices dropped as a result of lower consumption levels, particularly in China due to the nation's housing market woes along with Covid restrictions. In November, international prices remained relatively stable. In December, prices rose sharply as a result of a surge in demand from steel plants following the expectation of an easing in China's strict pandemic restrictions. In January and February, international and domestic prices increased amid expectations of strong demand as China re-opened its economy after abandoning its strict zero-COVID policy. In March, international and domestic prices increased due to supply constraints from weather-impacted Brazil and China's seasonal winter curb on production. In April, international prices fell amid weak demand from Chinese steelmakers and increased inventories at Chinese ports. In May, prices decreased due to increased supply in an already flooded market as several companies ramped up production amid lower raw material costs. In June, international prices increased as the market remained optimistic about the outlook for demand amid growing signs that the world's top steel producer, China, would introduce more stimulus to support its sputtering post-Covid economic rebound.

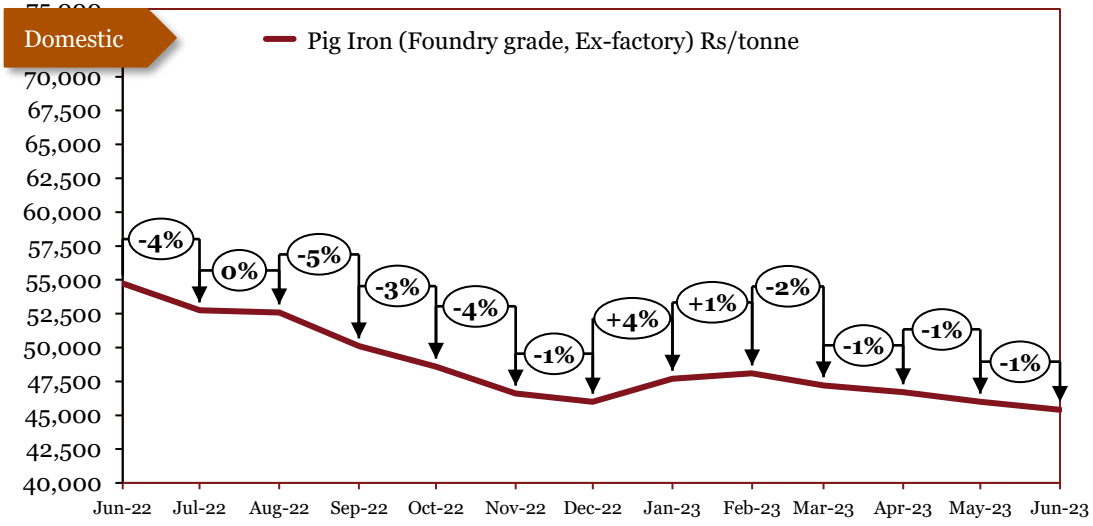
Pig Iron

International



Source: Crisil

Domestic



Source: Crisil

Monthly Average Prices

Period	*Int'l $/tonne	*Dom Rs/tonne
Jun-22	425	54750
Jul-22	391	52750
Aug-22	373	52600
Sep-22	370	50100
Oct-22	388	48600
Nov-22	360	46600
Dec-22	367	46000
Jan-23	388	47700
Feb-23	413	48100
Mar-23	434	47200
Apr-23	403	46700
May-23	370	46000
Jun-23	370	45400

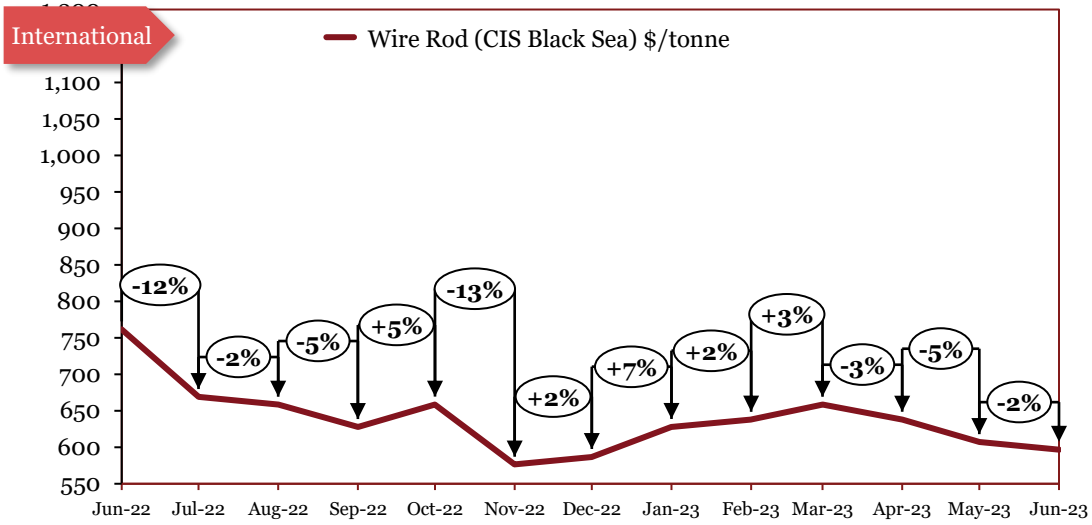
The actual prices may vary depending on city, player, grade etc.

Outlook

In November, international and domestic prices declined sharply due to a fall in coking coal prices, along with a slowdown in end-user demand caused by recessionary fears and geo-political unrest. In December, international prices rose slightly in tandem with iron ore prices. Domestic prices remained marginally stable. In January, domestic prices increased as India's largest iron ore producer NMDC raised its iron ore prices, a key raw material. International prices increased due to a boost in China's property sector as a result of favorable policymaking. In February, prices increased in tandem with key raw material prices of coking coal and iron ore. In March, domestic prices fell due to moderate demand for finished steel in the secondary sector. International prices increased in tandem with iron ore prices. In April, prices decreased due to a negative correction in coal and coke prices. In May, domestic prices plummeted as coking coal prices fell by almost 15%. International prices decreased due to subdued steel demand caused by high inflation and liquidity crunch. In June, prices remained relatively stable.

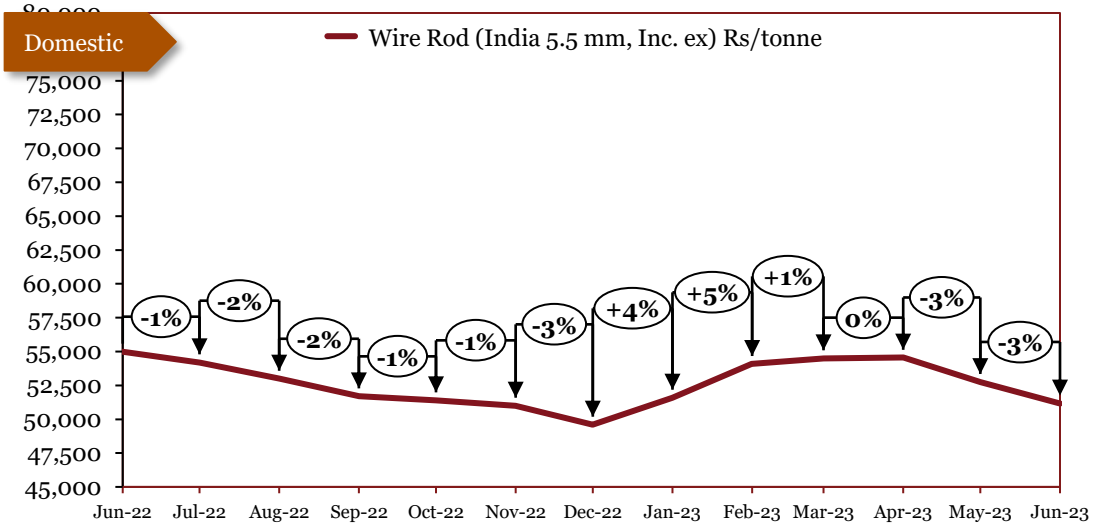
Wire Rod

International



Source: Crisil

Domestic



Source: Crisil

Monthly Average Prices		
Period	**^*Int'l ($/tonne)**	***Dom (Rs/tonne)**
Jun-22	761	54994
Jul-22	669	54194
Aug-22	659	52994
Sep-22	628	51694
Oct-22	659	51394
Nov-22	576	50994
Dec-22	587	49594
Jan-23	628	51594
Feb-23	638	54094
Mar-23	659	54494
Apr-23	638	54554
May-23	607	52754
Jun-23	597	51154

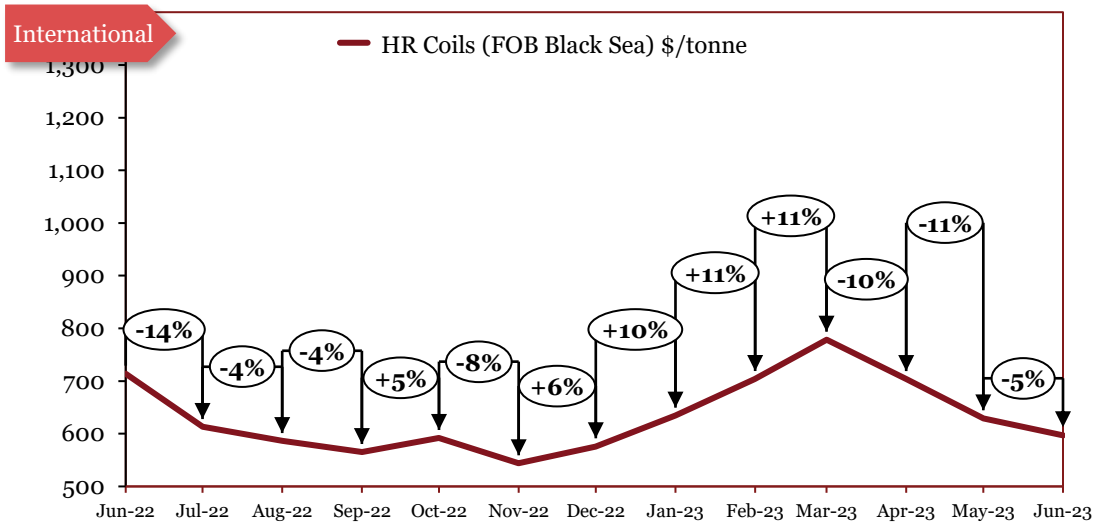
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In September, prices felldue to market uncertainty amid soaring energy prices, coupled with highly volatile prices of semi-finished steel in key markets. In October, domestic prices fell due to subdued domestic demand and inventory pile-up at steel mills due to scheduled maintenance breaks. International prices increased in tandem with stainless steel prices. In November, international prices fell sharply due to a fall in downstream demand, a slowdown in China's economy (a major consumer of finished steel products), as well as high inventory levels at mills. Domestic prices remained relatively stable. In December, international prices rose due to a surge in demand from the construction sector of China.Domestic prices decreased due to a decline in coking coal prices. In January, prices increased due to a contraction in pig iron production rates at major integrated steel works in the EU, the UK, the Balkans, and Turkey. In February and March, prices increased due toan increase in the price of steel, iron ore, and coking coal. In April, domestic prices remained stable. International prices decreased in tandem with steel and coking coal prices. In May, prices plummeted in tandem with coking coal prices and a fall in steel demand from the real estate sector in China.In June, prices decreased due to limited demand and sluggish global trends.

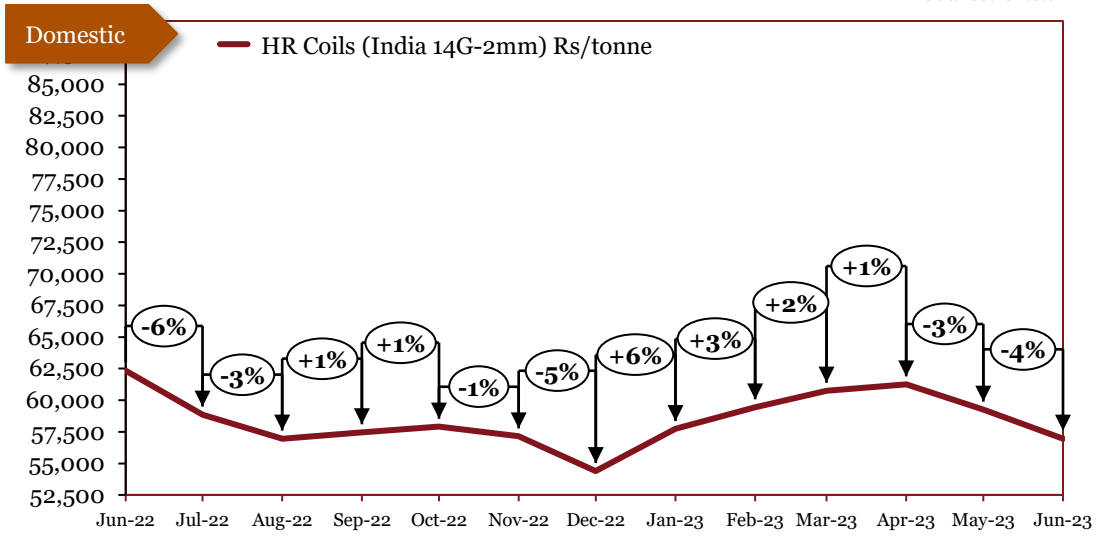
Hot-Rolled (HR) Coils

International



Source: Crisil

Domestic



Source: Crisil

Monthly Average Prices		
Period	***Int'l ($/tonne)**	**^*Dom (Rs/tonne)**
Jun-22	714	62350
Jul-22	613	58850
Aug-22	586	56950
Sep-22	565	57450
Oct-22	592	57900
Nov-22	544	57150
Dec-22	576	54400
Jan-23	634	57725
Feb-23	704	59425
Mar-23	778	60750
Apr-23	704	61250
May-23	629	59250
Jun-23	597	56950

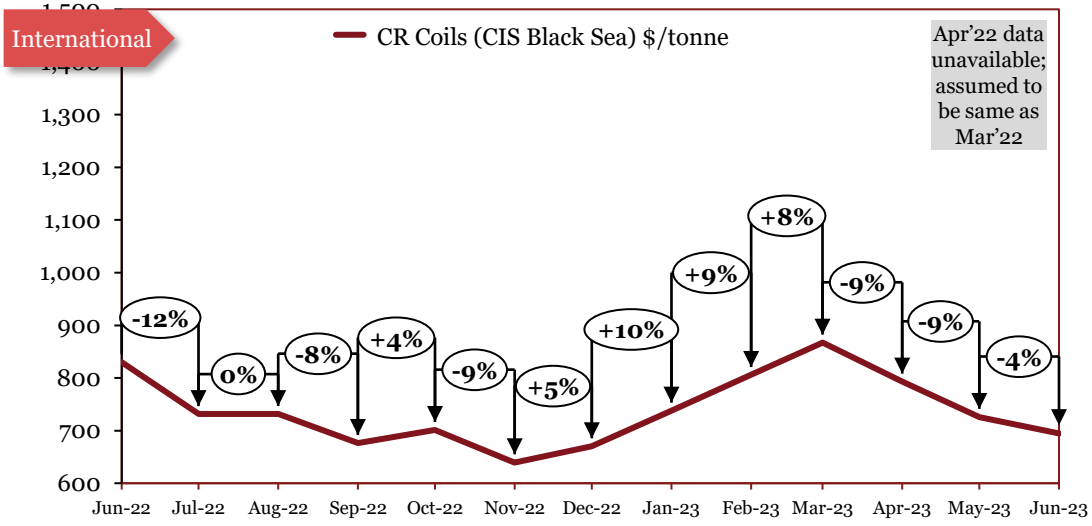
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In March, domestic prices increased due to high coking coal prices and stable export prices. International prices increased due to supply chain disruptions in Turkey. In April, domestic prices increased as Indian mills hike prices amid strong exports. International prices fell due to reduced demand caused by high-interest rates, a fall in iron ore prices, a surplus in the market after an initial surge in Chinese demand, and a global economic slowdown. In May, domestic prices decreased due to a slowdown in global demand, an influx of cheap imports from far-eastern Asia and Russia, and the government's decision not to increase import duties on rental cars increasing competition in the market. International prices fell as trade in the products came to a halt due to a lack of demand because of negative market sentiment, influenced by the uncertainty of the Chinese market and negative macroeconomic factors, and consistently high supply and inventories in China during the period of suspension of purchases during the holidays. In June, prices decreased as demand continues to be subdued as customers across sectors resorted to 'wait-and-watch' or 'need-based buying' along with a decrease in coking coal prices.

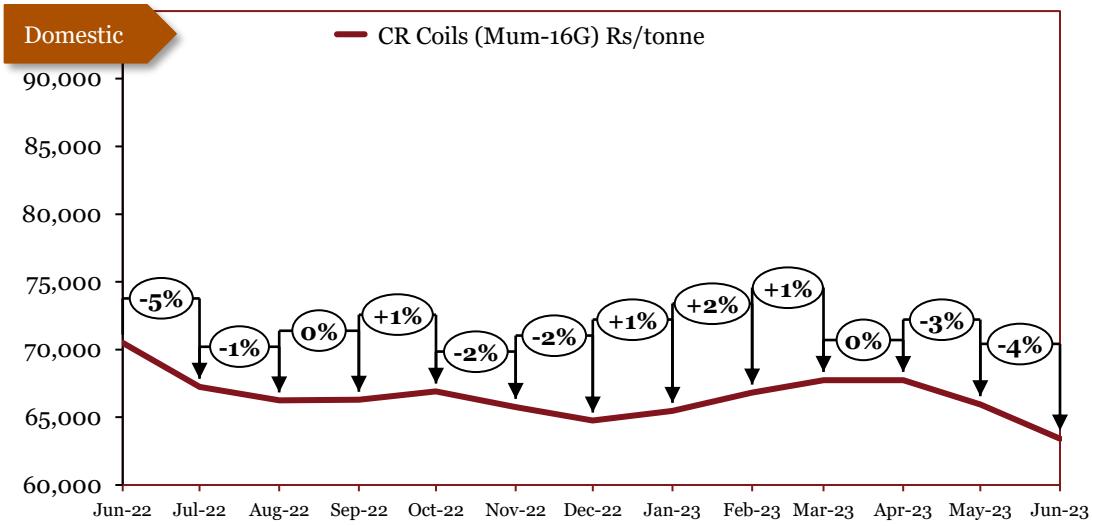
Cold-Rolled (CR) Coils

International



Source: Crisil

Domestic



Source: Crisil

Monthly Average Prices

Period	*Int'l ($/tonne)	^*Dom (Rs/tonne)
Jun-22	830	70500
Jul-22	732	67250
Aug-22	732	66250
Sep-22	677	66300
Oct-22	701	66900
Nov-22	640	65750
Dec-22	670	64750
Jan-23	738	65475
Feb-23	806	66825
Mar-23	867	67750
Apr-23	793	67750
May-23	726	65950
Jun-23	695	63425

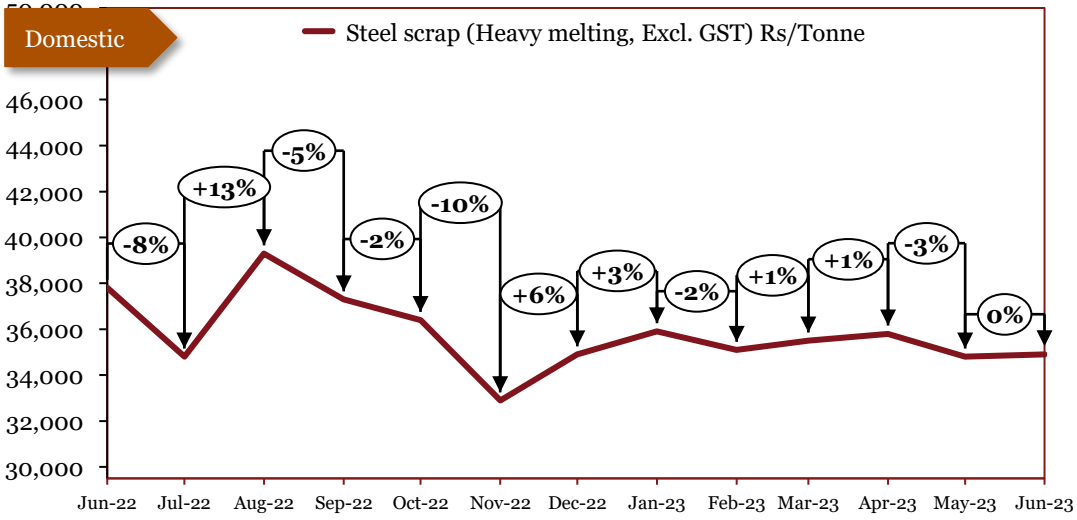
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In December, international prices increased as China ditched its "zero COVID" policy and adopted new economic stimulus measures, including new investments in infrastructure. Domestic prices decreased as steelmakers were forced to cut prices as a result of higher available stocks caused by weakening export markets. In January and February, prices increased due to a boost in demand as a result of the easing of restrictions in China and increased global inflation. In March, domestic prices increased as mills hiked prices due to elevated raw material prices like iron ore and coking coal, which improved demand in the domestic market. International prices increased in tandem with iron ore prices. In April, international prices fell in tandem with HRC prices. Domestic prices remained stable. In May, domestic prices decreased in tandem with iron ore and coking coal prices. International prices decreased. International prices decreased amid uncertainty and market concerns about the macroeconomic prospects. In June, domestic prices fell on account of the monsoon which weakened construction activities, Indian steel mills witnessed a demand slowdown and a fall in coking coal prices. International prices decreased due to a lack of demand and softer input costs (Steel and coking coal).

Steel Scrap (Heavy Melting)

Domestic



Source: CRISIL

Monthly Average Prices	
Period	***Dom (Rs/Tonne)**
Jun-22	37800
Jul-22	34800
Aug-22	39300
Sep-22	37300
Oct-22	36400
Nov-22	32900
Dec-22	34900
Jan-23	35900
Feb-23	35100
Mar-23	35500
Apr-23	35800
May-23	34800
Jun-23	34900

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

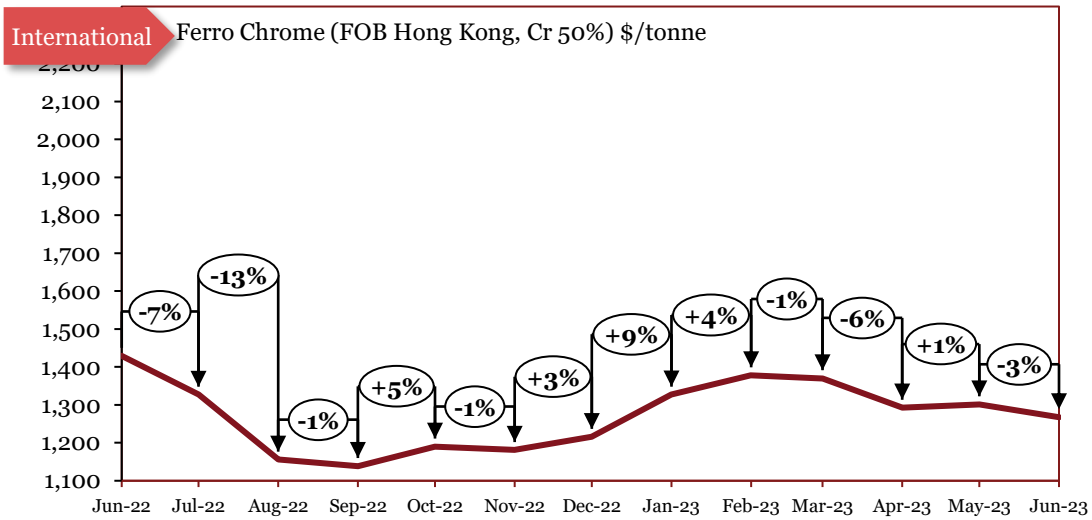
Outlook

In June, domestic prices fell due to low ingots sales. In July, prices fell amid an oversupply crisis, weakening of demand, and seasonal monsoon pressures. In August, prices increased on the back of a rise in demand from the automotive industry, owing to the onset of the festive season. In September, prices saw a downward trend due to considerable imports of cheaper bulk scrap from the US. In October, prices declined slightly due to reduced buying at steel scrap auctions, as a result of lower domestic consumption levels. In November, prices fell sharply due to the pile-up of finished inventory with steel mills post-export duty imposition, coupled with weak end-user demand and the resultant lower capacity utilization. In December and January, prices increased due to low availability during the winter period, as adverse weather conditions slowed down the collection and processing of scrap. In February, prices decreased due to the consequences of the Turkey-Syria earthquake. In March, prices increased due to inclement weather, low inventories, a reported shortage of prime steel scrap substitute DRI, and rising finished steel prices. In April, prices increased slightly due to tight supply caused due to supply chain issues in Turkey. In May, prices decreased due to a decrease in steel prices and declining import offers. In June, prices remained relatively stable.

Ferro-alloys

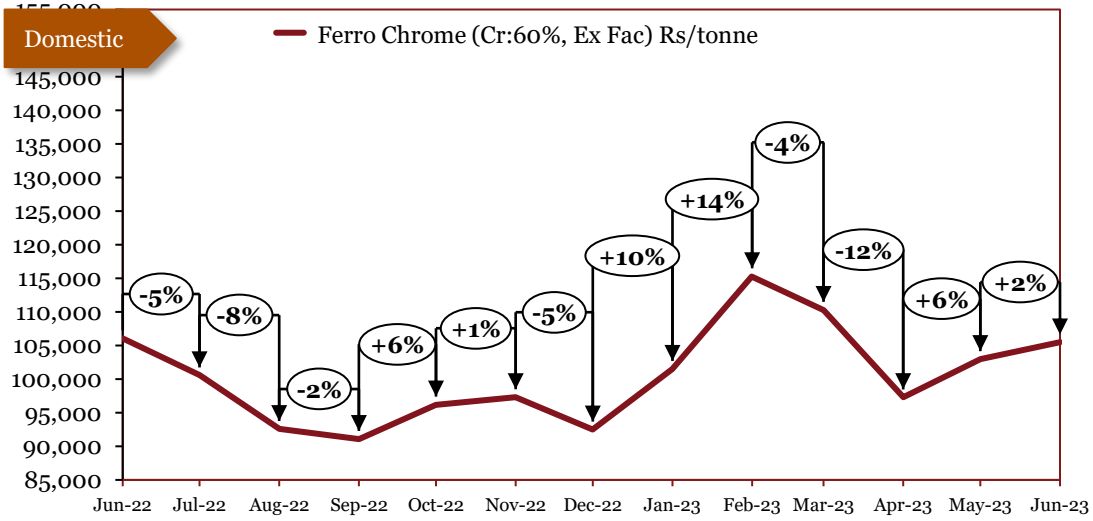
Ferro chrome

International



Source: Crisil

Domestic



Source: Crisil

Monthly Average Prices

Period	*Int'l ($/tonne)	*Dom (Rs/tonne)
Jun-22	1430	106100
Jul-22	1327	100600
Aug-22	1156	92600
Sep-22	1138	91100
Oct-22	1190	96200
Nov-22	1181	97300
Dec-22	1216	92500
Jan-23	1327	101500
Feb-23	1378	115300
Mar-23	1370	110300
Apr-23	1293	97300
May-23	1301	103000
Jun-23	1267	105500

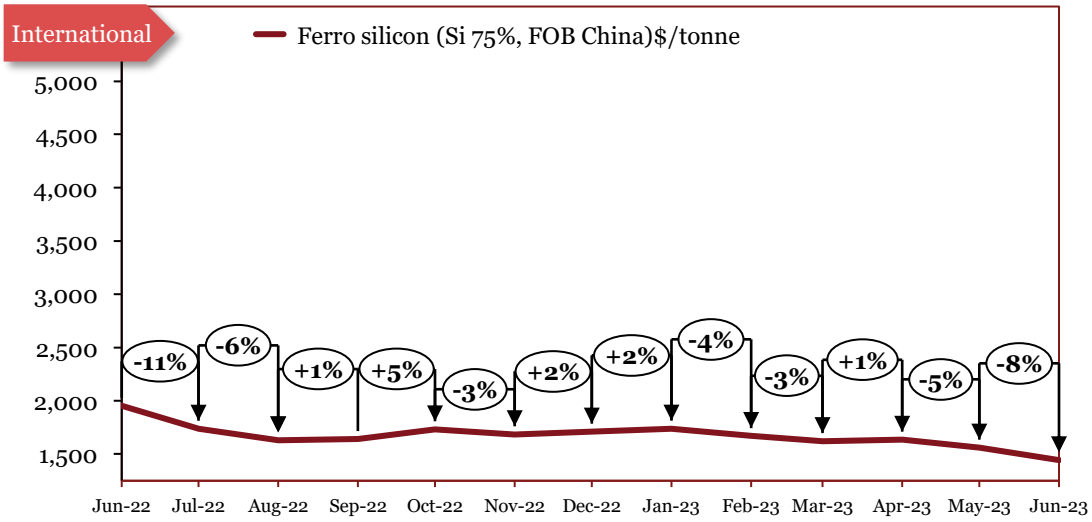
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In November, international prices remained relatively stable. Domestic prices rose slightly as the NMDC hiked iron ore prices, which is a key raw material. In December, international prices increased in tandem with iron ore prices. Domestic prices decreased due to a decrease in the price of coking coal. In January and February, prices increased in tandem with chromium and iron ore prices. In February, prices increased due to the limited availability of chrome ores, a severe earthquake in Turkey- one of the biggest chrome ore producers, a Marked increase in load-shedding (planned power shutdowns) in South Africa, and reduced production of Asian ferrochrome producers. In March, prices fell amidst a bearish stainless-steel market. In April, prices decreased due to a fall in input costs (iron ore and coking coal), oversupply at Chinese mills, and weak demand from both domestic and export markets. In May, prices increased due to scarce availability and high demand. In June, international prices decreased in tandem with coking coal prices. Domestic prices increased due to high electricity costs.

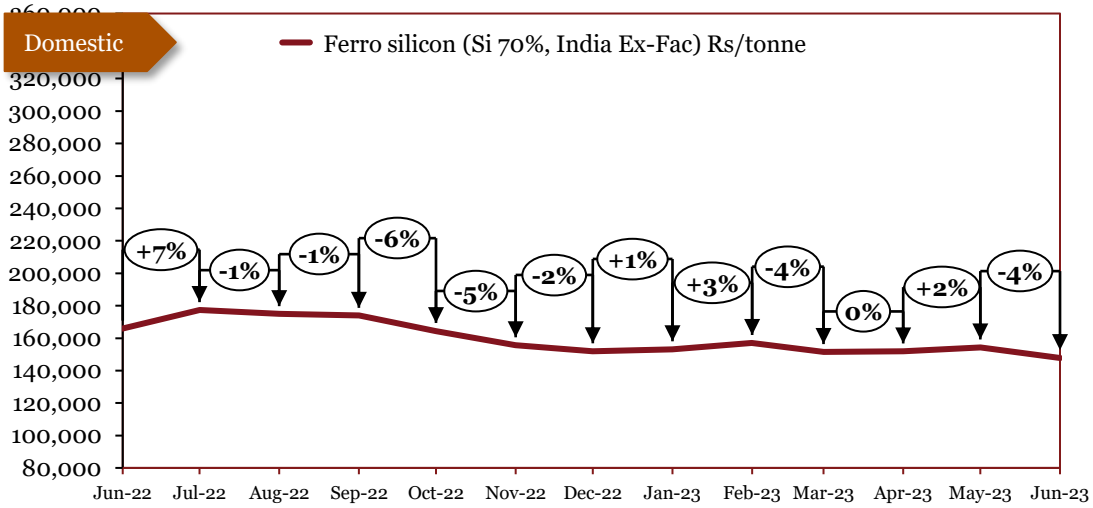
Ferro silicon

International



Source: Crisil

Domestic



Source: Crisil

Monthly Average Prices		
Period	*Int'l ($/tonne)	*Dom (Rs/tonne)
Jun-22	1953	165950
Jul-22	1739	177450
Aug-22	1628	174950
Sep-22	1642	173950
Oct-22	1732	164350
Nov-22	1684	155650
Dec-22	1711	151850
Jan-23	1739	153050
Feb-23	1670	157050
Mar-23	1622	151550
Apr-23	1635	151850
May-23	1559	154350
Jun-23	1442	147850

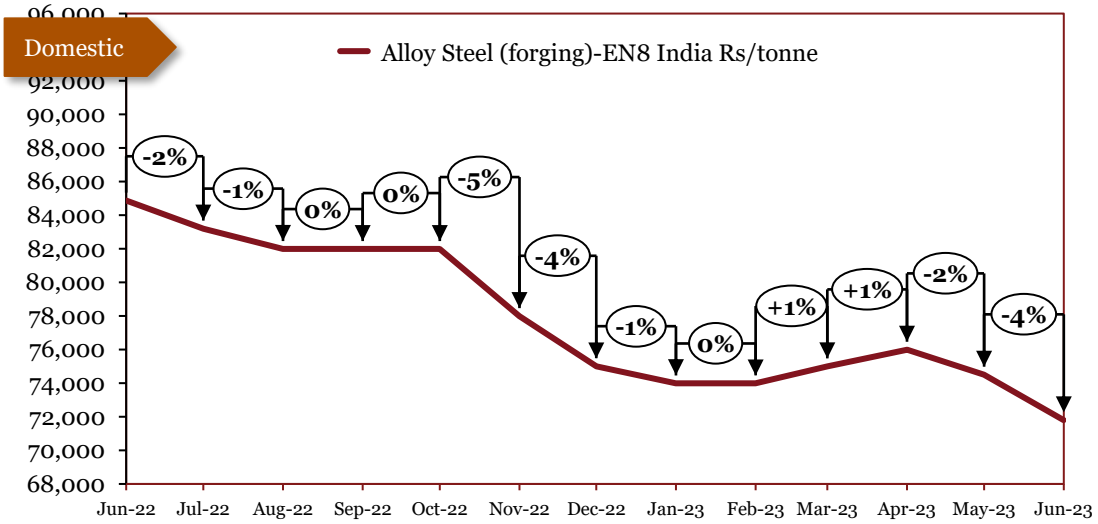
The actual prices may vary depending on city, player, grade etc.

Outlook

In October, domestic prices fell as a result of a sharp decline in domestic demand. International prices increased on account of production cuts in China due to Covid-19 restrictions. In November, both international and domestic prices decreased due to limited end-user demand and lower trading volumes, as well as high inventory levels caused by various ferromanganese producers shifting to ferrosilicon. In December, international prices increased due to higher input costs. Domestic prices decreased in tandem with coking coal prices. In January, prices remained relatively stable in the face of moderate demand. In February, domestic prices inched up in anticipation of material shortage due to restrictions on imported material from sellers who did not have a BIS certificate. International prices decreased amidst fears of recession. In March, prices decreased due to sluggish demand and oversupply at the producers. In April, prices rose due to an increased supply crunch in the domestic (labor issue in Bhutan) and global markets (power curtailment in the Ningxia region of China). In May, international prices fell in tandem with iron ore and coking coal prices. Domestic prices increased due to low production caused by power outages in northeast India, a major production center. In June, prices dropped on account of higher supplies, and sluggish steel demand amid intense bargaining in the market and low coking coal prices.

EN8 Alloy Steel (Forging)

Domestic



Source: SIAM

Monthly Average Prices	
Period	*Dom (Rs/tonne)
Jun-22	84875
Jul-22	83200
Aug-22	82000
Sep-22	82000
Oct-22	82000
Nov-22	78000
Dec-22	75000
Jan-23	74000
Feb-23	74000
Mar-23	75000
Apr-23	76000
May-23	74500
Jun-23	71800

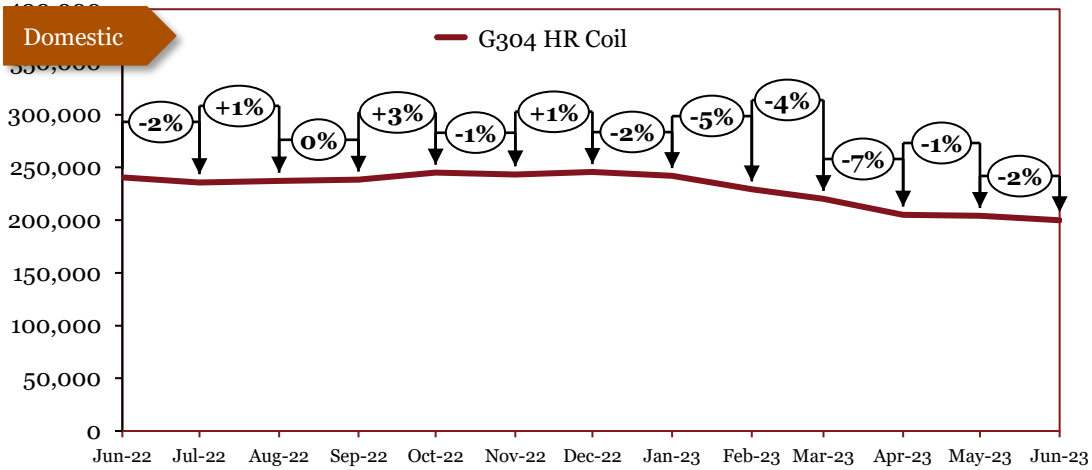
**The actual prices may vary depending on city, player, grade etc.*

Outlook

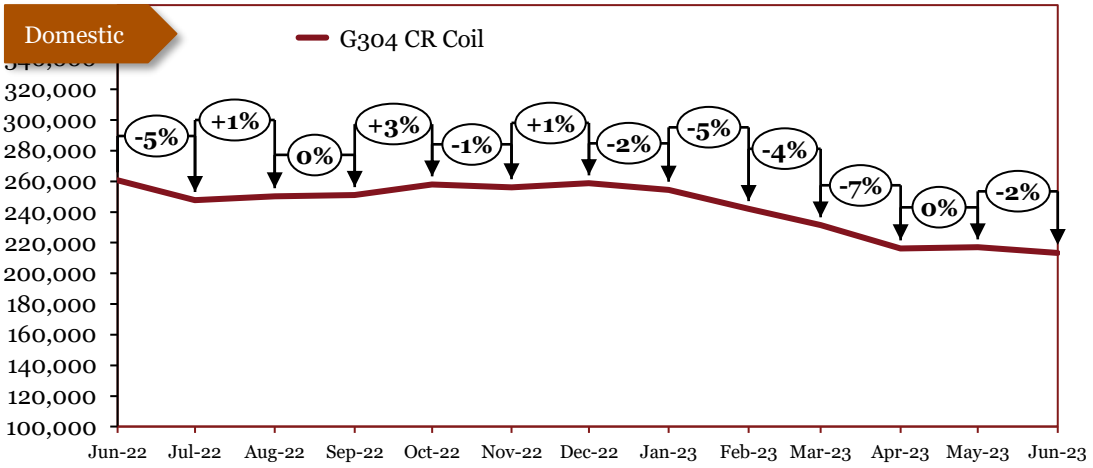
In March, prices increase in tandem with steel prices. In April, prices continued to rise amid supply disruptions caused by the situations in South Africa and Ukraine. In May, domestic prices remained stable. In June, Decline in prices is due to a plunge in exports and stagnant demand. In July, domestic prices fell slightly due to lower demand on account of a lack of export orders. In August, prices fell slightly owing to price cuts by steel mills, along with a fall in demand from the automotive industry. In September, prices remained stable. In October, prices remained stable. In November, prices fell due to concerns over an impending global recession and geo-political unrest, leading to a decline in demand and a downturn in the metal cycle. In December, prices fell due to the higher availability of stocks caused by a slowdown in export markets and global recessionary pressures. In January, prices decreased in tandem with stainless steel prices. In February, prices remained stable. In March, prices rose in tandem with elevated raw material and energy costs. In April, prices increased slightly due to a positive market outlook. In May, prices decreased in tandem with coking coal prices. In June, prices decreased as Chinese steel mills continued dumping alloy steel into Indian markets due to a shortage of customers in China leading to oversupply.

Stainless Steel

Domestic



Domestic



Monthly Domestic Average Prices

Period	*G304 HR (Rs/tonne)	*G304 CR (Rs/tonne)
Jun-22	240500	260600
Jul-22	235750	247750
Aug-22	237375	250250
Sep-22	238500	251000
Oct-22	245000	258000
Nov-22	243400	256000
Dec-22	245750	258750
Jan-23	242000	254500
Feb-23	229375	242000
Mar-23	220200	231400
Apr-23	205188	216250
May-23	204000	217000
Jun-23	200000	213250

Source: SIAM

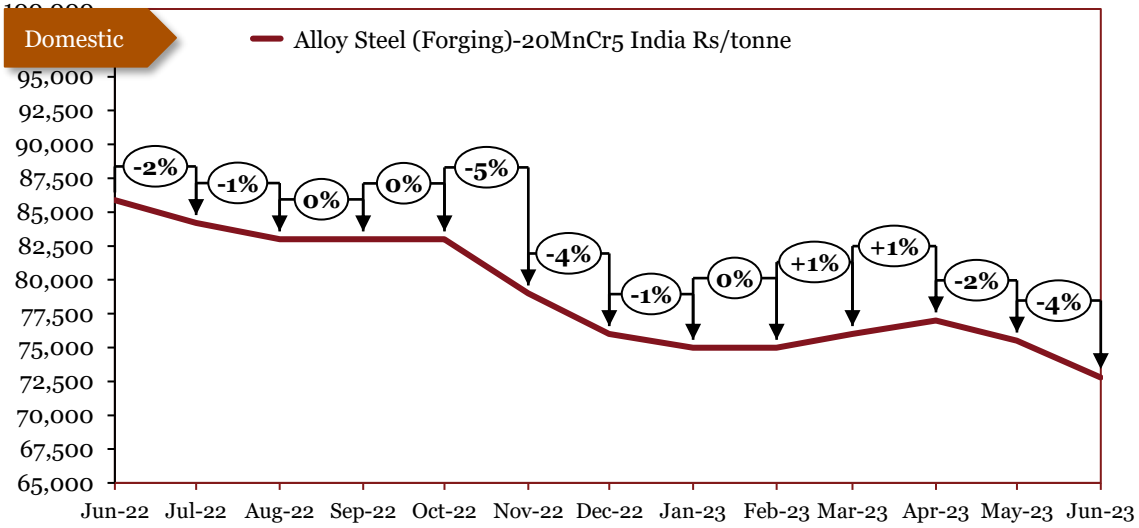
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In June, prices fell on the back of the imposition of export duty and crash in domestic steel prices. In July, weaker demand from construction and automobile industries led to a decrease in prices. In August, prices increased slightly as a result of an increase in end-consumer demand, due to the onset of the festive season. In September, prices remained relatively stable. In October, prices increased amid a sharp rise in domestic demand due to the onset of the festive season. In November, prices remained relatively stable. In December, prices rose in tandem with rising input costs - particularly nickel - caused by the Ukraine-Russian conflict and the resultant trade embargoes. In January, prices fell as vendor-managed inventory of stainless-steel factories increased sharply and the inventory under warrants also expanded to a high level. In February and March, prices dropped sharply due to weak demand amid fears of recession and a high level of inventory at the producers. In April and May, prices decreased due to a drop in raw material prices, rising stock levels, higher interest rates impeding downstream construction & automotive sector, and fears of recession. In June, prices fell due to sluggish demand in the traders' market amid need-based procurement, low demand from end consumers due to inflation, and high energy prices.

20MnCr5 Alloy Steel (Forging)

Domestic



Source: SIAM

Monthly Average Prices	
Period	***Dom (Rs/tonne)**
Jun-22	85875
Jul-22	84200
Aug-22	83000
Sep-22	83000
Oct-22	83000
Nov-22	79000
Dec-22	76000
Jan-23	75000
Feb-23	75000
Mar-23	76000
Apr-23	77000
May-23	75500
Jun-23	72800

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

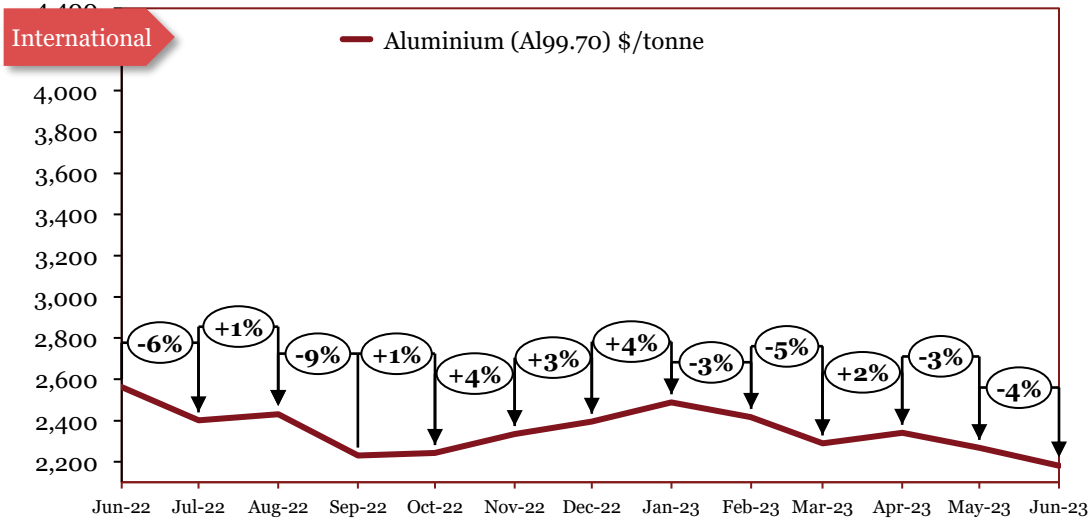
Outlook

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 inquiries from buyers and a decrease in exports. In August, prices fell owing slightly to a sustained fall in demand from the automotive industry. In September, prices remained relatively stable. In October, prices remained stable. In November, prices fell due to subdued overseas demand - particularly in China which is a major consumer of stainless steel - and concerns over a global recession. In December, prices declined due to a slowdown in export markets amid global recessionary pressures. In December and January, prices declined due to a slowdown in export markets amid global recessionary pressures. In February, prices remained stable. In March and April, prices rose in tandem with production costs- higher energy and steel scrap prices. In May, prices decreased in tandem with steel scrap and coking coal prices. In June, prices continue to spiral down, primarily driven by the demand weakness in China and falling coking coal prices.

Base Metals

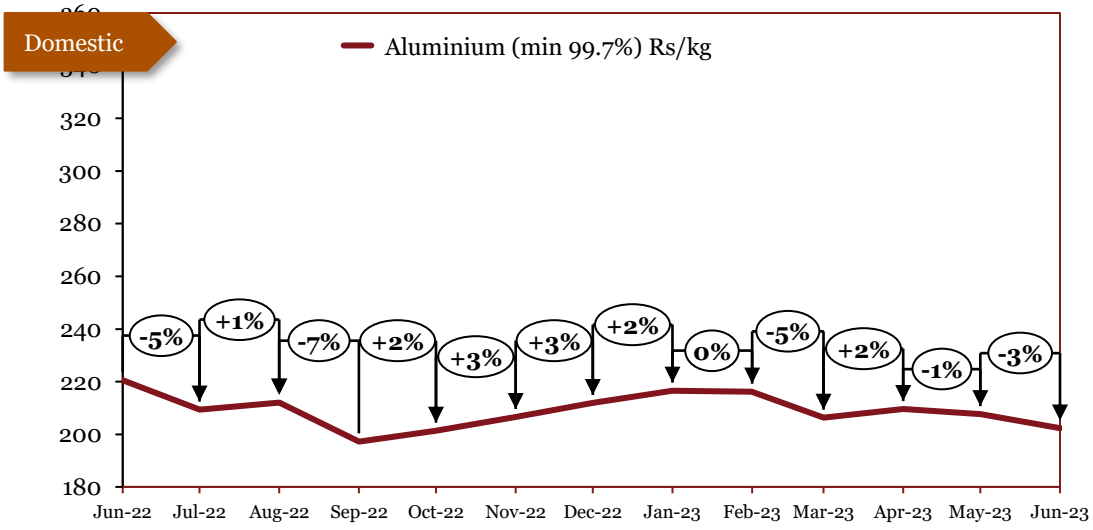
Aluminium

International



Source: LME

Domestic



*Source: MCX**
Source updated in July 2019

Monthly Average Prices

Period	*Int'l ($/tonne)	*Dom (Rs/kg)
Jun-22	2563	221
Jul-22	2401	209
Aug-22	2431	212
Sep-22	2230	197
Oct-22	2243	201
Nov-22	2335	207
Dec-22	2394	212
Jan-23	2489	217
Feb-23	2417	216
Mar-23	2290	206
Apr-23	2341	210
May-23	2267	208
Jun-23	2181	202

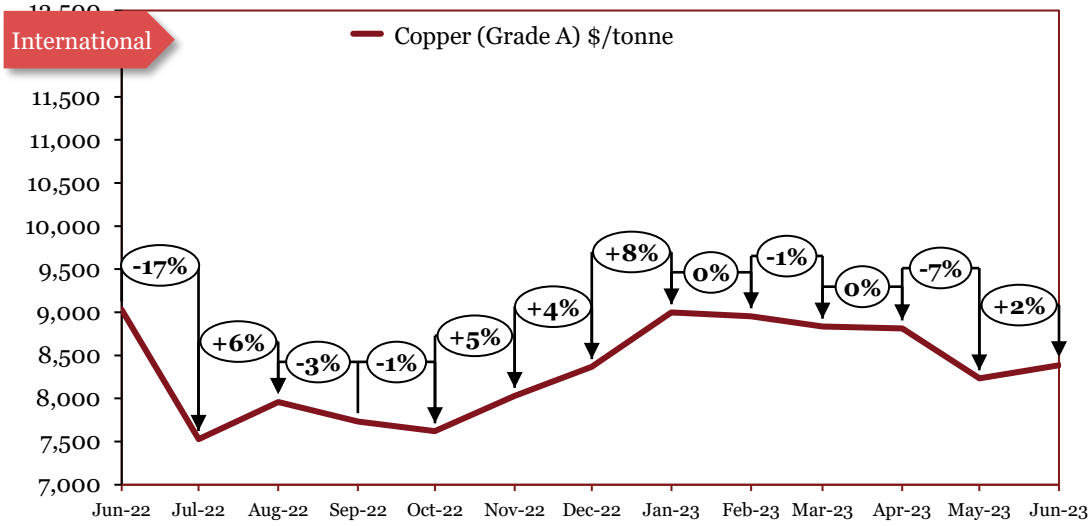
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In November, prices increased due to lower producer margins caused by soaring energy costs. In December, prices grew because of a rise in demand for low-carbon Aluminium caused by the importance placed on climate-friendly supply, along with higher demand for the light metal from the automotive industry. In January, prices rose due to increased tariffs, supply woes caused by the Shanghai smelter cutting production, and Chinese ingot inventories being de-stocked. In February, domestic prices remained relatively stable. International prices decreased due to a drop in worldwide demand and increasing production and logistic costs. In March, prices continued to fall due to slack demand, increasing stock inventories, and recessionary trends. In April, prices increased because of spurred consumption due to a lower US Dollar and power cuts in China affecting Aluminium smelters. In May, domestic prices remained relatively stable. International prices decreased as output increased and inventories rose amid tepid demand for the metal used in the auto, packaging, and construction sectors. In June, prices decreased as demand from some end-user sectors like construction remained tepid amid the ongoing high-inflation environment and poor economic conditions in Europe and Germany entering into a recession.

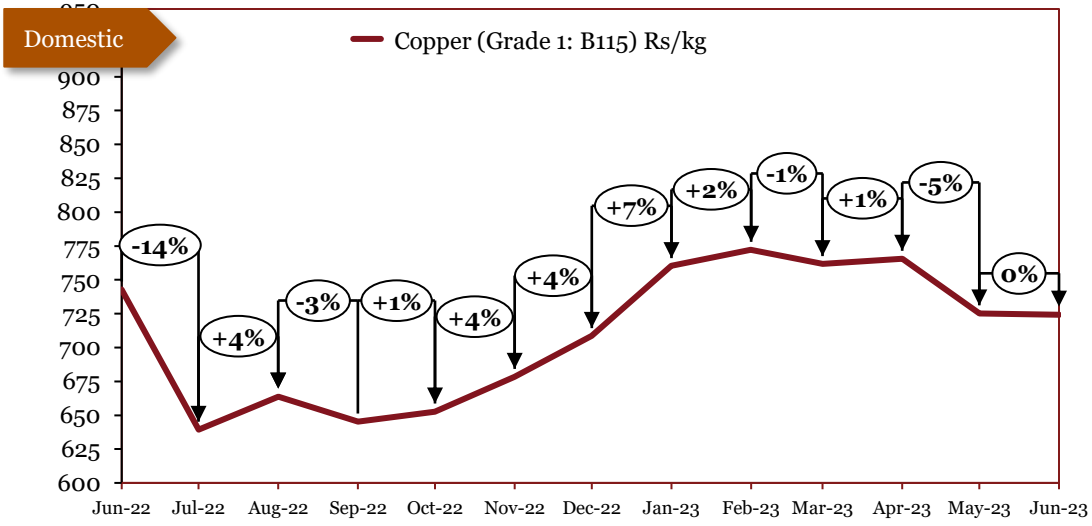
Copper

International



Source: LME

Domestic



Source: MCX

Monthly Average Prices		
Period	*Int'l ($/tonne)	*Dom (Rs/kg)
Jun-22	9032	743
Jul-22	7529	639
Aug-22	7960	664
Sep-22	7734	645
Oct-22	7620	653
Nov-22	8029	678
Dec-22	8367	709
Jan-23	8999	760
Feb-23	8954	772
Mar-23	8835	762
Apr-23	8813	766
May-23	8234	725
Jun-23	8386	724

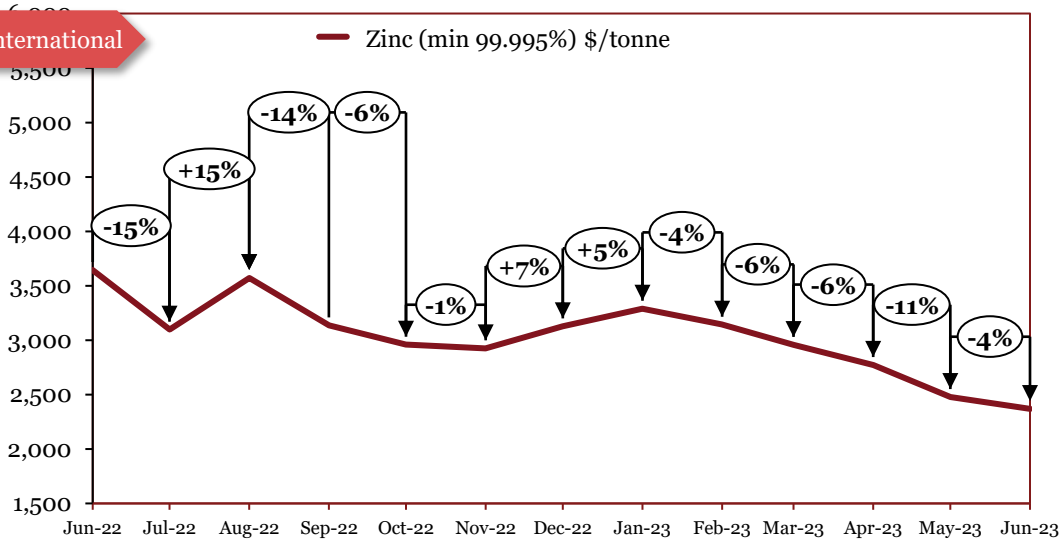
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In January, prices surged due to a boost in demand for 'green' metals as the green transition accelerates, coupled with supply woes in Peru and operational issues in Latin America. In February, International prices decreased due to a slower-than-expected demand recovery, high U.S. interest rates, and an increase in scrap availability in the Chinese market. Domestic prices continue to rise on account of healthy buying inquiries amid a rise in LME futures. In March, international prices decreased due to inflation in the US in a downward trend, with market players betting on the US Fed to slow down interest rate hikes and weak supply. In April, international prices continued a downward trend due to weak global demand caused by rising interest rates, high inventories, and a global slowdown. Domestic prices remained relatively stable. In May, prices continued a downward trend due to contracting manufacturing activity and slumping industrial profits in China. In June, international prices rose supported by a vote of approval from the U.S. House of Representatives to suspend the debt ceiling and improvement in the fundamentals of copper as an EV & green energy metal. Domestic prices remained stable.

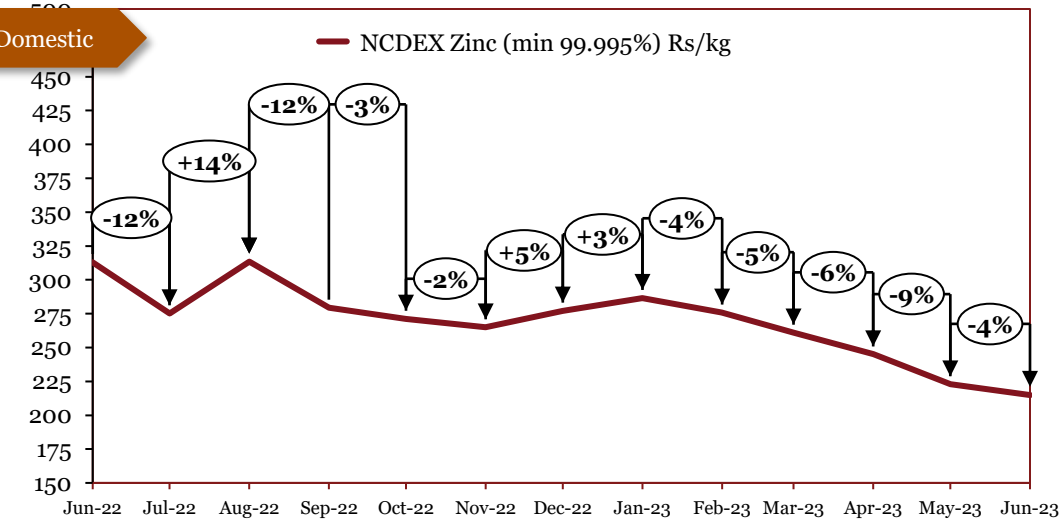
Zinc

International



Source: LME

Domestic



*Source: MCX**

Monthly Average Prices

Period	*Int'l ($/tonne)	*Dom (Rs/kg)
Jun-22	3643	313
Jul-22	3097	275
Aug-22	3572	314
Sep-22	3136	280
Oct-22	2959	271
Nov-22	2923	265
Dec-22	3128	277
Jan-23	3289	287
Feb-23	3143	276
Mar-23	2956	261
Apr-23	2772	245
May-23	2477	223
Jun-23	2368	215

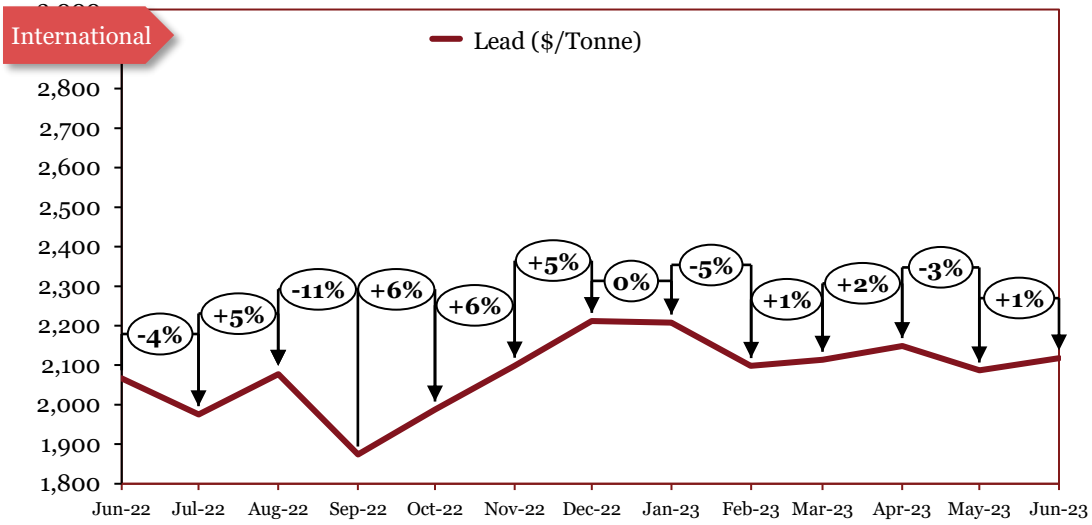
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In November, prices marginally declined due to a slowdown in demand caused by a sustained slump in China's economic activity, along with a rebound in the dollar. In December, both international and domestic prices increased on the back of tight supply amid reduced production in Europe due to higher energy costs, and higher demand due to the easing of lockdown and quarantine measures in China. In January, prices increased due to higher costs of production as coal prices rose. In February prices tumbled due to the potential for a significant supply recovery and a return to zinc surplus after two years of shortfall. In March, prices fell as a result of continuing concerns about global economic growth, lack of momentum from China, weak manufacturing activity in the USA, and a stronger dollar. In April, prices plummeted due to the flagging global economy, vulnerable US banking sector, and higher inventory levels, and resumed operations in France's smelters. In May, prices fell due to interest rate hikes, dollar strength, an increase in smelter supply, and a weaker-than-expected economic recovery in China -- biggest consumer of zinc. In June, prices declined due to weak demand, coupled with an increase in smelter and sluggishness in the steel sector, which impacted the demand for galvanizing.

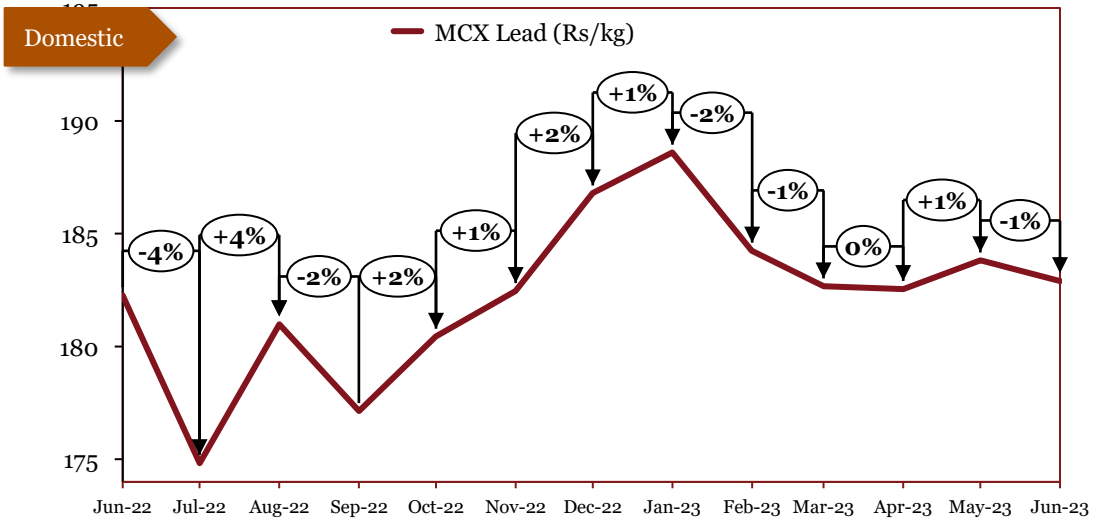
Lead

International



Source: LME

Domestic



Source: MCX

Monthly Average Prices

Period	*Int'l ($/tonne)	*Dom (Rs/kg)
Jun-22	2067	182
Jul-22	1976	175
Aug-22	2077	181
Sep-22	1874	177
Oct-22	1987	180
Nov-22	2099	182
Dec-22	2212	187
Jan-23	2208	189
Feb-23	2098	184
Mar-23	2114	183
Apr-23	2148	183
May-23	2087	184
Jun-23	2118	183

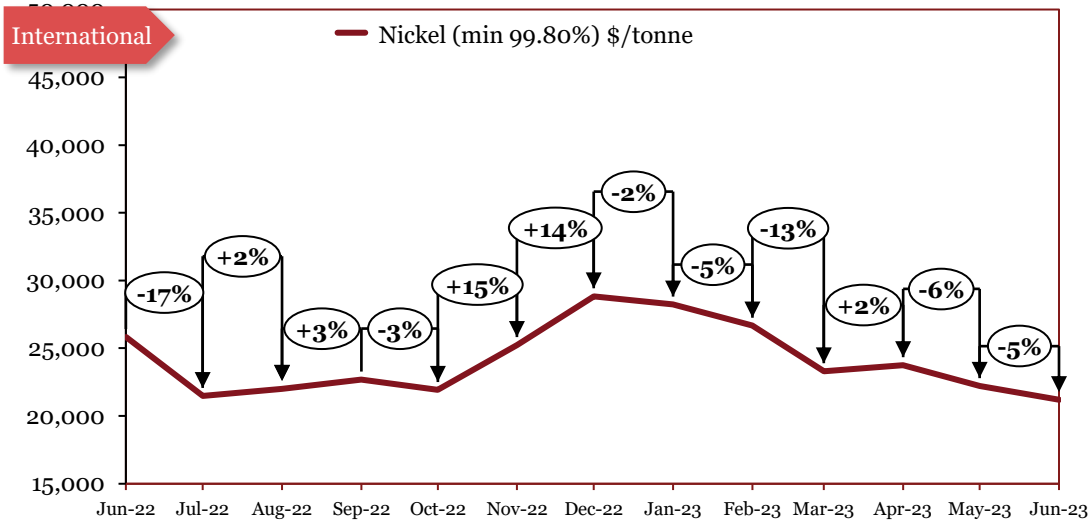
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In December, international prices rose due to tight supply caused by lower production in mines worldwide, and a higher rate of automotive battery replacements caused by harsh weather conditions. Domestic prices remained relatively stable. In January, prices remained relatively stable. In February, prices decreased as the peak lead acid car battery replacement season of winter ended. In March, international prices increased due to a slight acceleration in global lead demand, mainly due to the reopening of China's economy. Domestic prices remained relatively stable. In April, international prices increased due to supply chain disruptions as Russia- the world's seventh-largest producer of lead launched a fresh offensive against Ukraine. Domestic prices remained relatively stable. In May, international prices continued a downward trend due to slower global activity, low growth in China's property sector due to high debt levels, and only services-oriented recovery in China. Domestic prices remained stable. In June, international prices increased as the peak lead acid car battery replacement season of summer commenced coupled with high demand from the EV industry. Domestic prices remained relatively stable.

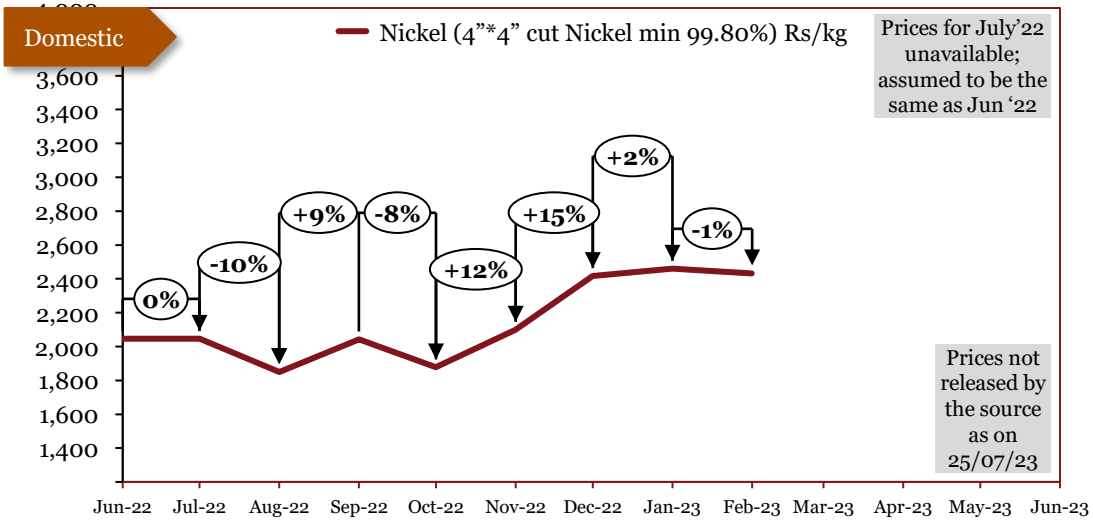
Nickel

International



Source: LME

Domestic



*Source: MCX**

Monthly Average Prices

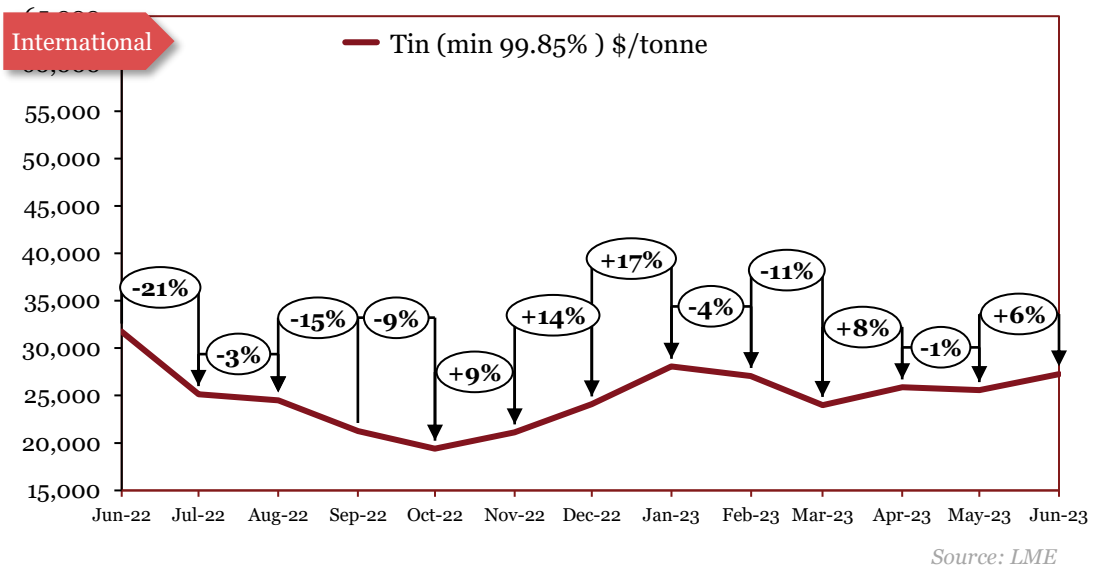
Period	*Int'l ($/tonne)	*Dom (Rs/kg)
Jun-22	25825	2046
Jul-22	21471	2046
Aug-22	21988	1850
Sep-22	22673	2043
Oct-22	21925	1877
Nov-22	25246	2100
Dec-22	28838	2418
Jan-23	28226	2460
Feb-23	26679	2433
Mar-23	23289	
Apr-23	23749	
May-23	22215	
Jun-23	21184	

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

Outlook

In October, prices decreased as a result of lower end-user demand in China due to stronger Covid-19 restrictions caused by an increase in the number of cases. In November, both domestic and international prices increased sharply due to a surge in demand in the global EV market, and speculation of possible supply disruptions from Russian Class 1 producer Norilsk Nickel (Nornickel).In December, prices rose due to tight supply coupled with higher downstream demand, especially for cathodes of electric vehicle batteries in China. In January, international prices decreased due to macroeconomic headwinds and a surplus of inventory. Domestic prices increased due to a surge in demand from the EV industry. In February, prices tumbled on expectations of easing supply tightness. In March, international prices fell due to concerns about the impact of Tsingshan's planned production switch. In April, international prices increased as the US dollar index weakened, and low inventory levels of refined nickel. In May, International prices decreased after the release of disappointing trade data from top industrial metals consumer China. In June, international prices continued a downward trend as global production volumes rise while the market remains in surplus.

Tin



Source: LME

Monthly Average Prices	
Period	*Int'l ($/tonne)
Jun-22	31750
Jul-22	25147
Aug-22	24495
Sep-22	21244
Oct-22	19391
Nov-22	21114
Dec-22	24075
Jan-23	28058
Feb-23	27047
Mar-23	23997
Apr-23	25866
May-23	25586
Jun-23	27243

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

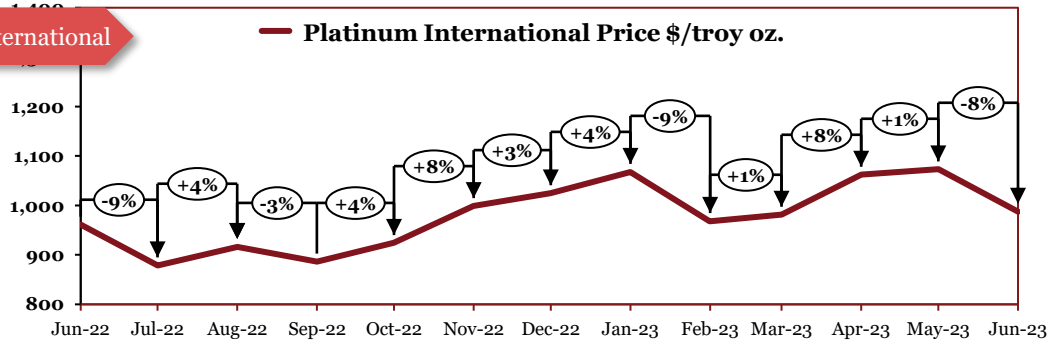
Outlook

In October, prices continued to decline sharply as a result of lower demand in China amid rising coronavirus cases and expanding restrictions. In November, prices rose sharply on account of a looming surge in demand for solar panels and batteries, both lead-acid and lithium-ion due to the green energy transition. In December, prices increased due to a surge in demand for industrial metals caused largely by the easing of restrictions in China. In January, prices increased as Chinese buyers scooped up the surplus metal creating a deficit for the world. In February, prices decreased as the global economy continues to slow and major economies fall into recession. In March, prices fell as the global demand outlook fell substantially on weakening macroeconomic fundamentals, a strengthening US dollar, and still high levels of global inflation. In April, prices increased as tin mining was suspended in Myanmar- the world's third-largest tin producer. In May, prices fell as the global demand outlook fell substantially on weakening macroeconomic fundamentals. In June, prices increased because of a looming supply crunch in the global tin market as Myanmar, the world's third-largest tin producer announced a suspension of tin mining activities, and Indonesia, the world's largest exporter of tin, announced a proposed ban on the exports of tin ingots.

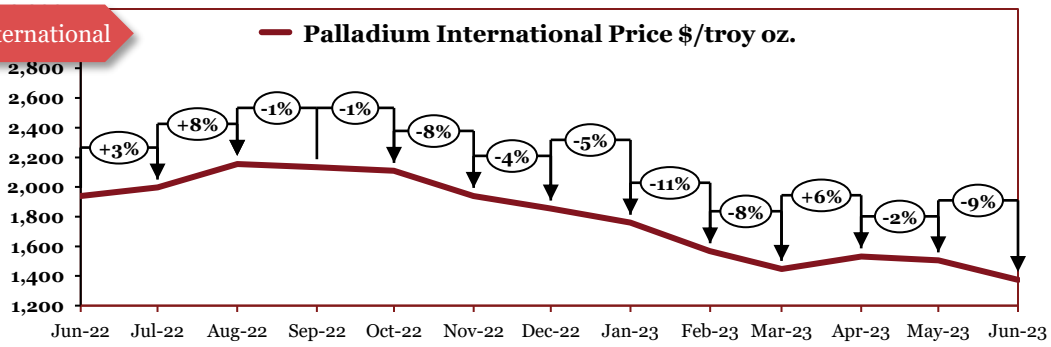
Precious Metals

Precious Metals

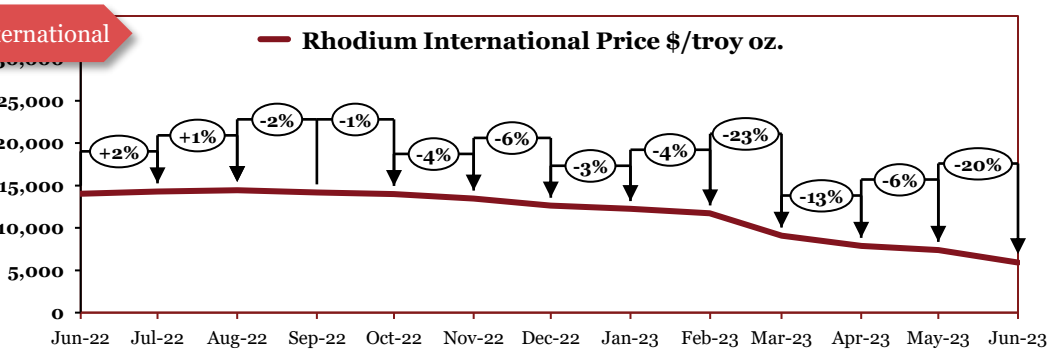
International



International



International



Source: Johnson Matthey

Monthly Average Prices ($/Oz)

Period	Pt	Pd	Rh
Jun-22	961	1939	14046
Jul-22	879	1996	14300
Aug-22	916	2154	14456
Sep-22	886	2134	14181
Oct-22	924	2108	13987
Nov-22	999	1940	13450
Dec-22	1025	1854	12626
Jan-23	1067	1761	12246
Feb-23	968	1567	11730
Mar-23	981	1447	9070
Apr-23	1062	1532	7881
May-23	1073	1505	7383
Jun-23	987	1374	5924

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

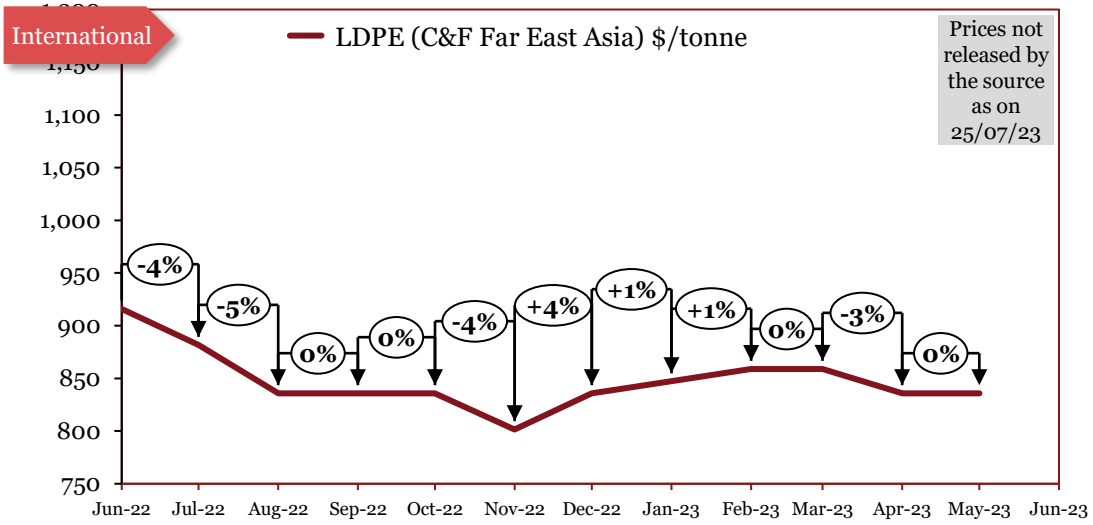
Outlook

In April, Platinum prices increased due to power cuts in South Africa, the war in Ukraine, and the increased production of hybrid cars. Palladium prices increased as hostilities were renewed between Russia -the world's second-largest palladium producer and Ukraine. Rhodium prices decreased due to weak demand from the automotive sector caused by fears of economic recession. In May, Platinum prices shot up as speculators bet that power outages at South African mines and rising demand from automakers and the hydrogen industry will create supply shortages. Rhodium prices fell as car companies seek to minimize their use of this metal on cost grounds. Palladium price fell as the market is hit by platinum-for-palladium substitution in gasoline vehicles and the rapid rise of electric vehicles threatens to hammer demand for the auto catalyst metal. In June, Platinum prices decreased as the diesel vehicle market, a major platinum consumer, is shrinking in Europe. Palladium prices fell on account of weak demand amidst negative macroeconomic factors. Rhodium prices fell as the rapid rise of electric vehicles threatens to hammer demand for the auto catalyst metal at a time of broader economic weakness and a slight fall in automotive use of the metal as car companies seek to minimize their use of this metal on cost grounds.

Polymers & Rubber

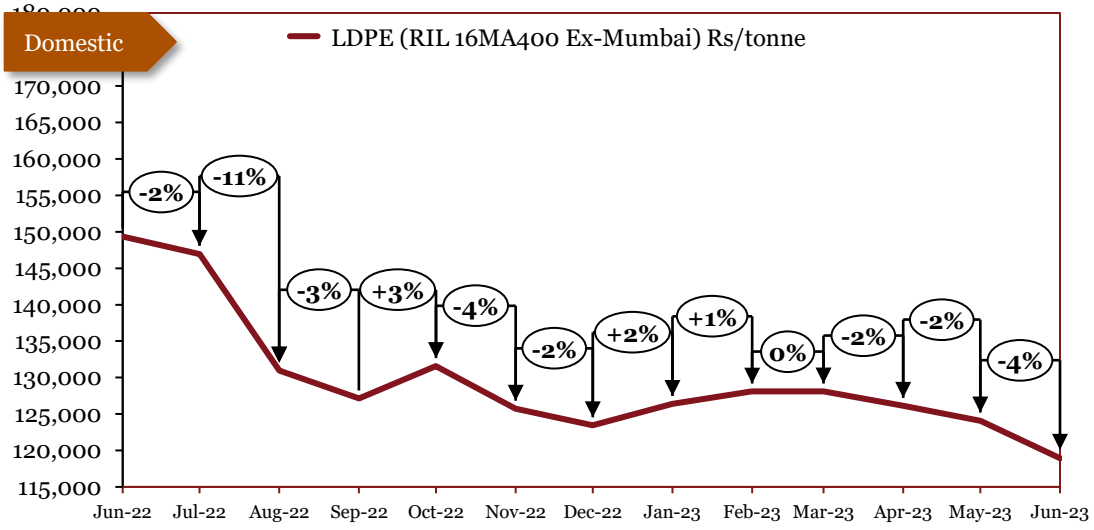
Low density polyethylene (LDPE)

International



Source: Crisil

Domestic



Source: Reliance Industries Ltd.

Monthly Average Prices

Period	*Int'l ($/tonne)	*Dom (Rs/tonne)
Jun-22	916	149359
Jul-22	882	146934
Aug-22	836	130941
Sep-22	836	127153
Oct-22	836	131591
Nov-22	802	125758
Dec-22	836	123439
Jan-23	847	126385
Feb-23	859	128095
Mar-23	859	128095
Apr-23	836	126116
May-23	836	124084
Jun-23		118956

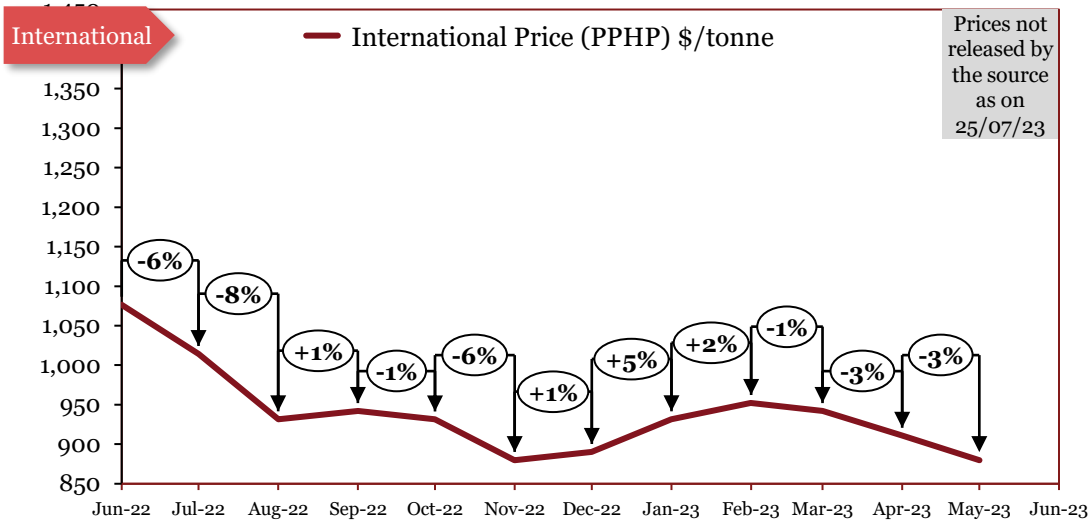
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In October, domestic prices increased despite a price dip in ethylene due to a spike in oil prices. International prices remained stable. In November, domestic and international prices fell due to persistent dull demand, surplus inventories, and lower import offers from overseas suppliers. In December, domestic prices fell in tandem with crude oil prices. International prices increased due to stronger demand from China after the relaxation of COVID norms. In January, prices increased slightly in tandem with crude oil prices. In February, prices increased on the back of an improvement in demand from the agricultural sector and expectations of a rebound in Chinese demand in the post-holiday period. In March, prices remained stable. In April, prices fell as the purchase pulse has been continually tepid amid ample product avails. In May, international, prices remained stable. Domestic prices fell in tandem with crude oil prices. In June, domestic prices continued to fall on the back of sluggish market sentiment and surplus product avails in the region, and lower import offers from overseas suppliers.

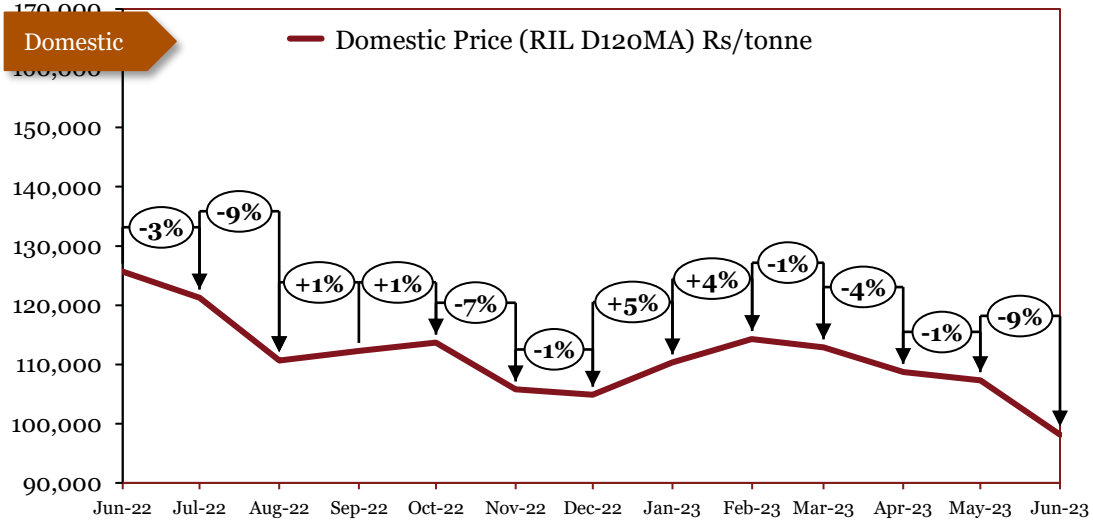
Polypropylene (PP)

International



Source: Crisil

Domestic



Source: Reliance Industries Ltd.

Monthly Average Prices

Period	*Int'l ($/tonne)	*Dom (Rs/tonne)
Jun-22	1076	125668
Jul-22	1014	121279
Aug-22	932	110698
Sep-22	942	112298
Oct-22	932	113702
Nov-22	880	105802
Dec-22	890	104896
Jan-23	932	110342
Feb-23	952	114285
Mar-23	942	112908
Apr-23	911	108733
May-23	880	107330
Jun-23		98166

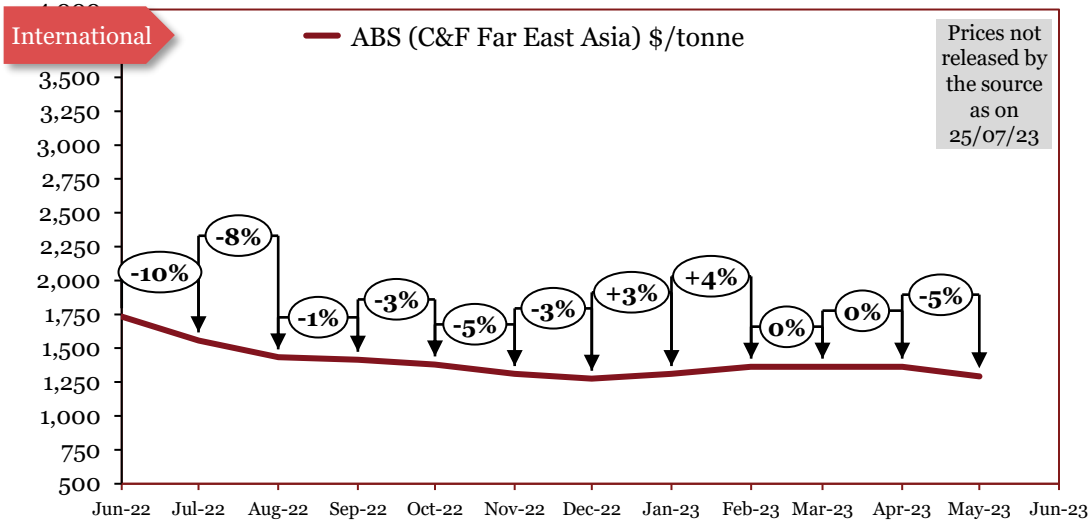
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In October, international prices decreased on the back of a low rate of consumption from the construction sector, and a pile-up of inventories with suppliers. In November, domestic and international prices fell due to a decrease in crude oil prices. In December, prices decreased due to an increase in supply as a result of lower exports, coupled with a slump in demand caused by fears of a recession. International prices remained relatively stable. In January, prices increased due to a significant increase in Prices for feedstock Polymer-Grade Propylene (PGP) in North America. In February, prices increased as propylene and crude oil prices increased. In March, prices fell in tandem with crude oil prices. In April, prices fell amid falling feedstock costs. In May, prices fell in tandem with crude oil prices. In June, domestic prices declined due to persistently subdued demand sentiment coupled with surplus product avails in the region and a weak macroeconomic environment.

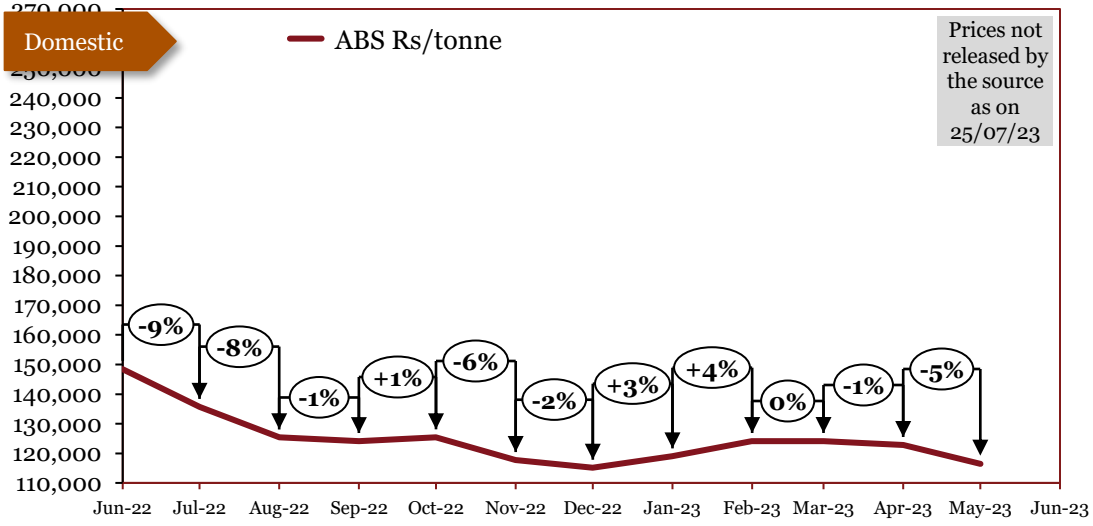
Acrylonitrile Butadiene Styrene *(ABS)*

International



Source: Crisil

Domestic



Source: Crisil

Monthly Average Prices

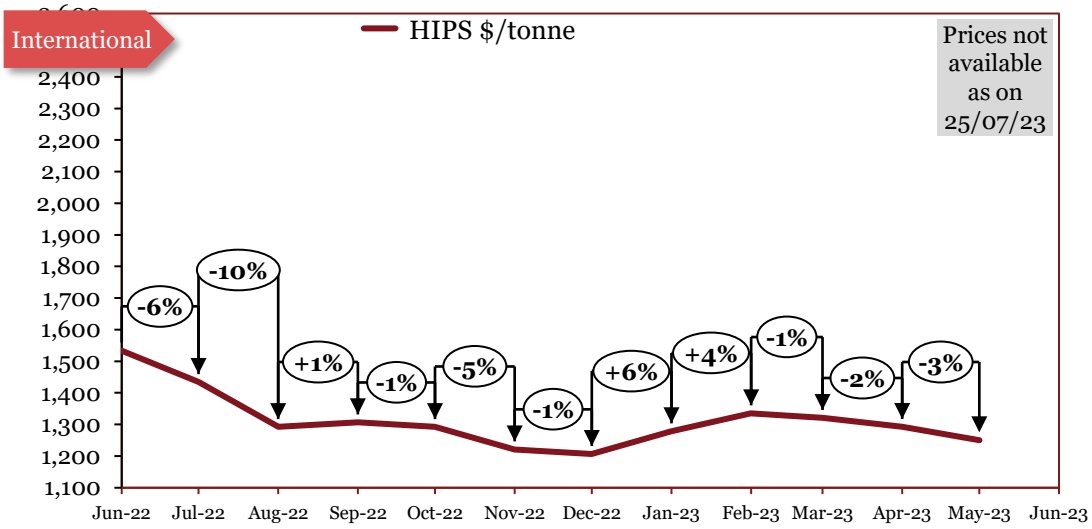
Period	*Int'l ($/tonne)	*Dom (Rs/tonne)
Jun-22	1735	148480
Jul-22	1558	135680
Aug-22	1434	125440
Sep-22	1416	124160
Oct-22	1381	125440
Nov-22	1310	117760
Dec-22	1274	115200
Jan-23	1310	119040
Feb-23	1363	124160
Mar-23	1363	124160
Apr-23	1363	122880
May-23	1292	116480
Jun-23		

Outlook

In July, prices fell due to the reduction in crude oil prices, as a result of geopolitical tensions. In August, domestic prices fell because of cheap import options available from China and South Korea. International prices fell due to a fall in Styrene prices, which is a key feedstock ingredient in ABS production. In September, prices declined owing to a sustained fall in Styrene prices - a key raw material in the production of ABS. In October, domestic prices rose in tandem with crude oil and coal prices. In October and November, international prices fell due to price drops in the three feedstocks, i.e., Acrylonitrile, Butadiene, and Styrene. In December, prices fell sharply in tandem with crude oil prices. In January and February, prices increased due to stability in production activities, a rise in crude oil prices combined with an increase in feedstock costs (Acrylonitrile and Butadiene), and a recovery in downstream offers. In March and April, prices remained relatively stable. In June, prices declined due to subdued demand, ample supply, and heavily hit consumption as Europe remains hawkish with rate hikes.

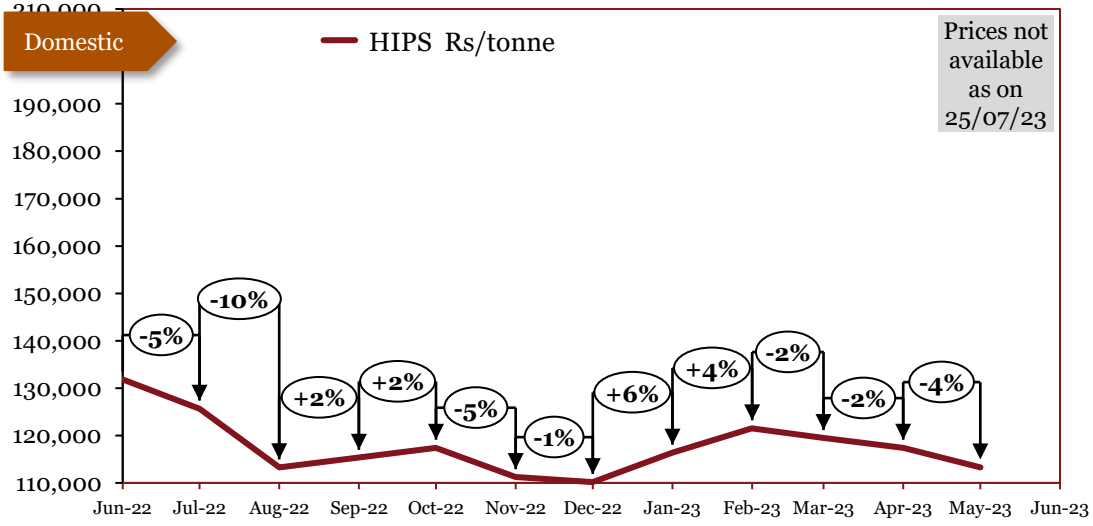
High Impact Polystyrene *(HIPS)*

International



Source: Crisil

Domestic



Source: Crisil

Monthly Average Prices

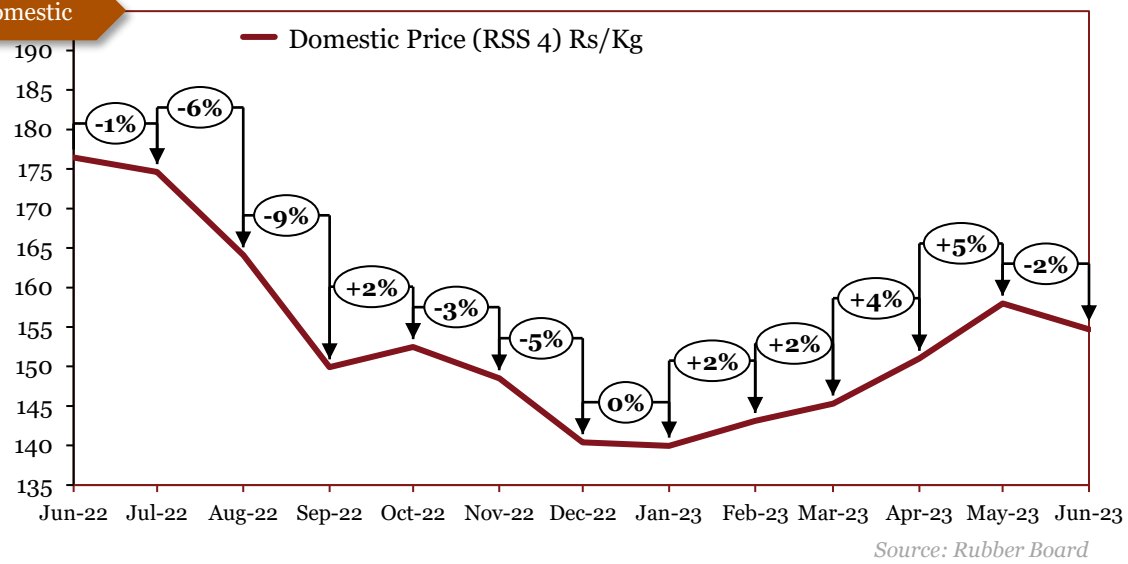
Period	*Int'l ($/tonne)	*Dom (Rs/tonne)
Jun-22	1534	131840
Jul-22	1434	125660
Aug-22	1292	113300
Sep-22	1306	115360
Oct-22	1292	117420
Nov-22	1221	111240
Dec-22	1207	110210
Jan-23	1278	116390
Feb-23	1335	121540
Mar-23	1321	119480
Apr-23	1292	117420
May-23	1250	113300
Jun-23		

Outlook

In June, both international and domestic prices fell sharply due to a decrease in crude oil prices, a ban on single-use plastics in various countries, and excess supply. In July, prices decreased due to sluggish demand in end-user markets, such as the automotive and home appliance sectors. In August, domestic prices fell because of a decline in the demand for plastics for packaging and insulation applications. International prices fell due to diminishing prices of crude oil in the international market. In September, prices increased slightly due to higher energy costs. In October, international prices fell due to low end-consumer demand caused by rising concerns over an economic slowdown and a slowdown in the construction sector. Domestic prices rose on account of the high input cost of coal and crude oil. In November, International prices fell in tandem with crude oil prices. Domestic prices remained stable. In December, prices fell sharply in tandem with the price of crude oil. In January and February, prices increased as crude oil prices stabilized. In March, prices fell in tandem with crude oil prices. In April prices surged in tandem with crude oil prices. In May, prices slumped in tandem with crude oil prices.

Natural Rubber

Domestic



Source: Rubber Board

Monthly Average Prices	
Period	***Dom (Rs/kg)**
Jun-22	176
Jul-22	175
Aug-22	164
Sep-22	150
Oct-22	152
Nov-22	149
Dec-22	140
Jan-23	140
Feb-23	143
Mar-23	145
Apr-23	151
May-23	158
Jun-23	155

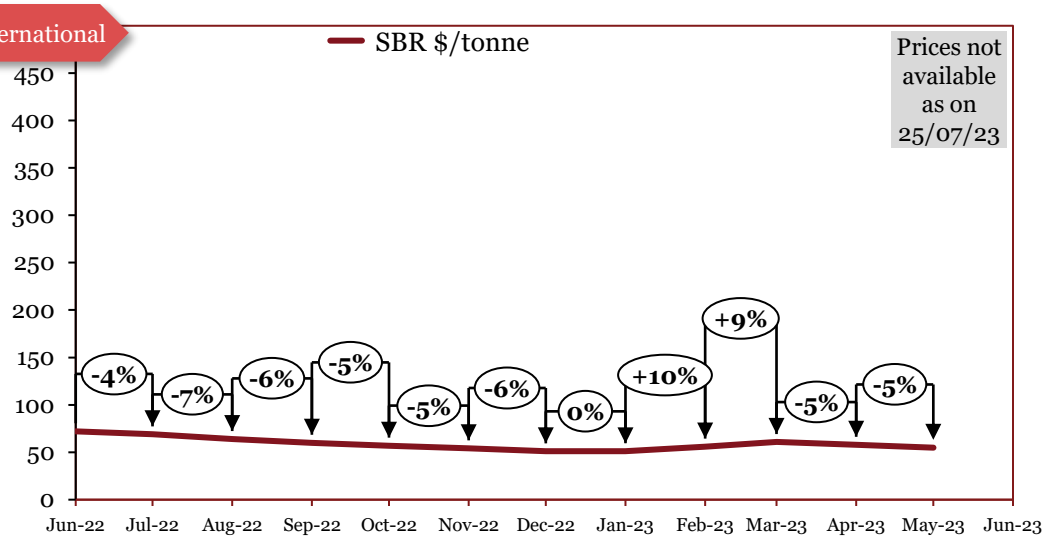
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In July, prices decreased slightly due to lower demand on account of the monsoon season. In August, prices decreased sharply as a result of erratic rainfall, subdued industrial demand, and a bearish outlook in international markets. In September, prices continued to fall as a result of lower crude oil prices and increased production leading to excess supply. In October, prices increased due to a rise in domestic demand; in tandem with crude oil prices. In November, prices declined due to lower demand from tire-makers and other domestic bulk buyers, particularly in Kerala's key markets. In December, prices declined on the back of poor demand from the tyre market, along with the onset of the peak tapping season. In January and February, prices remained relatively stable. In March and April, prices increased due to reduced production from the other major producers of rubber -Thailand, Malaysia, and Indonesia. In May, prices increased slightly in tandem with demand. In June, prices fell amid lingering concerns about faltering demand from top consumers in China.

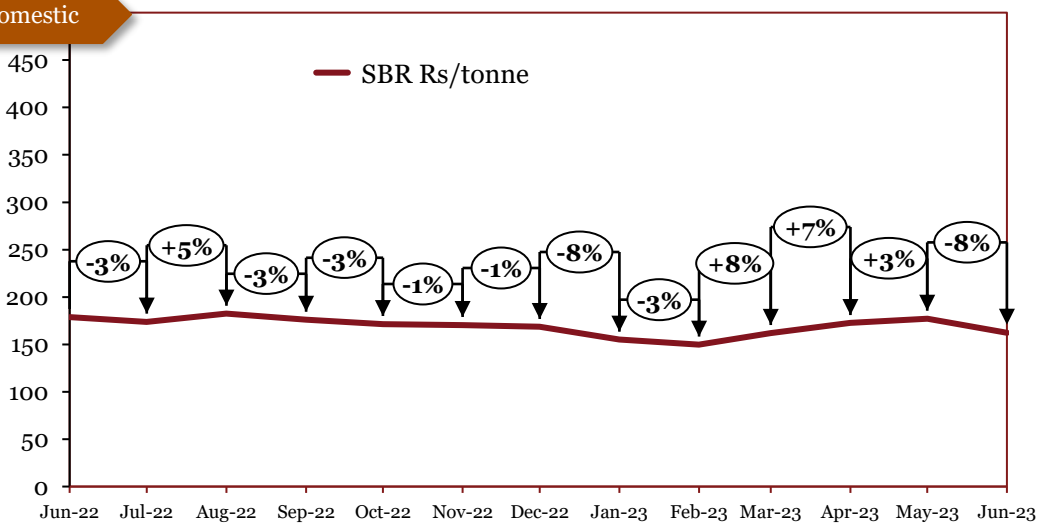
Styrene Butadiene Rubber (SBR)

International



Source: Crisil

Domestic



Source: SIAM

Monthly Average Prices		
Period	*Int'l ($/tonne)	*Dom (Rs/tonne)
Jun-22	72	179
Jul-22	69	174
Aug-22	64	183
Sep-22	60	176
Oct-22	57	172
Nov-22	54	171
Dec-22	51	169
Jan-23	51	155
Feb-23	56	150
Mar-23	61	162
Apr-23	58	173
May-23	55	177
Jun-23		162

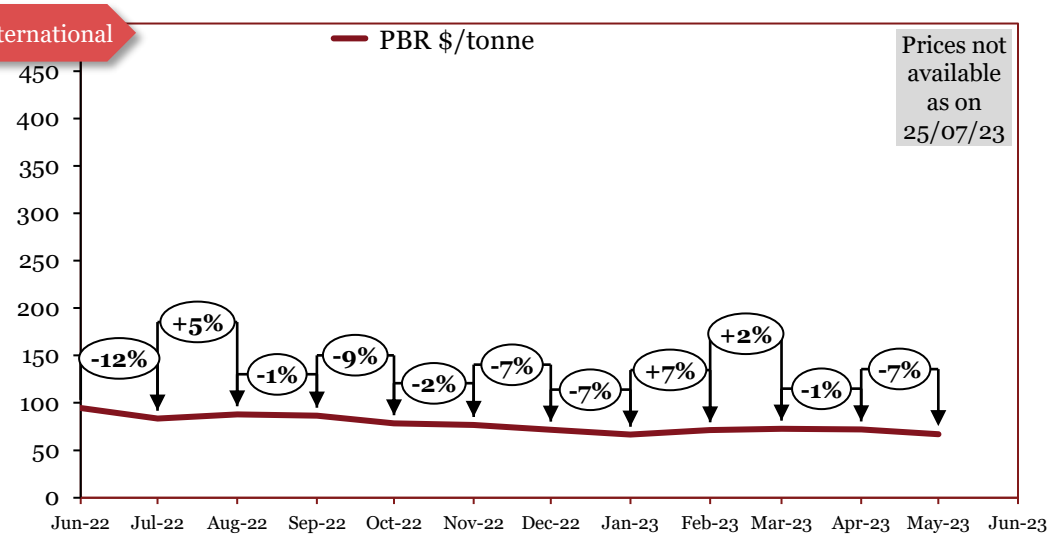
**The actual prices may vary depending on city, player, grade etc.*

Outlook

Shifting consumer preferences in a projected economic downturn scenario, amendments to industrial policies to align with growing environmental concerns, huge fluctuations in raw material costs triggered by prevailing geo-political tensions, and expected economic turbulences largely impacted Styrene Butadiene Rubber prices. In May, prices increased owing to a rebound in demand fundamentals. In June, domestic prices decreased as market growth remained sluggish because of feeble demands from downstream automotive and rubber industries combined with low coking coal prices.

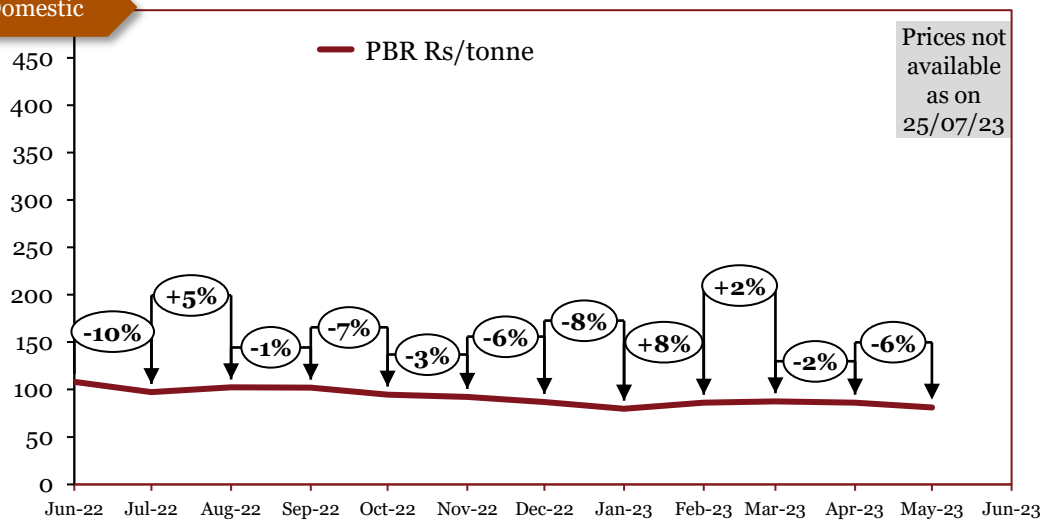
Polybutadiene Rubber (PBR)

International



Source: Crisil

Domestic



Source: Crisil

Monthly Average Prices

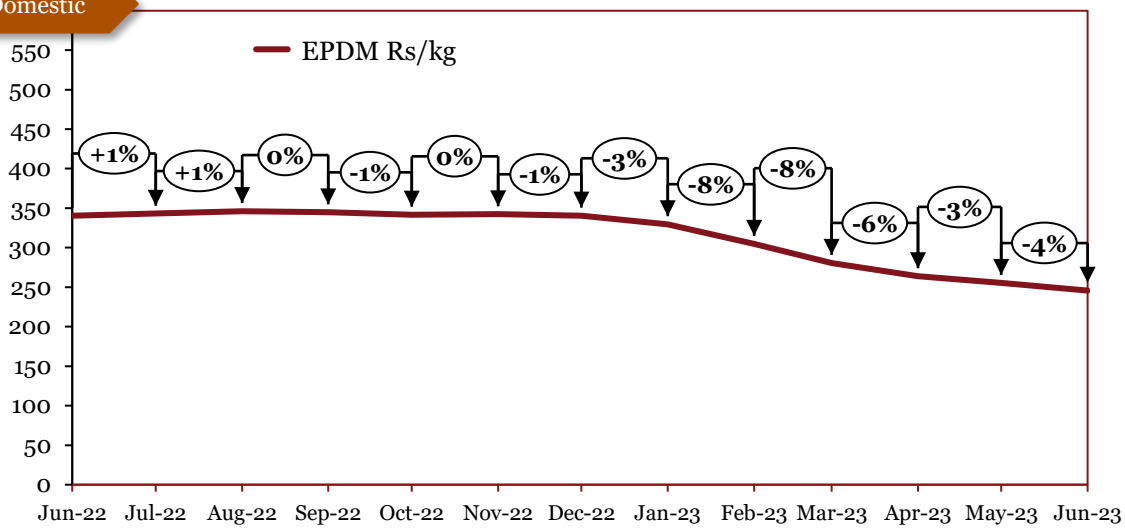
Period	*Int'l ($/tonne)	*Dom (Rs/tonne)
Jun-22	95	108
Jul-22	83	97
Aug-22	88	102
Sep-22	87	102
Oct-22	78	95
Nov-22	77	92
Dec-22	72	87
Jan-23	66	80
Feb-23	71	86
Mar-23	73	88
Apr-23	72	86
May-23	67	81
Jun-23		

Outlook

Domestic prices reached an all-time high during the said period due to the soaring crude oil and gas prices. The petrochemical industry suffered owing to inflated freight charges, low production levels, supply constraints, and depleting inventories, causing the manufacturers to raise their prices.
Faced with the direct consequences of the continuing Russia-Ukraine conflict, a staggering energy crisis unfurled in the European markets. The surging power costs caused the industries to slow or halt production, thereby creating massive shortages in the market. The growing demand amid supply issues, reduced inventories, labor shortages, and poor logistics caused the prices to swell drastically. In March, prices increased as the automotive industry recovered from the semiconductor crisis. In April prices remained relatively stable. In May, prices plummeted in tandem with crude oil prices.

Ethylene Propylene Diene Monomer (EPDM)

Domestic



Source: SIAM

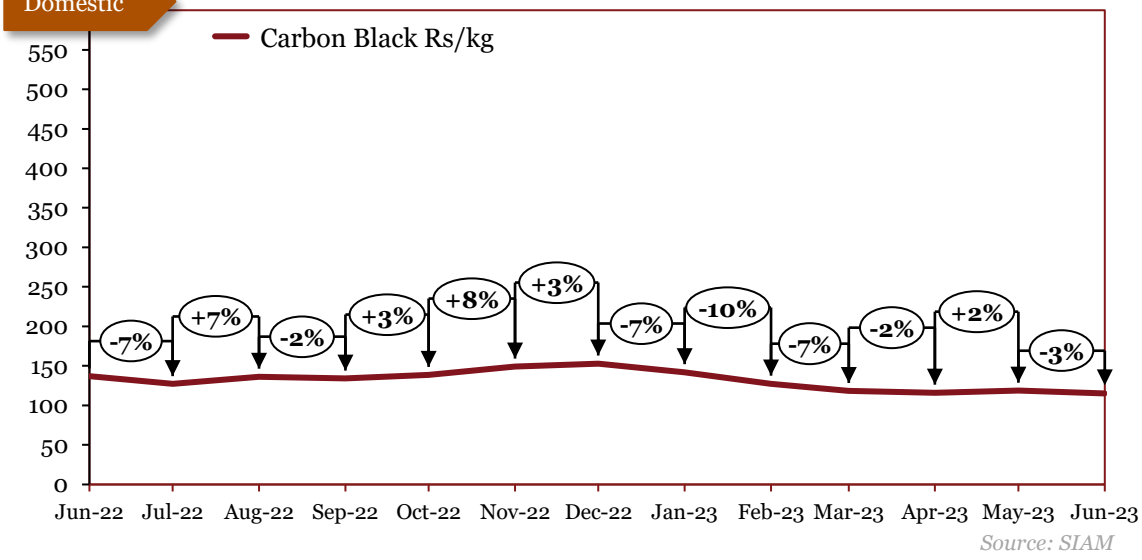
Monthly Average Prices	
Period	*Dom (Rs/kg)
Jun-22	340
Jul-22	343
Aug-22	346
Sep-22	345
Oct-22	342
Nov-22	342
Dec-22	340
Jan-23	329
Feb-23	305
Mar-23	281
Apr-23	264
May-23	255
Jun-23	246

Outlook

Prices have been on a decline after the auto industry was hit first by the semiconductor chip shortage followed by the general economic downturn. The price war initiated by Tesla in China to destock inventories and reduce production also has taken its toll on EPDM consumption. In May, prices decreased in tandem with crude oil prices. In June, prices continued to fall despite easing supply chain constraints, lower shipping container costs, and fewer berth delays.

Carbon Black

Domestic



Source: SIAM

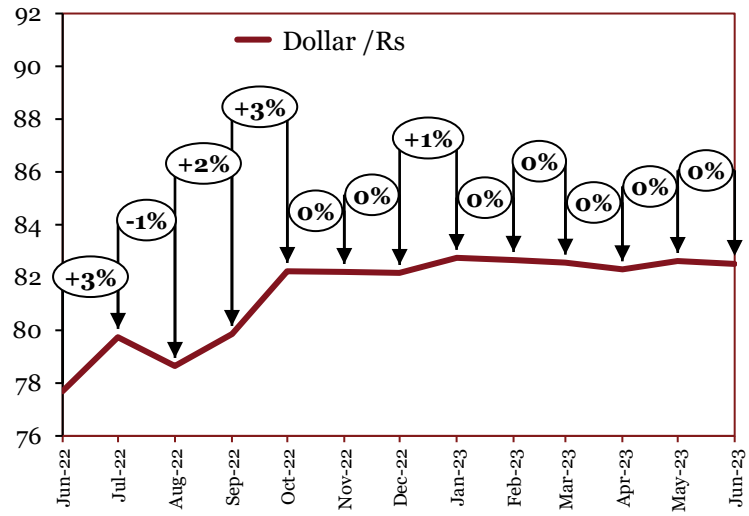
Monthly Average Prices	
Period	*Dom (Rs/kg)
Jun-22	137
Jul-22	127
Aug-22	136
Sep-22	134
Oct-22	139
Nov-22	149
Dec-22	153
Jan-23	142
Feb-23	127
Mar-23	118
Apr-23	116
May-23	119
Jun-23	115

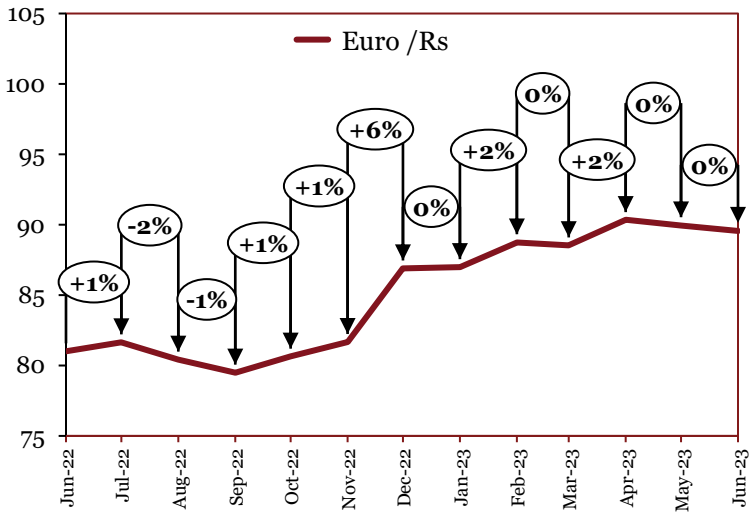
Outlook

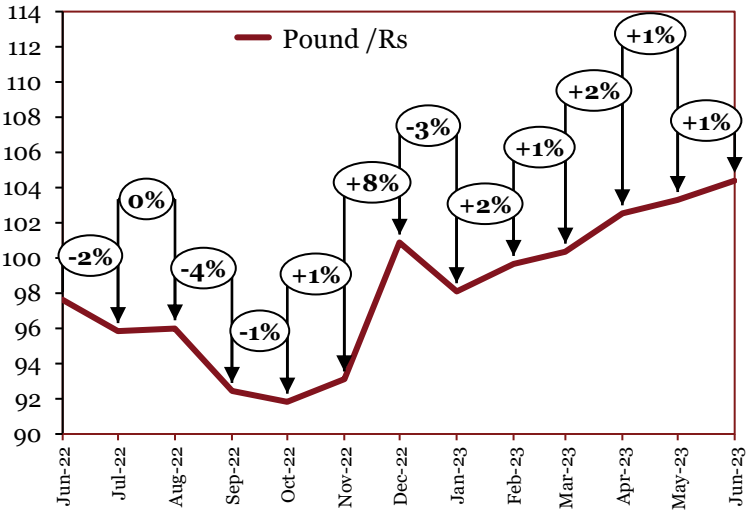
Multiple sanctions on Russia, a key carbon black exporter, have added pressure on supplies. Rising wage costs and the government's tab on rising pollution have restrained supply in China as well, further affecting supply. In May, prices remained relatively stable. In June, prices decreased on account of low demand from the end-consumer.

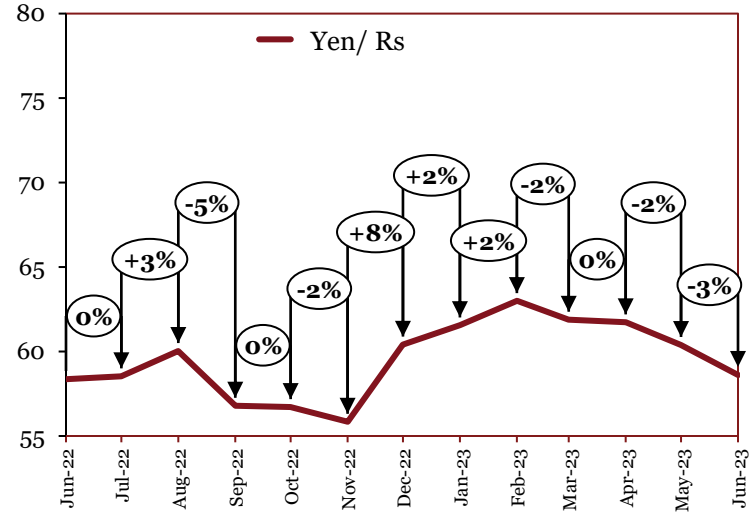
Appendices

Forex Movement









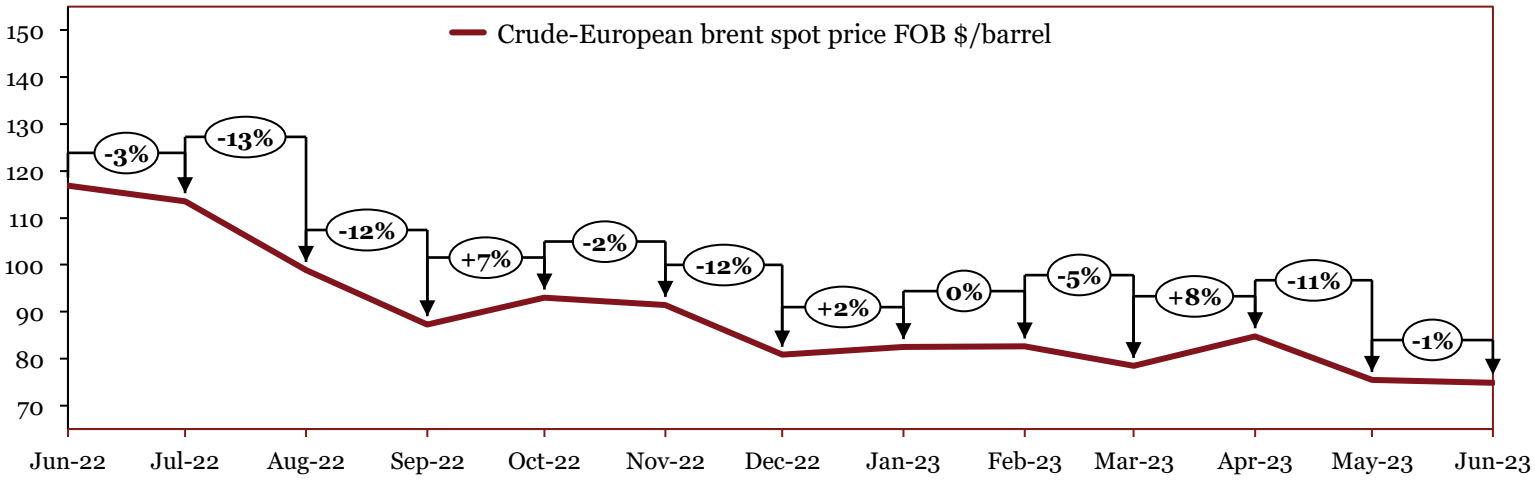
Source: SIAM

Monthly Average Prices (Rs)

	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
$	78	80	79	80	82	82	82	83	83	83	82	83	83
£	98	96	96	92	92	93	101	98	100	100	103	103	104
€	81	82	80	80	81	82	87	87	89	89	90	90	90
¥	58	59	60	57	57	56	60	62	63	62	62	60	59

Crude Oil

Source: SIAM



Monthly Average Prices ($/barrel)

	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
	117	114	99	87	93	91	81	82	83	78	85	75	75

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	Metal in sponge form with minimum purities of 99.95% for platinum and palladium, and 99.9% for rhodium	
Palladium		
Rhodium		
Low density polyethylene (LDPE)	International price (C&F FEA) $/tonne	RIL-16MA400 grade
Polypropylene (PP)	International Price (PPHP) $/tonne	RIL-D120MA grade
Acrylonitrile Butadiene Styrene (ABS)	International price (C&F FEA) $/tonne	Landed Cost Rs/tonne
High Impact Polystyrene (HIPS)	International price $/tonne	Landed Cost Rs/tonne
Rubber Prices	NA	NCDEX/Rubber board - RSS 4 (Ribbed Smoked Sheet 4) ex-warehouse Kochi exclusive of all taxes
Styrene Butadiene Rubber (SBR)	International Price Index (Base Price: $ 2,825-2,875 per tonne)	Landed Cost Rs/kg
Polybutadiene Rubber (PBR)	International price Index (Base Price: $ 2,730-2,780 per tonne)	Landed cost Index (Base cost: Rs 207,000 - 211,000 per tonne)

Commodity Specifications

Commodity	International	Domestic
Ethylene Propylene Diene Monomer (EPDM)	NA	Landed Cost Rs/kg
Carbon Black	NA	Landed Cost Rs/kg
Forex Movement	RBI reference rates	
Crude	European Brent spot price FOB $/barrel – Energy Information Administration (EIA)	

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