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Commodity price monitor

September-21

Prepared for ACMA

*Strictly private
and confidential*

September 2021



pwc

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Commodity trend dashboard

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

Calendar Year 2021: Q vs. Q update

Commodity	Region	Q-o-Q Up	Q-o-Q Down
Iron & Steel			
Iron Ore	International		-22.85% ▼
	Domestic low grade		
	Domestic high grade		
Pig Iron	International		-7.02% ▼
	Domestic	0.80% ▲	
Stainless steel	Domestic	17.64% ▲	
	Domestic	16.49% ▲	
Wire rod	International	1.17% ▲	
	Domestic		-1.51% ▼
Steel Billets	International		-1.94%
	Domestic	4.23%	
Hot-rolled coils	International		-6.90% ▼
	Domestic	4.02% ▲	
Cold-rolled coils	International		-8.26% ▼
	Domestic	2.63% ▲	
Steel Scrap	Domestic		-0.21% ▼
EN8	Domestic		-0.36% ▼
20MnCr5	Domestic		-0.36% ▼
Ferro-alloys			
Ferro chrome	International	28.47% ▲	
	Domestic	27.23% ▲	
Ferro silicon	International	36.93% ▲	
	Domestic	13.73% ▲	

ND: Not disclosed by the source

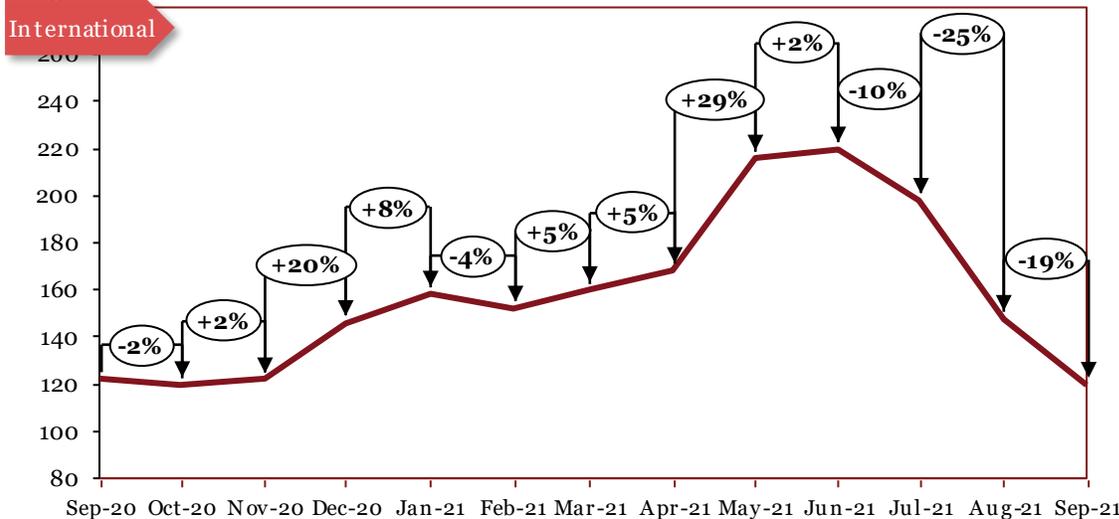
Commodity trend dashboard Quarter-on-Quarter changes (2/2)- Rolling view

Calendar Year 2021: Q vs. Q update

Commodity	Region	Q-o-Q Up	Q-o-Q Down
Base Metals			
Aluminum	International	10.36% ▲	
	Domestic	10.07% ▲	
Copper	International		-3.49% ▼
	Domestic		-2.23% ▼
Zinc	International		-3.09% ▼
	Domestic	6.18% ▲	
Lead	International	10.05% ▲	
	Domestic	5.34% ▲	
Nickel	International	10.27% ▲	
	Domestic	11.80% ▲	
Tin	International	11.48% ▲	
	Domestic	N/A	
Precious Metals			
Platinum	International		-13.35% ▼
Palladium	International		-11.68% ▼
Rhodium	International		-33.32% ▼
Polymers			
Low density polyethylene (LDPE)	International		-0.21% ▼
	Domestic		-3.72% ▼
Polypropylene (PP)	International		-5.57% ▼
	Domestic		-2.80% ▼
Acrylonitrile Butadiene Styrene (ABS)	International		-3.67% ▼
	Domestic		-2.64% ▼
Polystyrene (PS)	International		-0.64% ▼
	Domestic	0.11% ▲	
Rubber	Domestic	2.57% ▲	
Currency Exchange			
Dollar	International	0.35% ▲	
Pound	International		-1.54% ▼
Euro	International		-0.39% ▼
Yen	International		-0.40% ▼

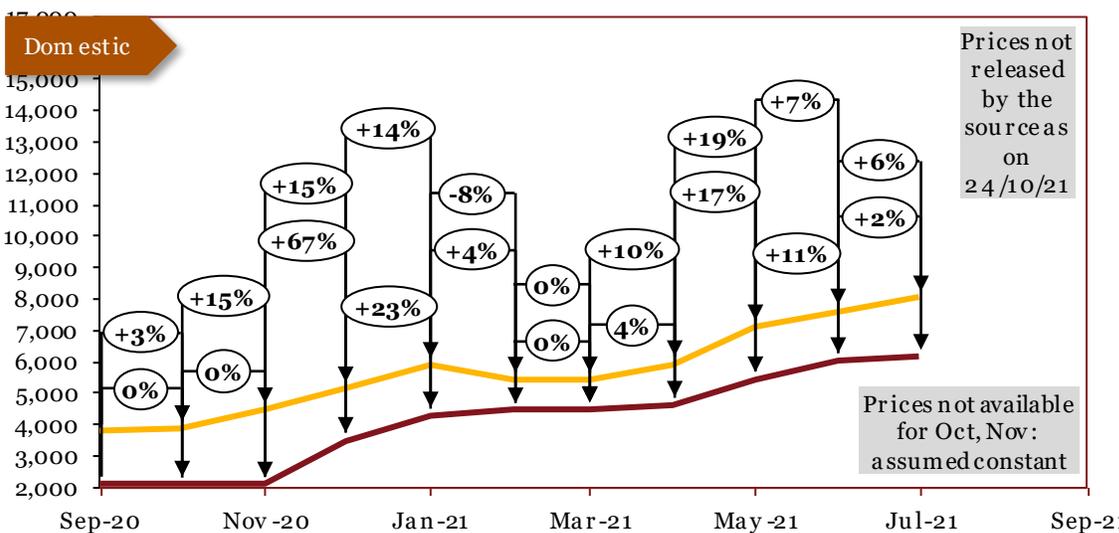
Iron & Steel

Iron Ore



Source: Crisil

Period	*Int'l	*Dom	
	\$/tonne	Rs/tonne	
		65% & below	65% & above
Sep-20	122	2090	3797
Oct-20	120	2090	3901
Nov-20	122	2090	4473
Dec-20	146	3499	5148
Jan-21	158	4301	5888
Feb-21	152	4473	5418
Mar-21	160	4477	5419
Apr-21	168	4652	5936
May-21	216	5462	7089
Jun-21	220	6040	7589
Jul-21	198	6146	8047
Aug-21	148		
Sep-21	120		



Prices not released by the source as on 24/10/21

Prices not available for Oct, Nov: assumed constant

Source: Crisil

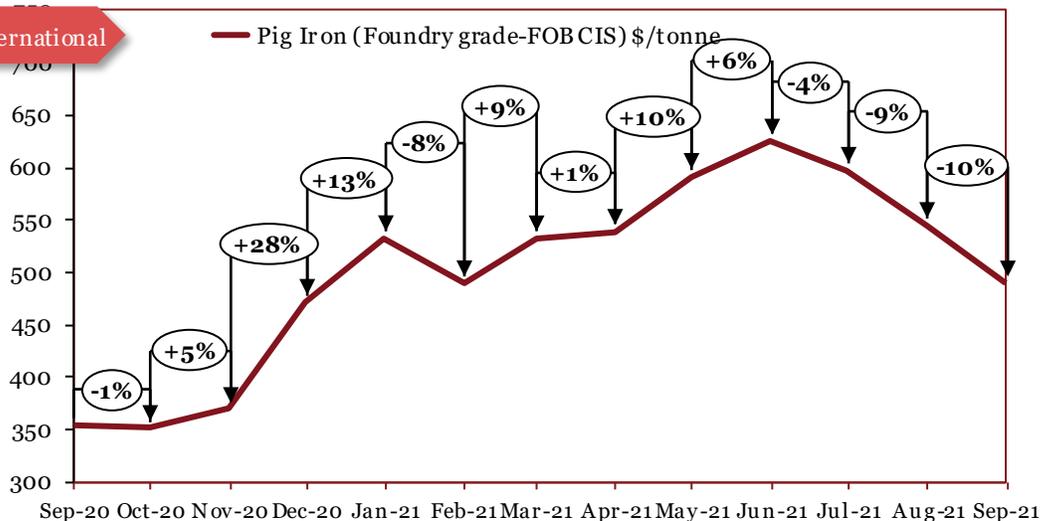
*The actual prices may vary depending on city, player, grade etc.

Outlook

In September, international prices continued their upturn on account of high demand from China. In October, international prices declined due to lower Chinese imports, along with greater supply from Brazil and South Africa. In November, international prices rose on account of a shortage of available supply in the market. In December, prices rose aggressively on the backs of trade disputes between China and Australia. In January, domestic prices continued to rise due to disruptions in supply. In February, international prices saw a dip due to reduced buying from China as part of low-carbon initiatives to reduce crude steel output. In March, international iron ore prices rose on the back of high demand from China fuelled by strong steel margins and high output. In April, international prices rose on demand amidst increased infrastructure projects post Covid-19 recovery. In May, international prices surged in line with flat steel prices and strong demand. In June, iron ore prices rose marginally on the back of global supply constraints. In August, higher Brazilian shipments along with a decline in Chinese steel indicators drove international prices further down. In September, China's decision to cut steel production by 10% through the months of August-December continued to place the iron ore market in a surplus, and prices declined even more.

Pig Iron

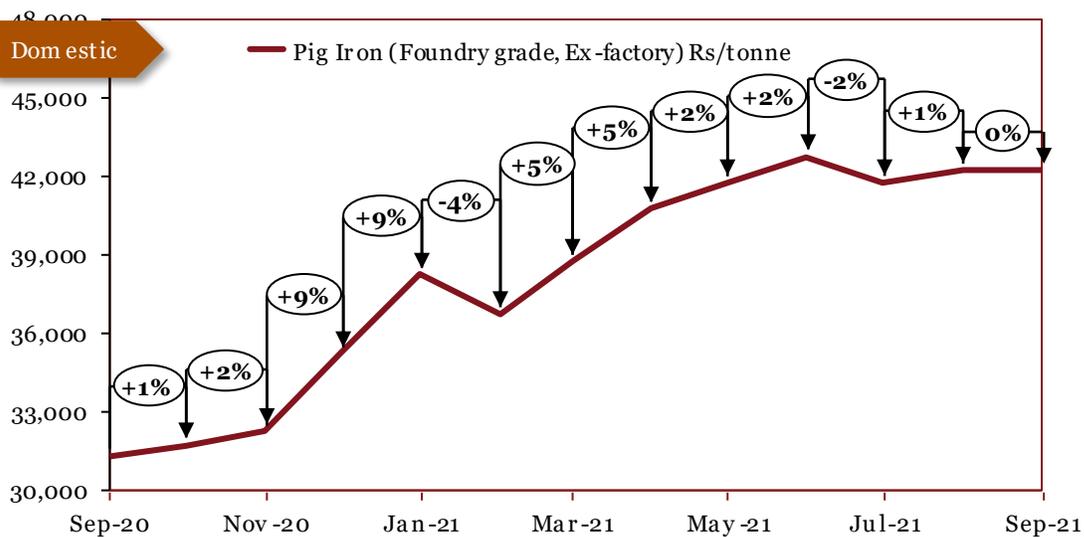
International



Source: Crisil

Monthly Average Prices		
Period	*Int'l	*Dom
	\$/tonne	Rs/tonne
Sep-20	354	31350
Oct-20	351	31750
Nov-20	370	32250
Dec-20	471	35250
Jan-21	533	38250
Feb-21	490	36750
Mar-21	533	38750
Apr-21	539	40750
May-21	591	41750
Jun-21	625	42750
Jul-21	598	41750
Aug-21	545	42250
Sep-21	490	42250

Domestic



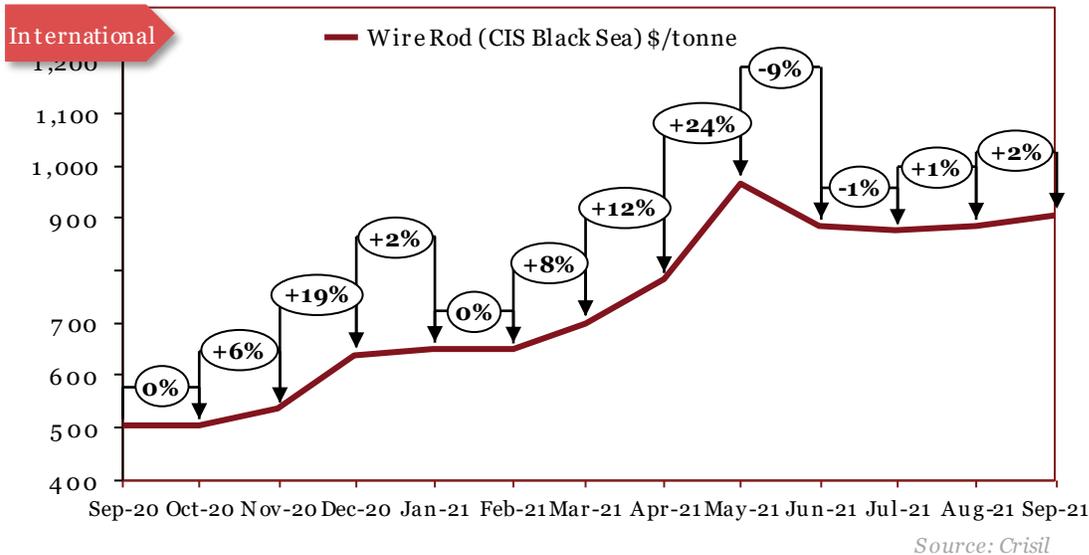
Source: Crisil

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

Outlook

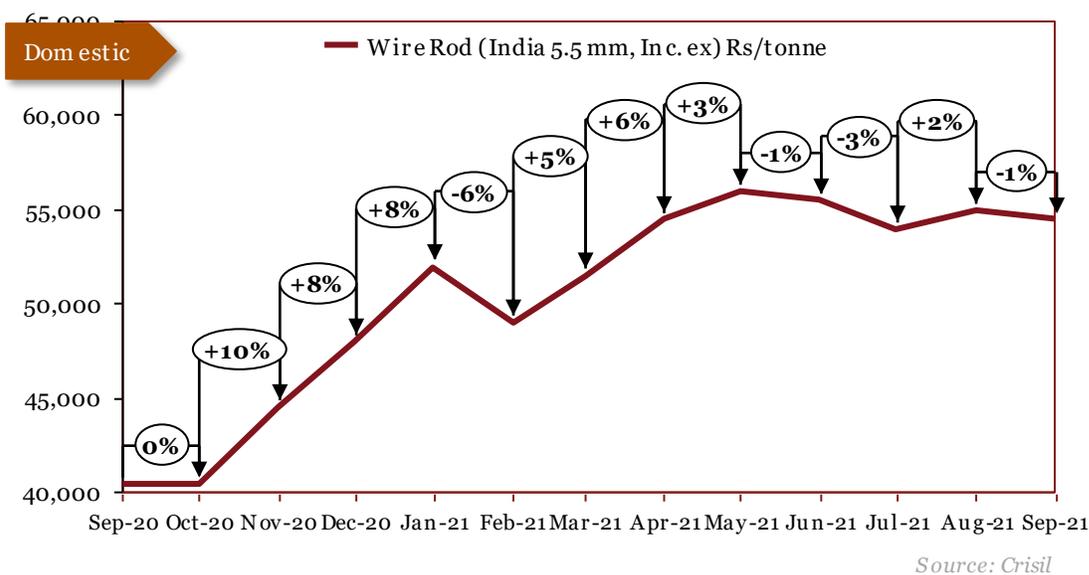
In February international prices fell along with Iron Ore prices, while domestic prices slumped on lower demand. In March, international prices surged on increased buying from Brazil and good demand. Domestic prices rose due to healthy demand coupled with strong flat steel prices. In April, international rose in conjunction with steel prices. Domestic prices rose on demand from both castings and steel segment coupled with strong flat steel prices. In May, International prices rose on surged on strong demand and limited supply from China. Domestic prices rose in line with flat steel prices, even as demand remains weak owing to the second wave of Covid-19. In June, international and domestic prices rose in line with flat steel prices despite weakened demand in India due to the second wave of the pandemic. In August, international prices fell in tandem with iron ore prices. Domestic prices remained comparatively stable. In September, international prices declined due to a decline of iron price indicators caused by a cut in China's steel supply. Domestic prices remained unaffected.

Wire Rod



Monthly Average Prices

Period	^*Int'l (\$/tonne)	*Dom (Rs/tonne)
Sep-20	504	40494
Oct-20	504	40494
Nov-20	535	44494
Dec-20	638	47994
Jan-21	648	51994
Feb-21	648	48994
Mar-21	700	51494
Apr-21	782	54494
May-21	967	55994
Jun-21	885	55494
Jul-21	875	53994
Aug-21	885	54994
Sep-21	906	54494



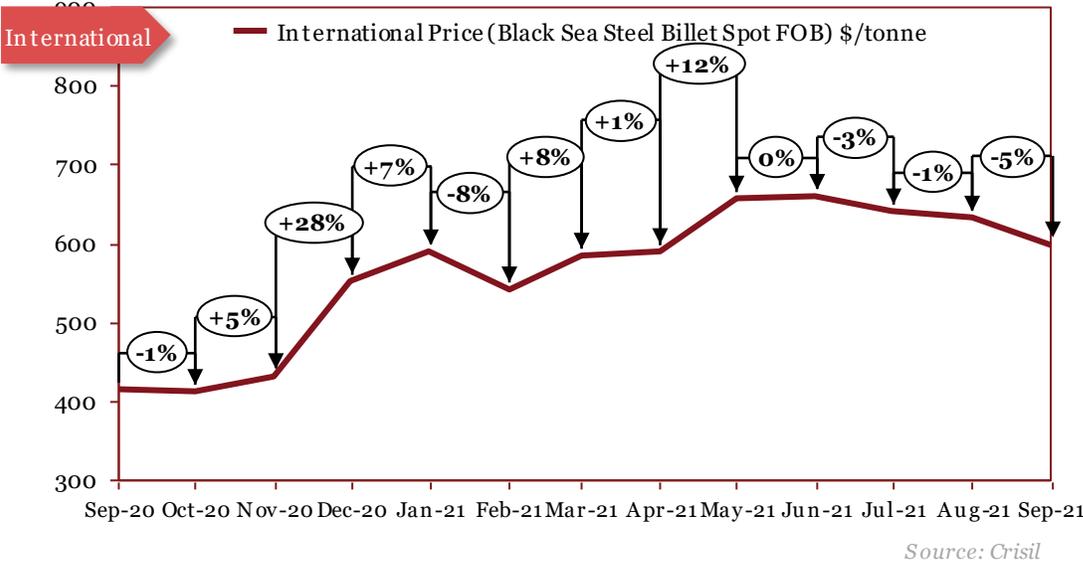
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Outlook

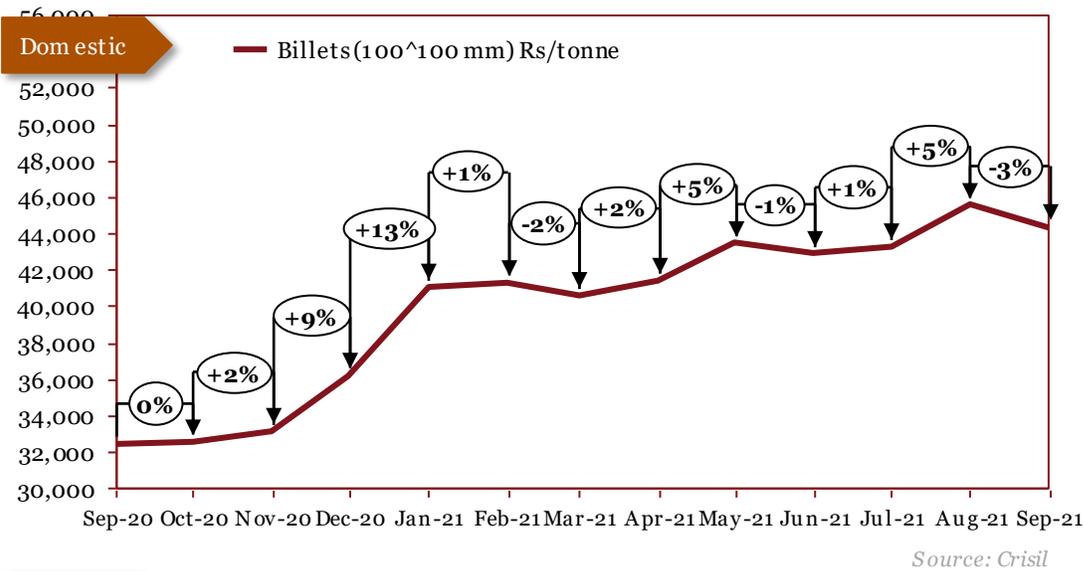
In September, international and domestic prices remained stable. In October, international and domestic prices remained stable. In November, international as well as domestic prices rose due to the higher cost of iron ore. In December, a boom in Chinese construction drove higher international and domestic prices. In January, international prices rose on tight supply and price rise for scrap. Dom estically, prices rose reflecting soaring steelmaking cost. In February, international prices remained stable on good demand, while domestic prices slumped with reduced steel prices. In March, international and domestic prices rose in conjunction with steel prices. In April, international as well as domestic prices rose on the back of increased demand from China. In May, global prices surged on short supply in Europe and Asia. Domestic prices followed suit. In June, international price fell on the back of decreased demand from China and Southern Europe. Domestic prices remained stable. In August, a mid-month increase in transaction prices from various steelmakers drove prices slightly upwards. In September, production cuts in China caused a slight increase in international prices. Domestic prices slightly reduced on account of a market correction.

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

Steel Billets



Monthly Average Prices		
Period	^*Int'l (\$/tonne)	*Dom (Rs/tonne)
Sep-20	416	32500
Oct-20	413	32567
Nov-20	433	33150
Dec-20	553	36233
Jan-21	590	41100
Feb-21	542	41350
Mar-21	584	40667
Apr-21	590	41500
May-21	658	43500
Jun-21	661	42900
Jul-21	641	43340
Aug-21	633	45600
Sep-21	599	44367



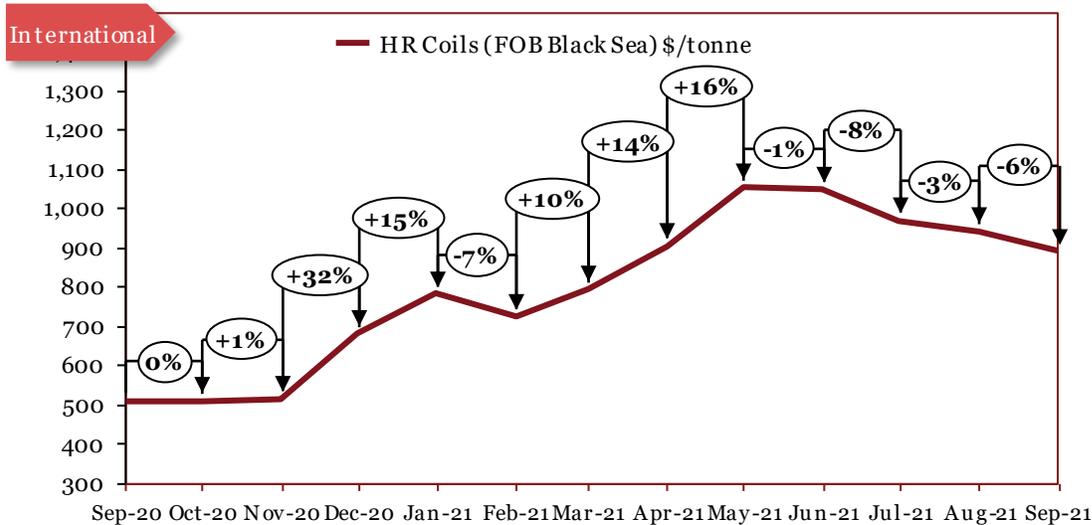
*The actual prices may vary depending on city, player, grade etc.

Outlook

In October, international prices declined while domestic prices remained stable. In November, international prices rose on higher ore prices, as well as reduced supply. Domestic prices followed suit. In December, international as well as domestic prices rose due to the higher price of scrap. In January, international prices along with domestic prices rose due to increased demand of steel in China and an upward trend in prices of steel products. In February, international prices saw a dip due to lack of trade and falling steel prices, while domestic prices remained stable. In March, international prices surged on the back of high Chinese buying. Domestic prices dipped on account of weaker demand for finished products. In April, international as well as domestic prices rose in conjunction with scrap prices. In May, international and domestic prices increased due to reduced availability. In June, international and domestic prices remained fairly steady. In July, international prices decreased due to an increase in supply. Domestic prices remained relatively constant. In August, international prices remained unaffected, whereas domestic prices rose on account of a surge in raw material costs. In September, international prices dipped due to a softening of demand. Domestic prices fell in tandem with international prices.

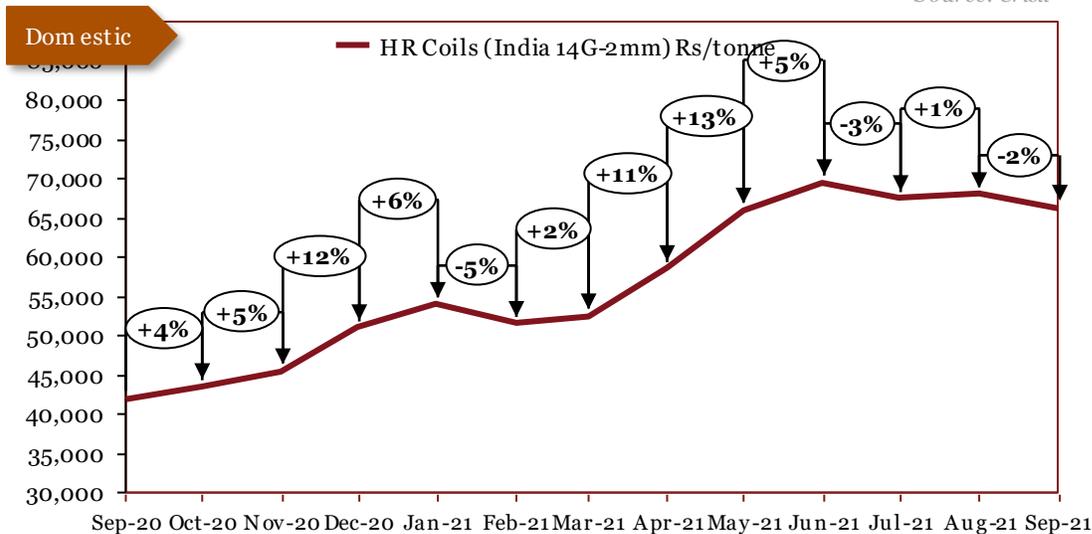
^International prices changed due to change in the grade

Hot-Rolled (HR) Coils



Source: Crisil

Monthly Average Prices		
Period	*Int'l (\$/tonne)	^*Dom (Rs/tonne)
Sep-20	512	42050
Oct-20	512	43550
Nov-20	517	45550
Dec-20	682	51050
Jan-21	784	54050
Feb-21	725	51550
Mar-21	794	52550
Apr-21	906	58550
May-21	1055	66050
Jun-21	1050	69550
Jul-21	970	67550
Aug-21	943	68050
Sep-21	890	66350



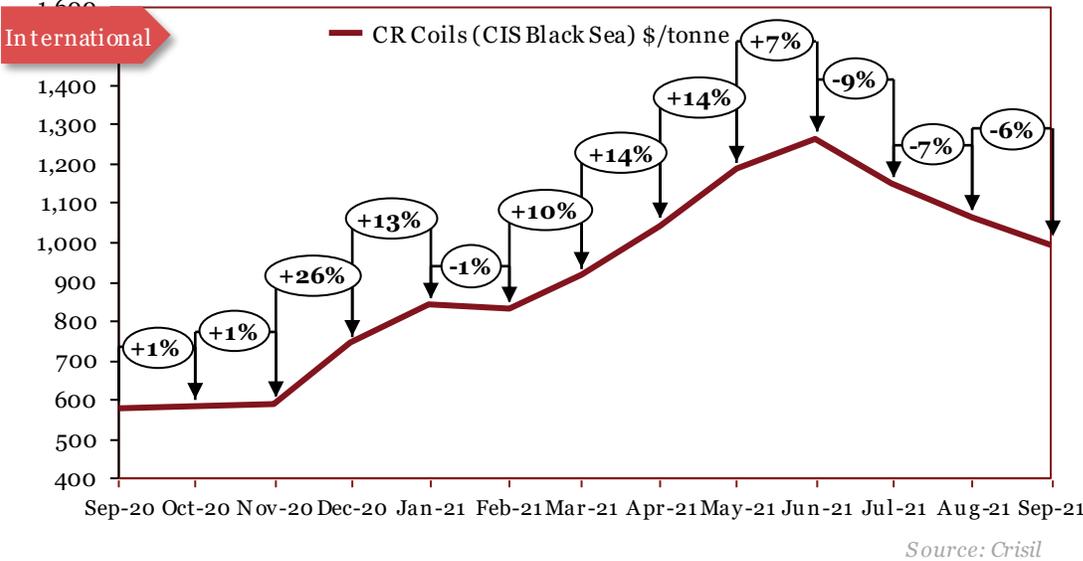
Source: Crisil

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

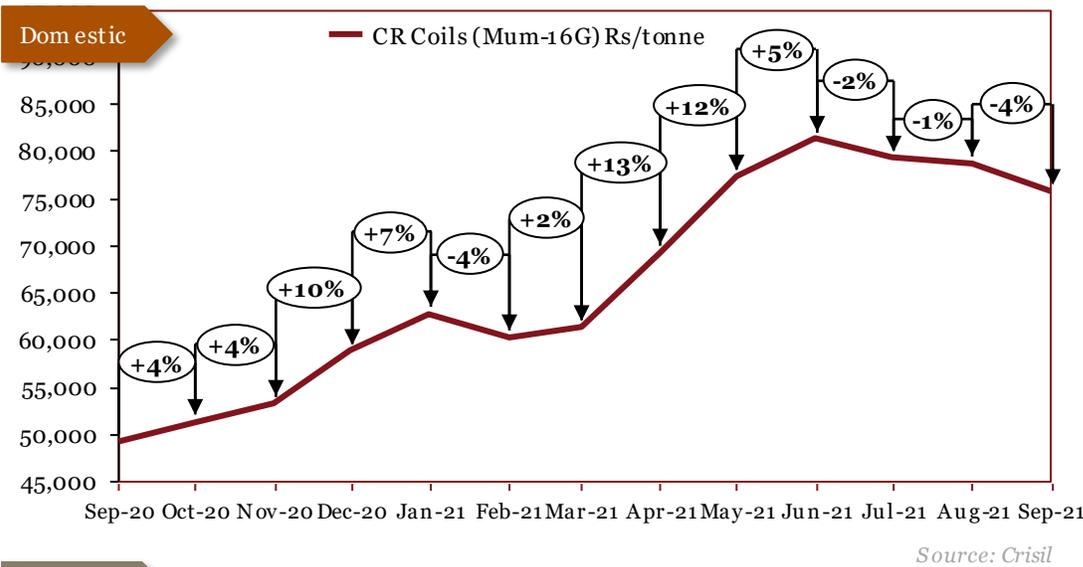
Outlook

In January, international prices continued to rise on robust demand. Domestic prices surged amid constrained supply and increased demand from construction, automotive and white goods sectors. In February, International prices slumped due to decreased demand. Domestic prices dipped due to traders' sufficient inventories as well as moderation in demand from auto and pipe makers. In March, international prices rose on strong demand in China post resumption of activities after New Year holidays. Domestic prices followed suit. In April, international and domestic prices surged on the back of increased demand from China. In May, international prices rose on the back of increased crude steel output from China coupled with increasing iron ore prices. Domestic prices followed suit. In June, international prices declined on the back of pressure from global governments to bring down steel price rally. Domestic prices rose despite weakened demand due to high export potential and increasing flat steel prices. In July, high volumes of exports of HRC from China weighed down on both domestic and international prices. In August, prices rallied back up marginally due to market forces and supply constraints. In September, international as well as domestic prices fell further as a result of growing automotive demand concerns.

Cold-Rolled (CR) Coils



Monthly Average Prices		
Period	*Int'l (\$/tonne)	^*Dom (Rs/tonne)
Sep-20	578	49350
Oct-20	584	51350
Nov-20	590	53350
Dec-20	744	58850
Jan-21	843	62850
Feb-21	830	60350
Mar-21	916	61350
Apr-21	1046	69350
May-21	1187	77350
Jun-21	1267	81350
Jul-21	1150	79350
Aug-21	1064	78850
Sep-21	996	75850

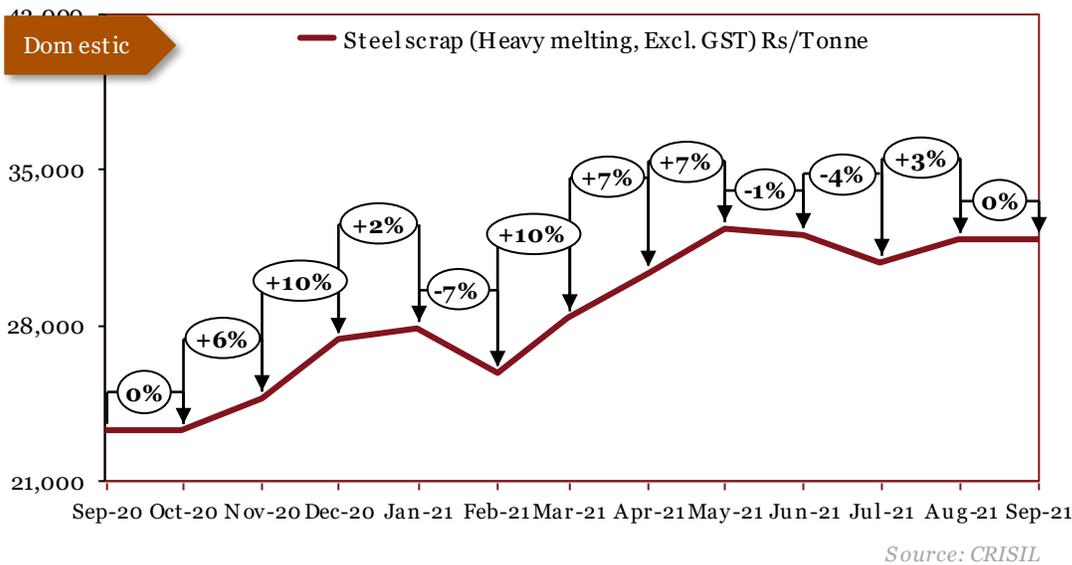


*The actual prices may vary depending on city, player, grade etc.

Outlook

In September, international and domestic prices rose in line with HR Coil prices. In October, international prices rose on continued strong Chinese demand, while domestic prices rose in accordance with HR Coil prices. In November, international and domestic prices rose in tandem with HR coil prices. In December, international and domestic prices rose in tandem with HR Coil prices. In January, domestic as well as international prices rose in line with HR Coils, reflecting strong demand. In February, both international and domestic prices dipped in conjunction with hot-rolled coil prices. In March, international and domestic prices rose in accordance with HR Coil prices. In April, international and domestic prices increased concurrently with HR Coils. prices. In May, prices rose mirroring HR coil prices. In June, international as well as domestic prices rose in line with increasing flat steel prices. In July and August, international prices projected downwards due to a combination of correctional market forces and unfavourable Chinese duty rebates which halted South American imports. Domestic prices fell slightly due to lower demand levels. In September, prices fell due to thin trading liquidity amid lower demand.

Steel Scrap (Heavy Melting)



Monthly Average Prices	
Period	*Dom (Rs/Tonne)
Sep-20	23300
Oct-20	23300
Nov-20	24800
Dec-20	27400
Jan-21	27900
Feb-21	25900
Mar-21	28400
Apr-21	30400
May-21	32400
Jun-21	32100
Jul-21	30900
Aug-21	31900
Sep-21	31900

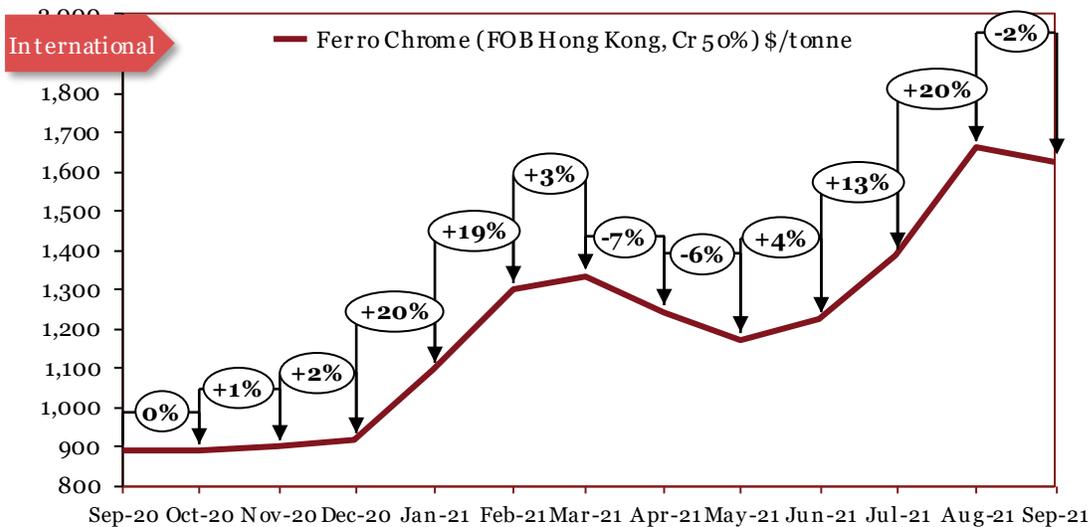
**The actual prices may vary depending on city, player, grade etc.*

Outlook

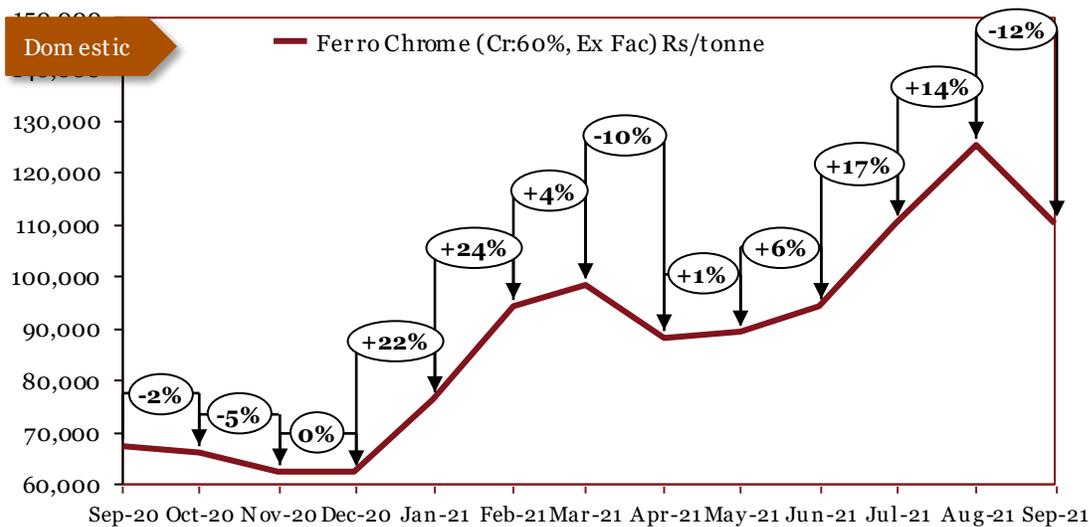
In August, domestic prices rose as Indian manufacturers had to contend with global price rise. In September, prices continued to rise on the backs of strong Chinese demand. In October, prices remained stable. In November prices rose on a account of higher demand for steel. In December, scrap prices rose internationally and domestically on limited supply and greater demand from developing economies. In January, scrap prices saw a slight increase, reflecting strong demand and lack of a abundant supply. In February, prices fell due to plummeting steel prices coupled with weakened demand. In March, prices rose in conjunction with steel prices. In April, domestic scrap prices increased, owing to rise in global steel prices. In May, domestic prices increased in line with global and domestic steel prices. In June, prices fell marginally due to better availability. In August, steel prices rose on a account of a decline in China's steel supply. In September, prices remained unaffected.

Ferro-alloys

Ferro chrome



Source: Crisil



Source: Crisil

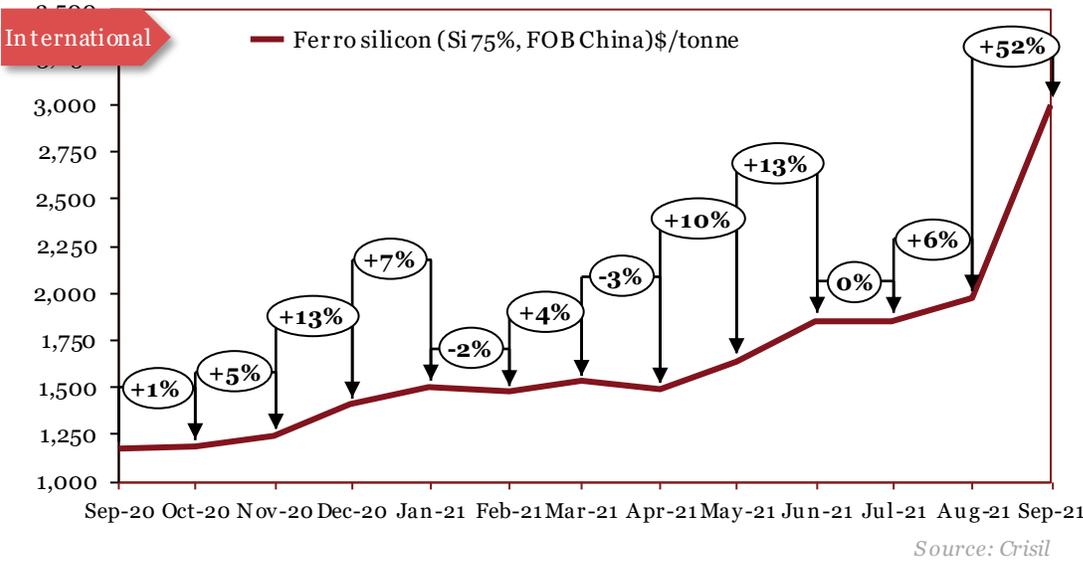
Monthly Average Prices		
Period	*Int'l	*Dom
	(\$/tonne)	(Rs/tonne)
Sep-20	890	67300
Oct-20	890	66100
Nov-20	899	62600
Dec-20	916	62400
Jan-21	1096	76400
Feb-21	1301	94400
Mar-21	1335	98400
Apr-21	1241	88400
May-21	1173	89297
Jun-21	1224	94400
Jul-21	1387	110400
Aug-21	1661	125400
Sep-21	1626	110400

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

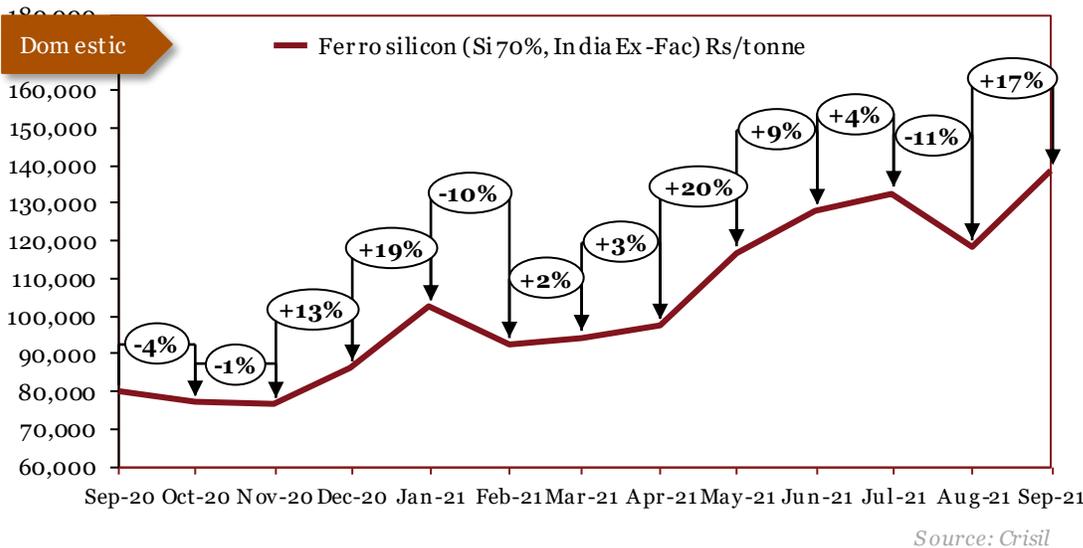
Outlook

In December, international prices rose on tighter spot supplies and higher input costs while domestic prices remained stable. In January, international and domestic rose on the back of South Africa's increased export duty coupled with reduced raw material supply and anticipation of pick up in demand. In February, international prices rose on reduced production from China due to high-carbon emission restrictions which led to shortfall in supply. Domestic prices rose on the back of limited supply and increased chrome ore prices. In March, International as well as domestic prices continued to rise due to increased buying activity from China. In April, global and domestic ferro chrome prices declined with normalcy in supply situation in China, hence moderation in exports demand. In May, international and domestic prices declined with increased supply in China, hence a moderation in exports demand. In June, international prices rose on increasing chrome ore costs. Domestic prices rose on supply issues. In August, prices rose sharply due to higher demand for ferrochrome on the back of increased stainless steel production. In September, domestic prices fell heavily due to production cuts. International prices weren't impacted as much, as China's electricity constraints caused a leap in prices towards the end of the month.

Ferro silicon



Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/tonne)
Sep-20	1173	80050
Oct-20	1187	77050
Nov-20	1242	76450
Dec-20	1408	86450
Jan-21	1504	102450
Feb-21	1477	92450
Mar-21	1532	94450
Apr-21	1490	97450
May-21	1642	116950
Jun-21	1856	127950
Jul-21	1856	132450
Aug-21	1973	118450
Sep-21	3002	138450

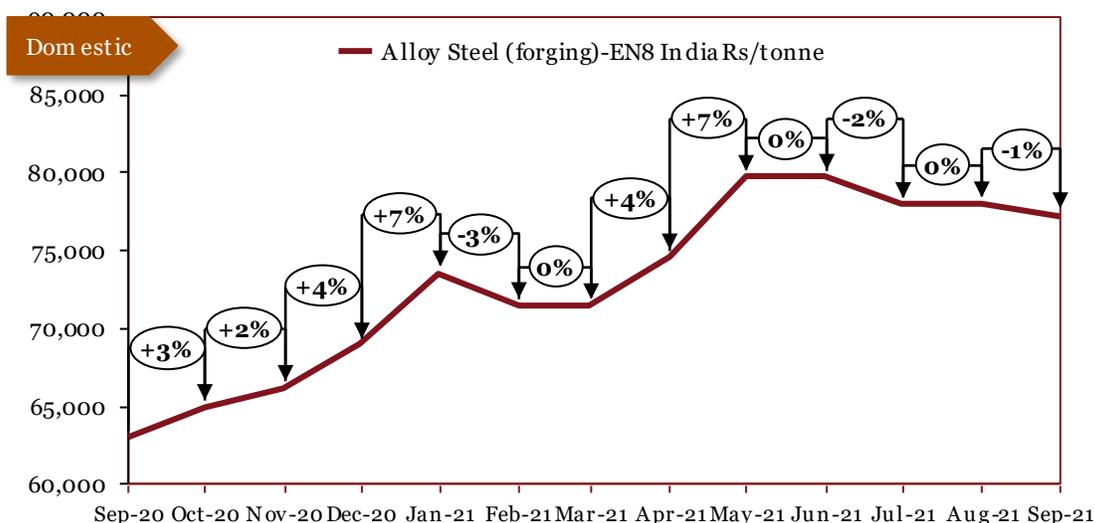


*The actual prices may vary depending on city, player, grade etc.

Outlook

In February, international price and domestic prices plummeted due to lack of trade and producers looking to liquidate stocks. In March, international prices increased with demand, while domestic prices rose on supply constraints in Meghalaya due to daily power-outages. In April, international prices declined with moderation in demand and increased supply. Domestic prices increased marginally due to continued supply constraints in Meghalaya as the producers are over-booked with existing orders amidst power disruptions. In May, international prices rose on tight supply and increased Chinese prices. Domestic prices increased due to supply constraints in Guwahati and Meghalaya. In June, global prices surged with tight supply situation and increase in Chinese prices. Domestic prices saw a spike due to continued supply constraints from major producing regions and backlog in dispatches from Bhutan. In August, international prices rose due to increased demand of ferro silicon, which is used as a warming agent in the production of steel scrap. In September, international prices rose by over 50% as spot availability became very tight, caused by production cuts in China in order to meet energy consumption targets. Domestic prices rose in tandem with international prices.

EN8 Alloy Steel (Forging)



Source: PwC Research

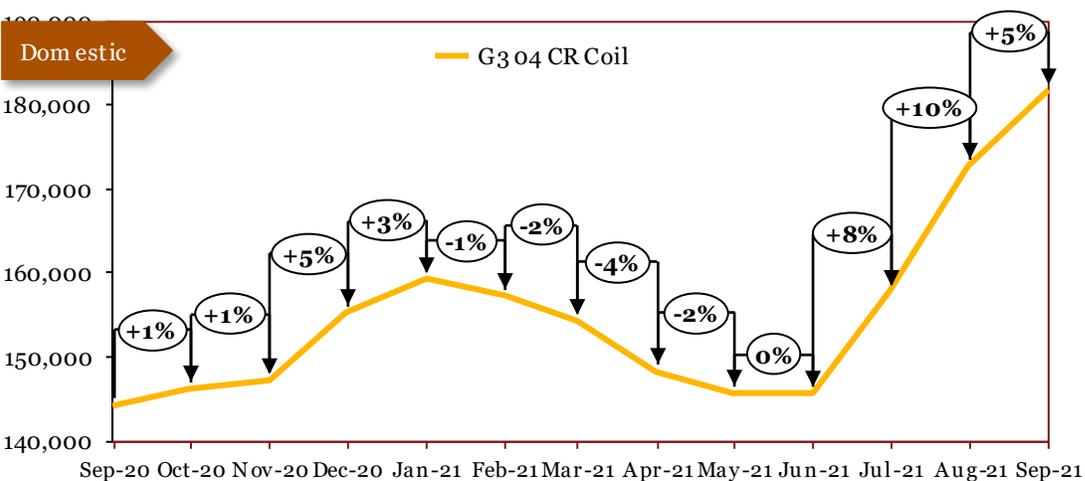
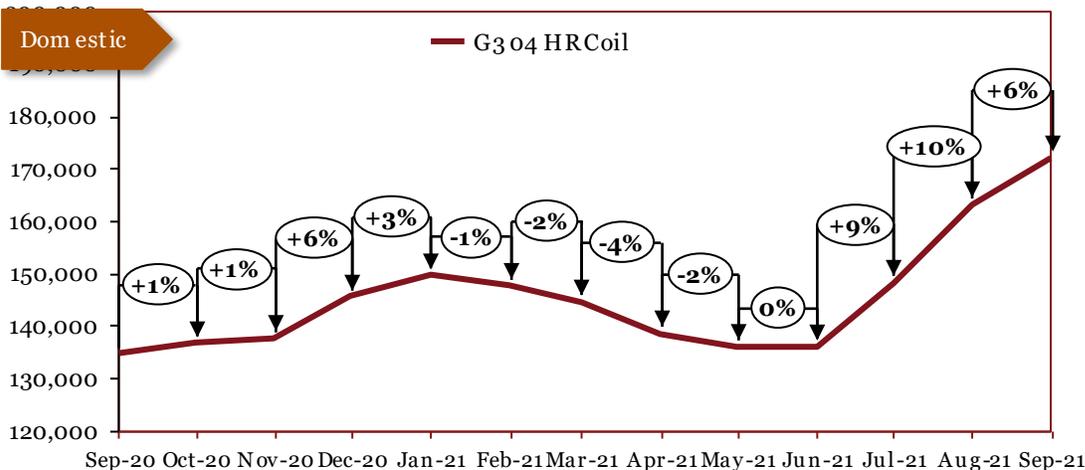
Monthly Average Prices	
Period	*Dom (Rs/tonne)
Sep-20	63000
Oct-20	65000
Nov-20	66250
Dec-20	69000
Jan-21	73600
Feb-21	71500
Mar-21	71500
Apr-21	74600
May-21	79750
Jun-21	79750
Jul-21	78000
Aug-21	78000
Sep-21	77250

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

Outlook

In January, prices remained unchanged thanks to stable market conditions. In February prices remained stable. In March, domestic prices rose thanks to higher demand and improved industrial activity prior to the national lockdown. In April, prices remained stable. Prices remained stable in May. In June, prices rose as industries reopened across the country. In July, prices were unchanged. In August, prices rose domestically as part of the trend to higher steel prices. In September, prices rose further as steel prices rose on a tight supply. In October, prices continued to rise due to increased steel demand from industry. In November, prices continued to rise, on account of higher steel demand. In December, prices rose on stronger demand and a global trend of higher steel prices. In January, the trend of rise in prices continued domestically on shortage of demand 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.

Stainless Steel



Source: PwC Research

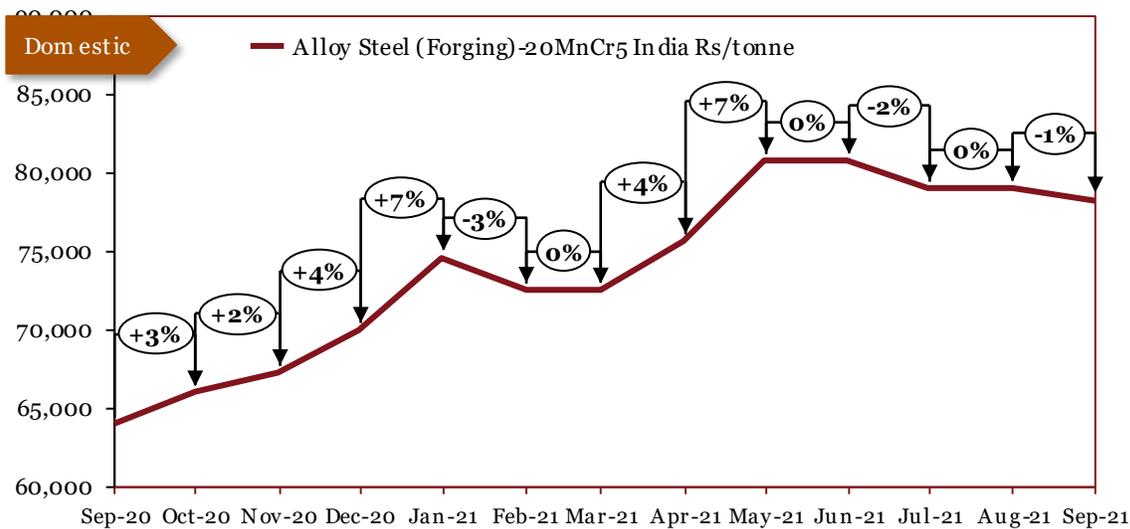
Monthly Domestic Average Prices		
Period	*G304 HR (Rs/tonne)	*G304 CR (Rs/tonne)
Sep-20	134700	144250
Oct-20	136700	146250
Nov-20	137700	147250
Dec-20	145700	155250
Jan-21	149700	159250
Feb-21	147700	157250
Mar-21	144700	154250
Apr-21	138700	148250
May-21	136200	145750
Jun-21	136200	145750
Jul-21	148200	157750
Aug-21	163200	172750
Sep-21	172200	181750

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

Outlook

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

20MnCr5 Alloy Steel (Forging)



Source: PwC Research

Monthly Average Prices	
Period	*Dom (Rs/tonne)
Sep-20	64000
Oct-20	66000
Nov-20	67250
Dec-20	70000
Jan-21	74600
Feb-21	72500
Mar-21	72500
Apr-21	75600
May-21	80750
Jun-21	80750
Jul-21	79000
Aug-21	79000
Sep-21	78250

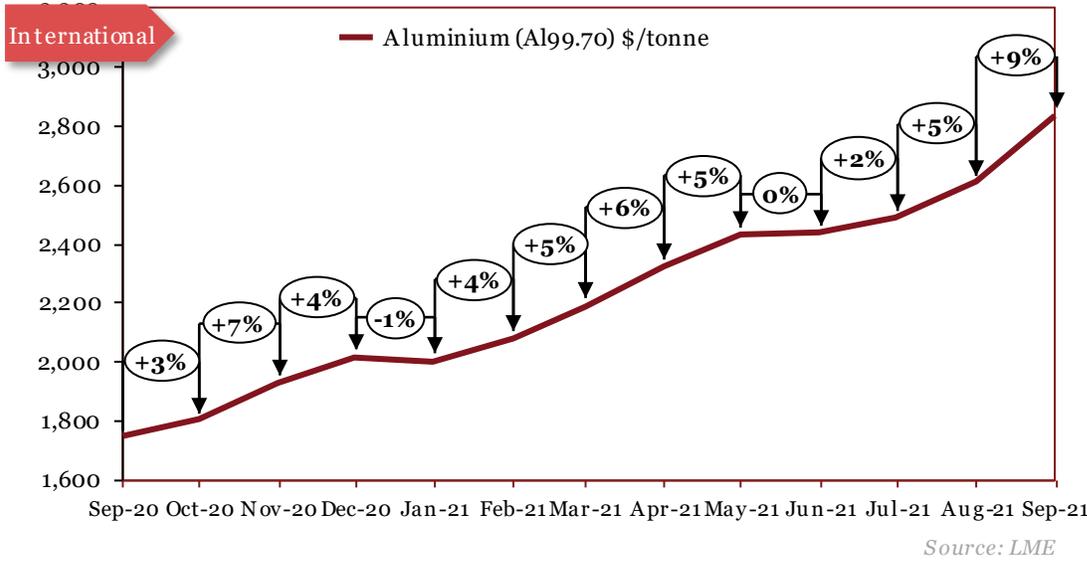
**The actual prices may vary depending on city, player, grade etc.*

Outlook

In February prices remained stable. In March, prices rose on stronger industrial activity and demand prior to the COVID-19 lockdown. In April, prices remained stable. In May, prices remained stable. In June, prices rose on account of the gradual unlocking of the economy. In July, prices remained stable. In August, prices rose on stronger demand. In September, prices rose as steel prices continued to trend upwards. In October, price movement continued upwards as industrial demand from segments such as automotive continued to rise. In November, prices rose, following the trend of rising steel prices. In December, prices rose on increased demand and tight supply. In January, surging steel prices globally along with short supply were key drivers to price rise. In February, prices dipped in conjunction with global and domestic steel prices amidst weaker demand. In March, domestic prices remained stable. In April, domestic prices rose in tandem with global steel prices on the back of reduced exports from China. In May, prices rose in line with flat steel prices coupled with increased consumption from China. 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.

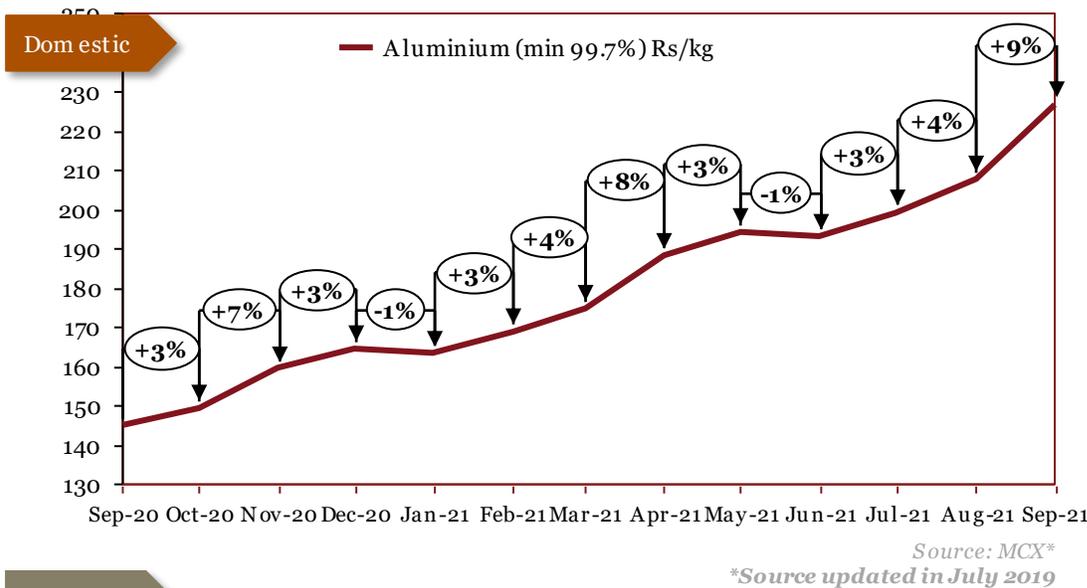
Base Metals

Aluminium



Monthly Average Prices

Period	*Int'l (\$/tonne)	*Dom (Rs/kg)
Sep-20	1745	145
Oct-20	1803	150
Nov-20	1932	160
Dec-20	2018	165
Jan-21	2004	164
Feb-21	2080	169
Mar-21	2192	175
Apr-21	2324	188
May-21	2434	194
Jun-21	2439	193
Jul-21	2492	199
Aug-21	2611	208
Sep-21	2839	227

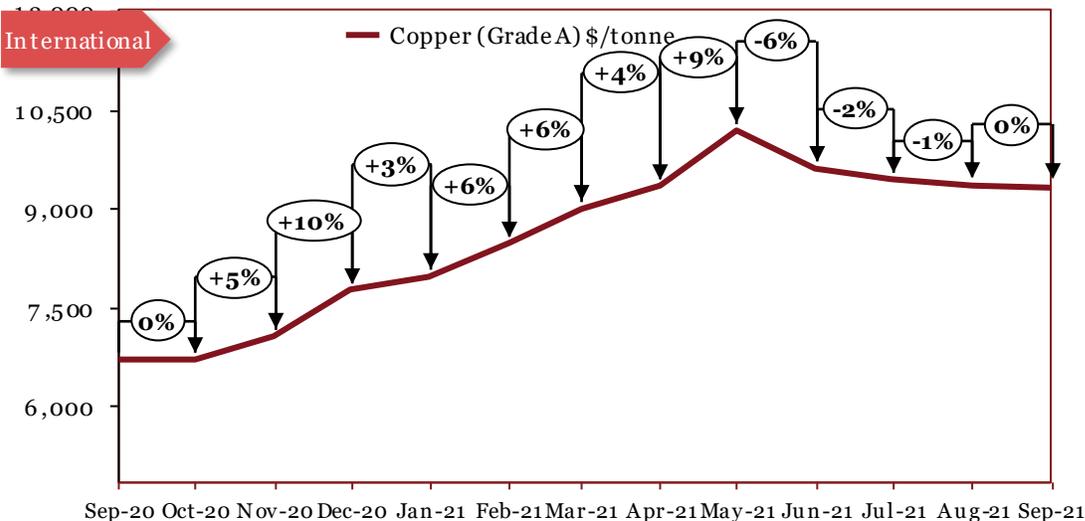


*The actual prices may vary depending on city, player, grade etc.

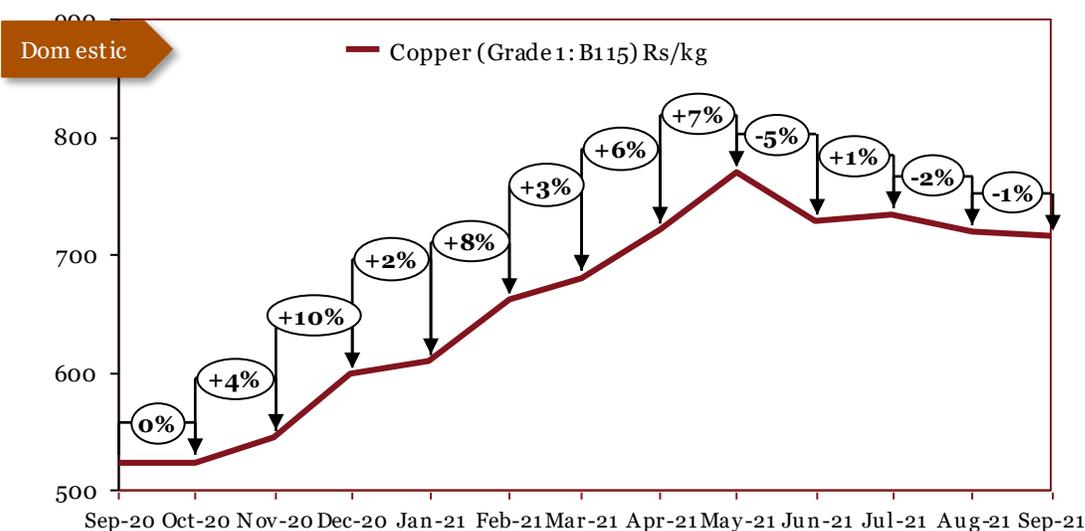
Outlook

In November, international prices rose on account of improving demand in China and the United States, leading to higher prices domestically as well. In December, international prices rose on higher demand from China and the United States, coupled with higher freight prices. Domestic prices rose in tandem. In January, global prices saw a slight dip due to rise in Chinese exports, while domestic prices softened due to subdued demand. In February, international prices rose on increased demand and a softer US Dollar Index, while domestic prices rose in line with international prices and revival in domestic demand. In March, international and domestic prices rose on demand from consumer industries, primarily from China. In April, international prices increased on the back of increased buying from China, while domestic prices rose on demand. In May, international prices rose on the back of high demand and decreased production in China. Domestic prices decreased in tandem. In June, international as well as domestic prices remained stable. In August, a supply-side bottleneck in China coupled with increasing Chinese imports of Aluminium resulted in a steep rise in prices. In September, both domestic and international prices rose by almost 10%, as soaring energy prices resulted in an increase in production costs.

Copper



Source: LME



Source: MCX

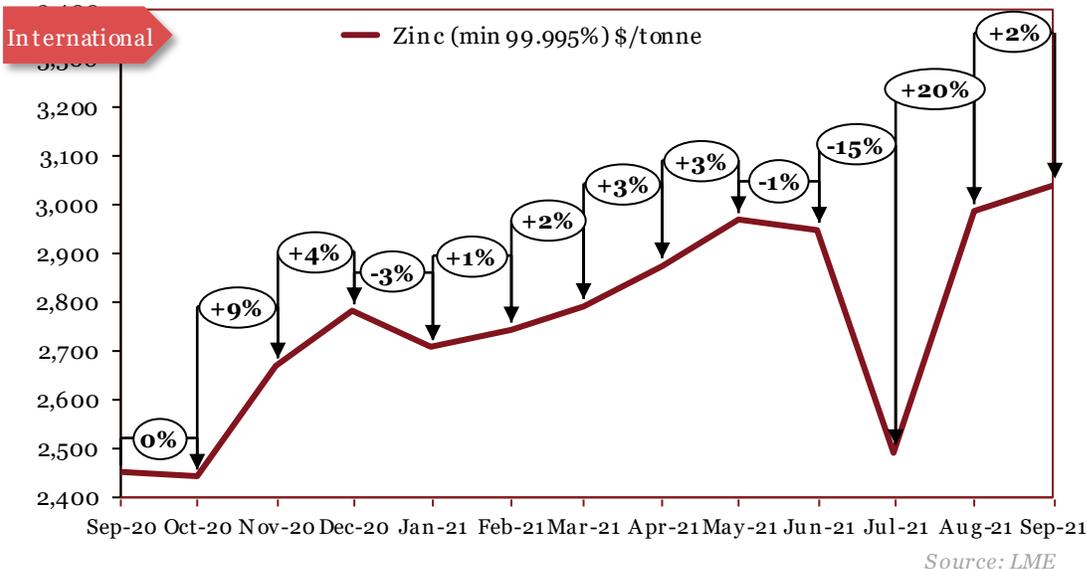
Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/kg)
Sep-20	6712	524
Oct-20	6703	524
Nov-20	7063	545
Dec-20	7755	599
Jan-21	7971	610
Feb-21	8460	662
Mar-21	9005	681
Apr-21	9336	722
May-21	10184	770
Jun-21	9612	728
Jul-21	9434	734
Aug-21	9357	720
Sep-21	9324	715

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

Outlook

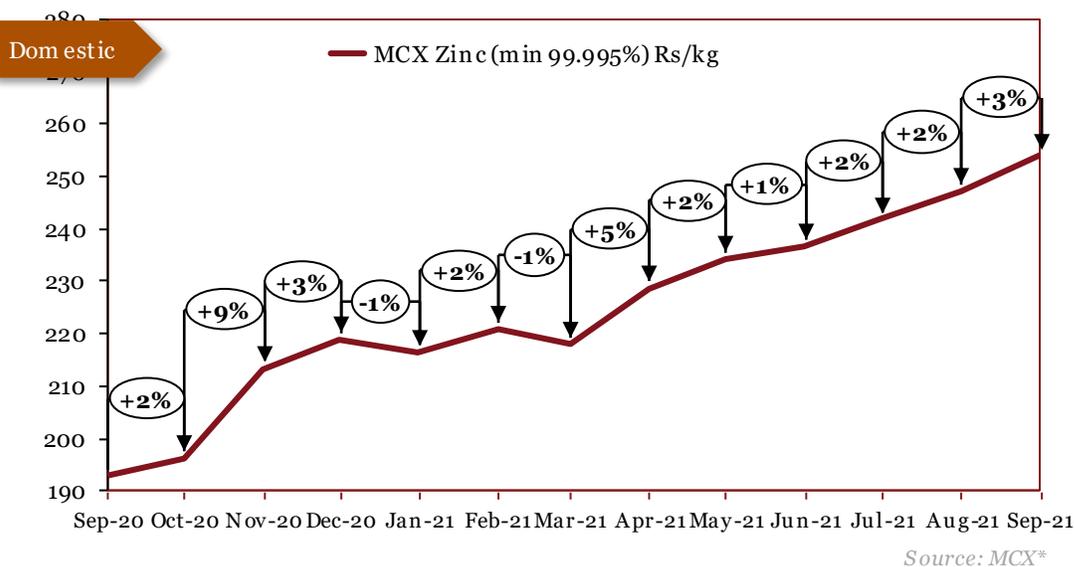
In October, international and domestic prices remained stable. In November, international prices rose on account of greater demand and from China, reduced availability of supply. Domestic prices rose in tandem. In December, prices rose on the backs of a stronger economy and Chinese stockpiling. In January, global prices rose due to robust metal demand by China and weakening of the dollar. Domestic prices remain high on supply deficit. In February, international prices saw a spike due to increased demand from construction, electronics and auto sector. Domestic prices rose on tight supply amidst rising demand. In March, international prices continued to rise on demand from China's manufacturing sector. Domestic prices rose in tandem. In April, international prices rose as demand from renewable energy sector and electric vehicles picked up pace. Domestic prices rose in accordance. In May, international as well as domestic prices rose, due to supply disruptions in South America. In June, international prices dropped due to excessive stock amidst reduced demand from China. Domestic prices followed suit. In July and August, international prices fell as a result of China selling 30,000 tonnes of Copper from its reserves. In September, both international and domestic prices remained largely unaffected.

Zinc



Monthly Average Prices

Period	*Int'l (\$/tonne)	*Dom (Rs/kg)
Sep-20	2451	193
Oct-20	2442	196
Nov-20	2670	213
Dec-20	2782	219
Jan-21	2708	216
Feb-21	2743	221
Mar-21	2792	218
Apr-21	2875	229
May-21	2970	234
Jun-21	2950	237
Jul-21	2493	242
Aug-21	2989	247
Sep-21	3042	254

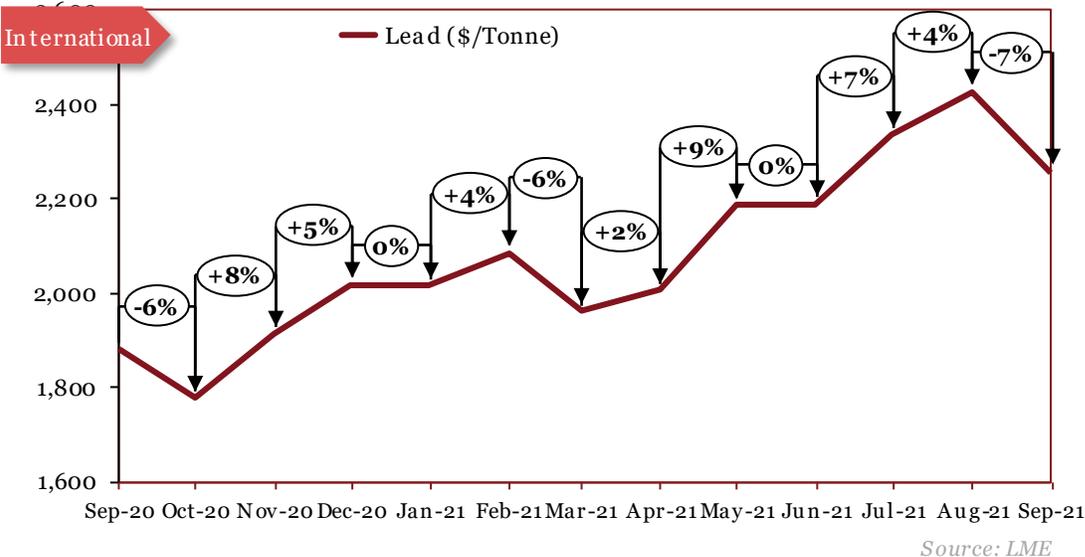


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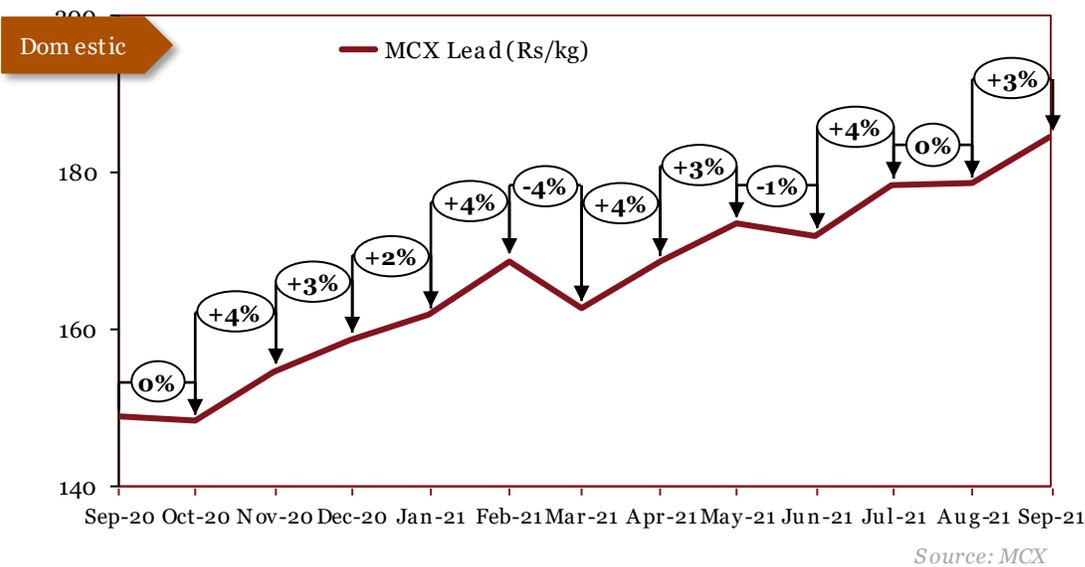
Outlook

In December, prices rose internationally on strong demand, while domestic prices benefited from a stronger rupee. In January, international and domestic prices dipped due to weakened demand and despite constrained supply in constrained in top-producing countries. In February, international remained stable, while domestic prices rose on a pick-up in demand. In March, international prices rose on the back of tight supply and shipping delays in the US, while domestic prices dipped due to weakened demand. In April, international Zinc price increase has been supported by Chinese infrastructure demand and rebounding global auto output. Domestic prices increased on tight supply. In May, international and domestic prices rose despite growing unsold inventory, as investors continued to be bullish about the global recovery. In June, international prices saw a marginal dip due to The National Food and Strategic Reserves Administration of China announcement that it will be releasing reserves of zinc to help keep costs to Chinese manufacturers down. Domestic prices increased marginally. In July, prices saw a decline on account of supply exceeding demand. In August, prices rose back up due to strong Chinese demand and shrinking global inventories. In September, prices rose slightly on account of rising input costs.

Lead



Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/kg)
Sep-20	1881	149
Oct-20	1777	148
Nov-20	1914	155
Dec-20	2019	159
Jan-21	2015	162
Feb-21	2086	169
Mar-21	1961	163
Apr-21	2006	169
May-21	2186	173
Jun-21	2189	172
Jul-21	2337	178
Aug-21	2429	179
Sep-21	2257	185

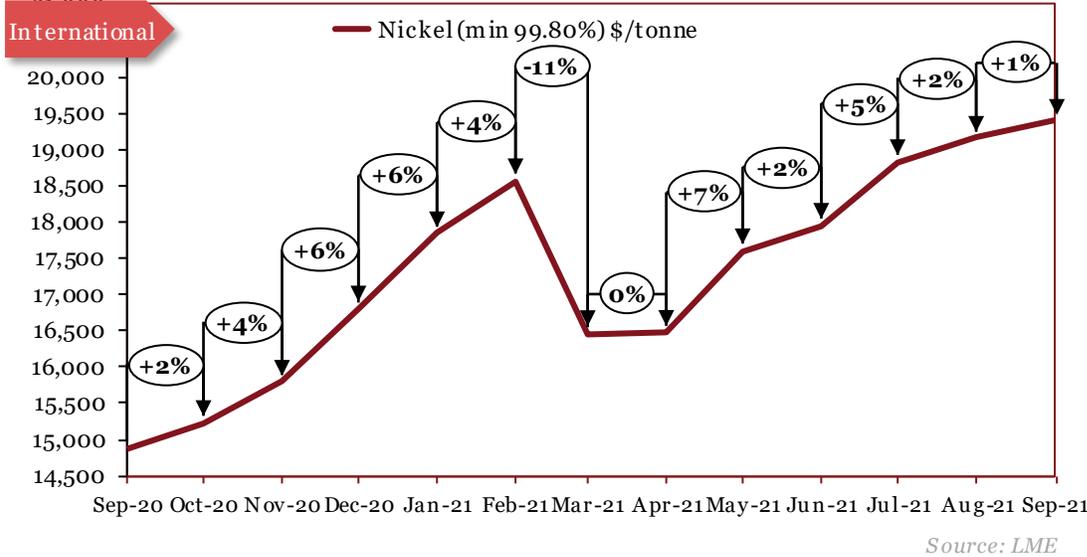


*The actual prices may vary depending on city, player, grade etc.

Outlook

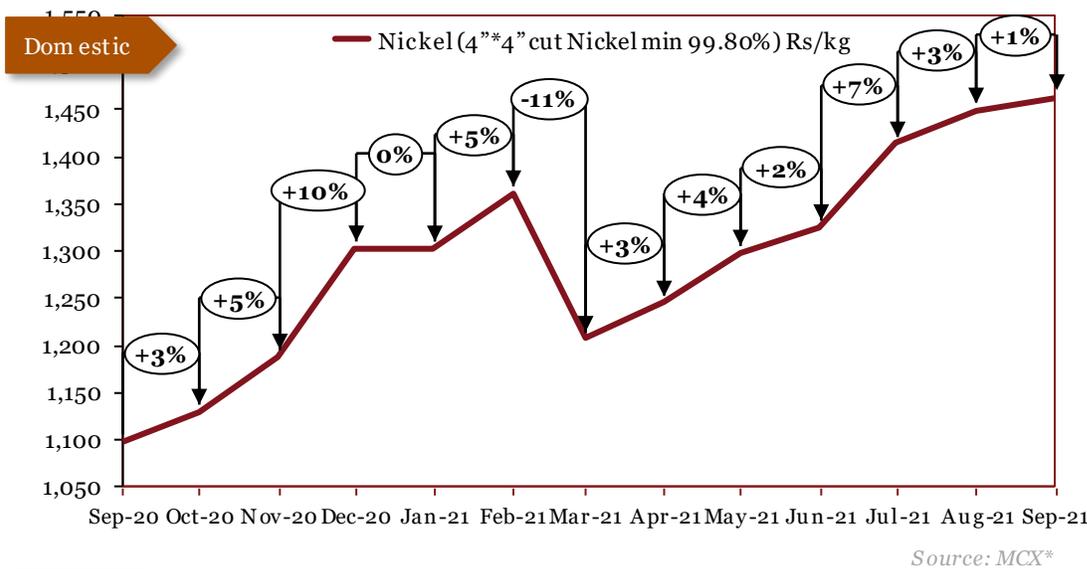
In November, prices rose on the back of an economic upturn, and demand from battery developers. Domestic prices rose in tandem as the economy continued to recover. In December, prices rose internationally, buoyed by continued low supply in the market. Domestic prices rose as the economic recovery continued. In January, international prices remained stable while domestic prices continued to rise due to increased demand in the domestic market. In February, prices rose on the back of strong demand from North America, Europe and China, whilst domestic prices rose on the back of international surging prices. In March, international and domestic prices fell on weakened demand in spite of supply tightness. In April, international and domestic prices increased, owing to increased demand in batteries. In May, international as well as domestic prices rose on account of continued bullishness from investors and fears of supply disruptions. In June, international prices remained stable. Domestic prices saw a minimal dip due to 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.

Nickel



Monthly Average Prices

Period	*Int'l (\$/tonne)	*Dom (Rs/kg)
Sep-20	14866	1097
Oct-20	15219	1129
Nov-20	15796	1187
Dec-20	16807	1268
Jan-21	17848	1302
Feb-21	18568	1361
Mar-21	16461	1207
Apr-21	16481	1245
May-21	17605	1298
Jun-21	17943	1326
Jul-21	18817	1414
Aug-21	19160	1450
Sep-21	19394	1462

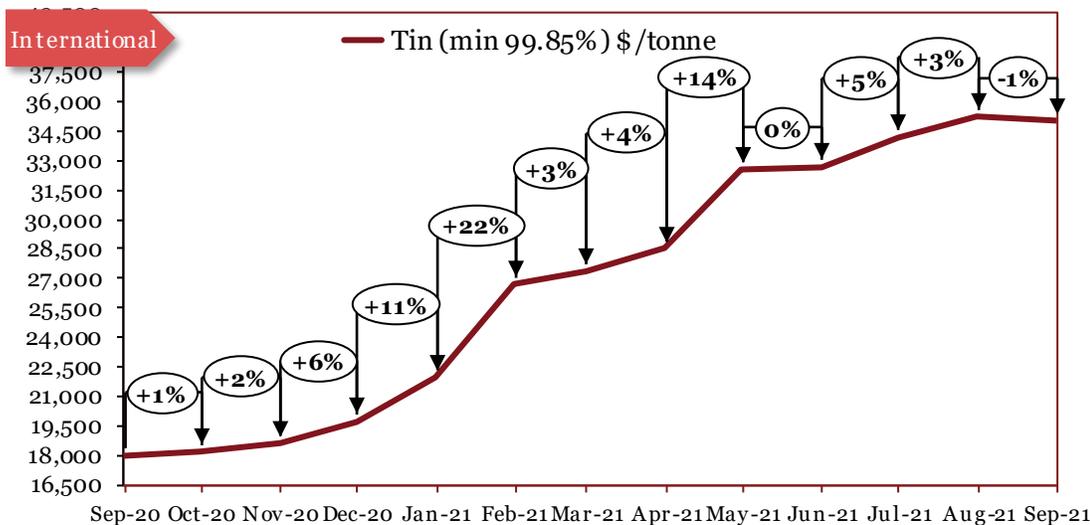


*The actual prices may vary depending on city, player, grade etc.

Outlook

In November, international prices rose on account of greater Chinese demand, with the continued Indonesian export ban and typhoons in Philippines impacting supply. Domestic prices rose in tandem. In December, international prices rose as demand for batteries remained exceptionally bullish, taking prices close to their previous high. Domestic prices rose simultaneously. In January, international prices went up due to continued demand for batteries and in transportation. Domestic prices remained consistent. In February, international prices rose on material shortages and expectations of higher demand for nickel batteries. Domestic prices rose on the back of greater demand from alloy makers. In March, international and domestic prices declined on the back of cautious investors amidst weak demand. In April, international prices remained unchanged, domestic prices rose on tight supply. In August, Nickel prices rose as part of the trend of higher metals prices. In June, international prices saw a spike due to demand from USA, Europe and China coupled with demand for EV batteries. Domestic prices mirrored global trends. In July and August, persistent supply disruptions coupled with increasing demand continued to drive prices up. In September, both international and domestic prices remained relatively constant under stable market conditions.

Tin



Source: LME

Monthly Average Prices	
Period	*Int'l (\$/tonne)
Sep-20	17946
Oct-20	18154
Nov-20	18568
Dec-20	19727
Jan-21	21955
Feb-21	26717
Mar-21	27396
Apr-21	28508
May-21	32524
Jun-21	32678
Jul-21	34183
Aug-21	35253
Sep-21	35034

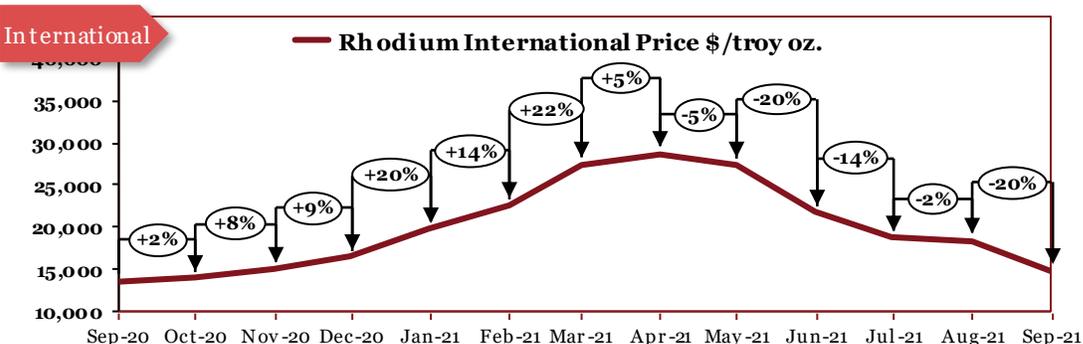
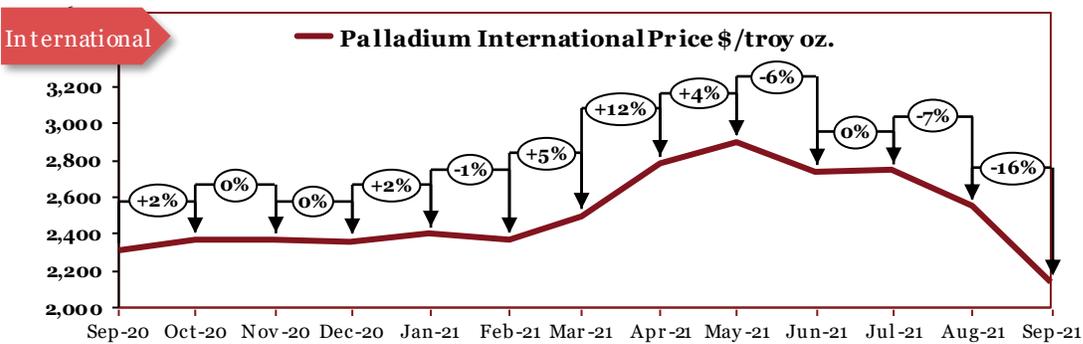
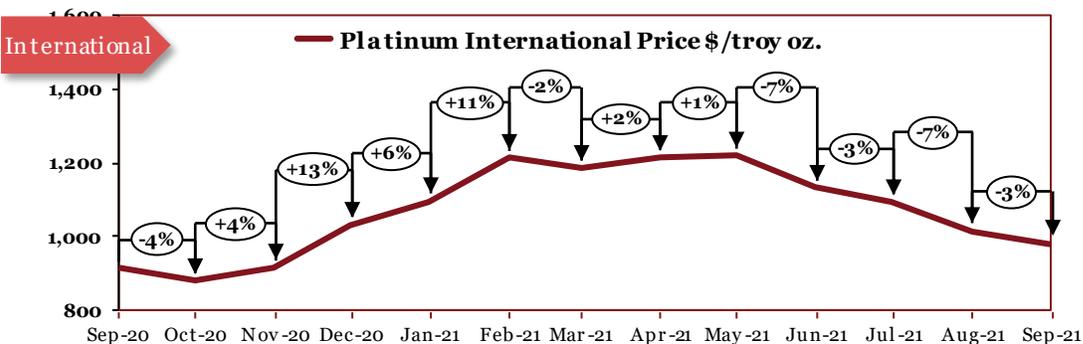
*The actual prices may vary depending on city, player, grade etc.

Outlook

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

Precious Metals

Precious Metals



Source: Johnson Matthey

Monthly Average Prices (\$/Oz)			
Period	Pt	Pd	Rh
Sep-20	915	2314	13647
Oct-20	881	2369	13977
Nov-20	918	2368	15078
Dec-20	1034	2362	16436
Jan-21	1097	2398	19763
Feb-21	1215	2367	22549
Mar-21	1189	2495	27484
Apr-21	1215	2782	28737
May-21	1221	2896	27325
Jun-21	1133	2736	21752
Jul-21	1094	2744	18781
Aug-21	1016	2550	18417
Sep-21	982	2137	14692

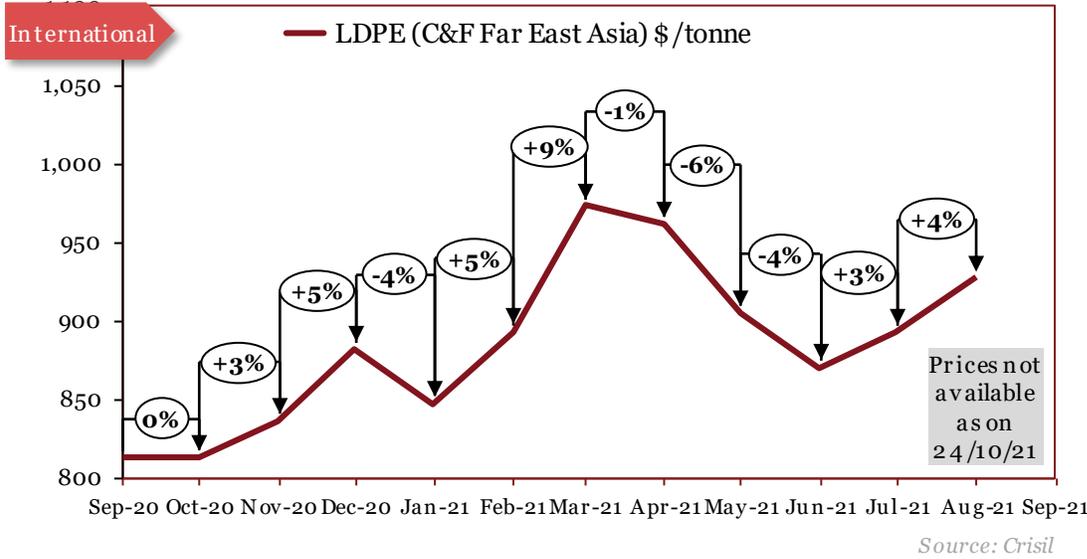
*The actual prices may vary depending on city, player, grade etc.

Outlook

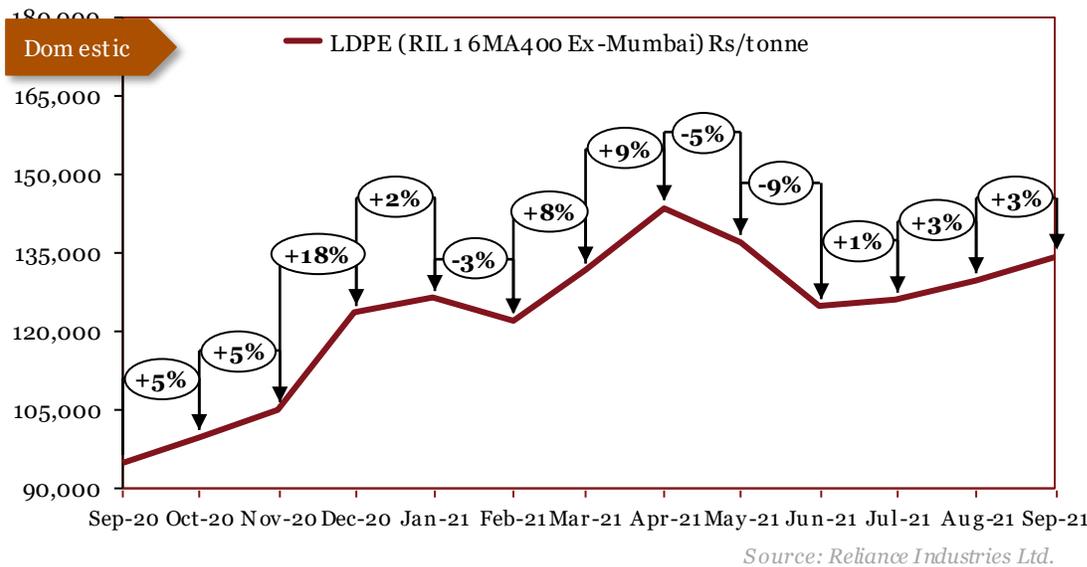
Rhodium prices surged amid supply tightness, existing deficit, stricter emissions regulation standards implemented worldwide and strong demand from China and Europe. In March, Platinum prices declined on reduced buying, while palladium prices rose on tight inventories and increased demand from Automotive, industrial, and electric power sectors. Rhodium prices continued to surge on the back of supply deficit as global economies look to meet emission norms. In April, platinum, palladium and rhodium prices rose on increased demand from the auto industry as governments became stricter on emission norms. In May, Platinum and palladium prices rose on increased demand. Rhodium prices fell on ease in supply. In June, Platinum and Palladium prices fell owing to strengthening of the dollar. Rhodium prices fell on the back of supply should improve as supply has started to normalize. In July and August, the prices of Platinum, Palladium and Rhodium fell drastically on account of decreased consumer spending and market activity in anticipation of a third wave of COVID-19. In September, the continued lack of demand - caused by the semiconductor shortage - caused a massive decline in the prices of Palladium and Rhodium. Platinum's demand wasn't hit as hard due to its various uses, thus its price dropped only marginally.

Polymers & Rubber

Low density polyethylene (LDPE)



Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/tonne)
Sep-20	813	95103
Oct-20	813	99879
Nov-20	836	105106
Dec-20	882	123653
Jan-21	847	126609
Feb-21	893	122180
Mar-21	973	131732
Apr-21	962	143661
May-21	905	137145
Jun-21	870	124861
Jul-21	893	126218
Aug-21	927	129954
Sep-21		121756

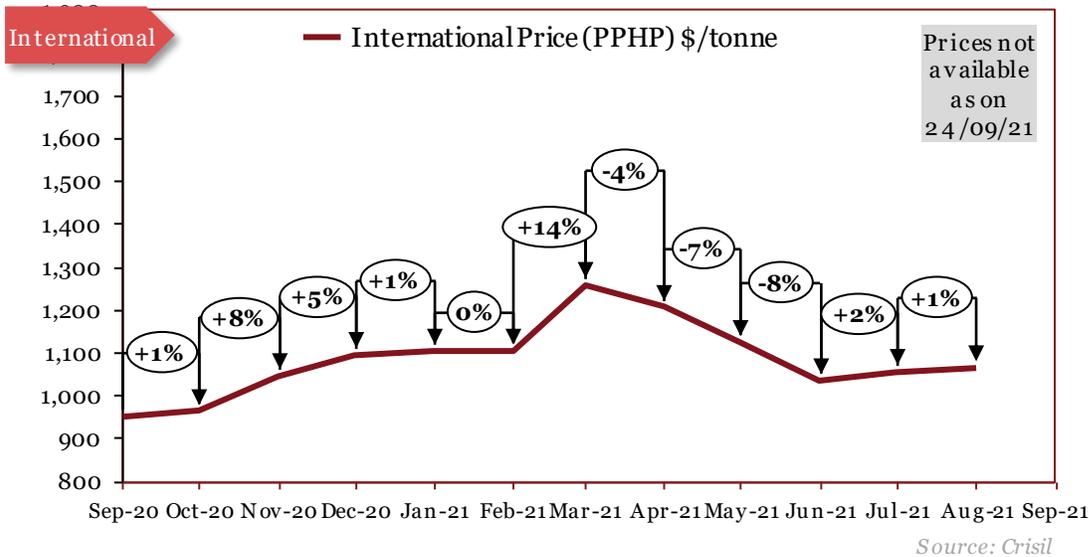


*The actual prices may vary depending on city, player, grade etc.

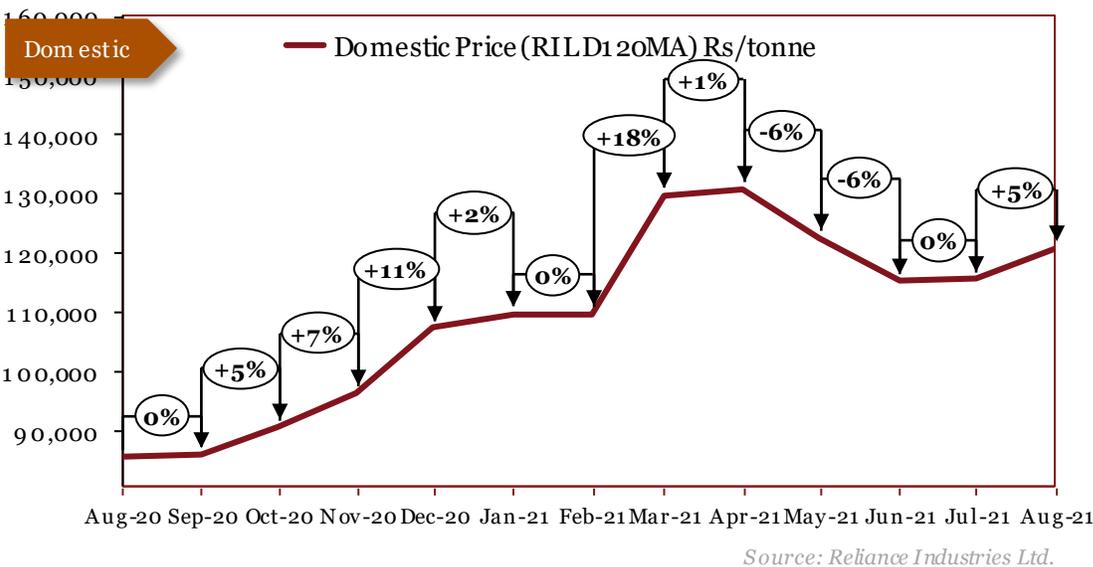
Outlook

In August, international prices declined slightly, while domestic prices rose on account of higher oil prices. In September, domestic prices rose on the backs of higher consumer goods sales as the festive season approaches. In October, domestic prices continued to rise as producers receive higher export demand, with limited availability and high shipping costs. In November, domestic prices rose on the back of higher crude oil prices. In December and January, domestic prices rose on increased crude oil prices. In February, international prices rose on the back of increased crude oil prices, domestic prices dropped on the back of limited demand amidst sufficient supply. In March, domestic prices rose in conjunction with ethylene prices amidst tight supply. In April, domestic prices increased on supply tightness amidst reduced production from US. In May, prices fell on the back of stable movement of raw material and decreased margins. In June, domestic prices fell further due to ease in supply tightness and continued demand from consumer industries. In July, both domestic and international prices rose in tandem with rising crude oil prices. In August, Reliance Industries Limited arbitrarily raised domestic prices, on the back of strong demand. In September, prices rose due to rising oil prices.

Polypropylene (PP)



Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/tonne)
Sep-20	954	85917
Oct-20	964	90503
Nov-20	1045	96407
Dec-20	1096	107261
Jan-21	1106	109697
Feb-21	1106	109658
Mar-21	1259	129681
Apr-21	1208	130673
May-21	1127	122586
Jun-21	1035	115206
Jul-21	1056	115581
Aug-21	1066	120813
Sep-21		#REF!

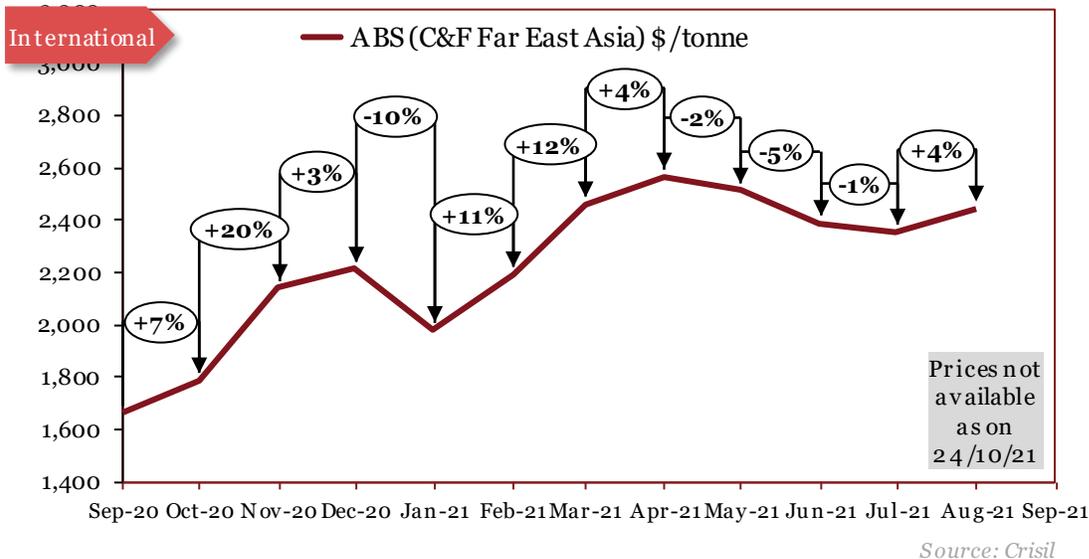


*The actual prices may vary depending on city, player, grade etc.

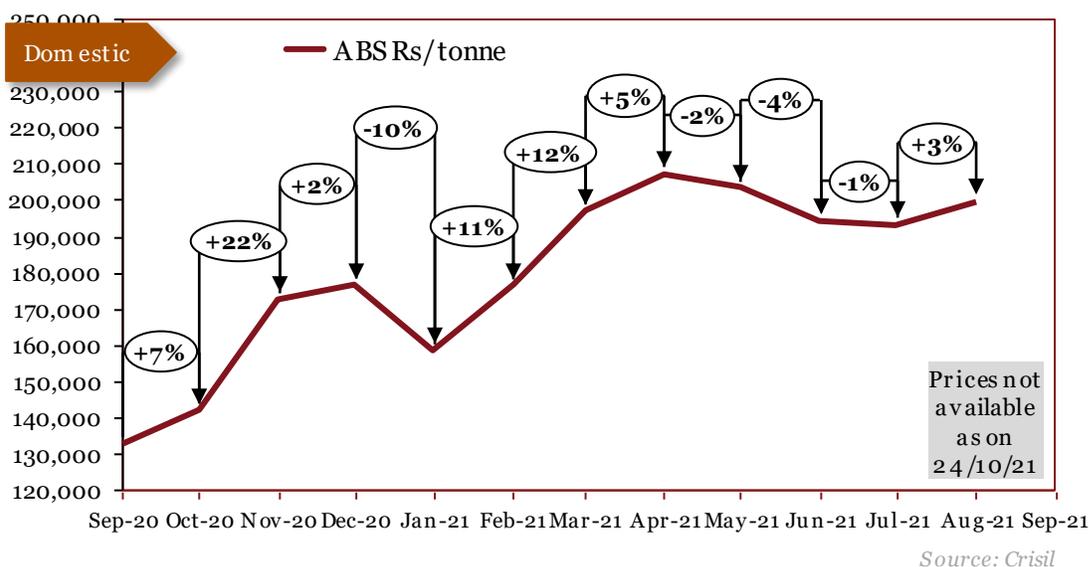
Outlook

In April, prices declined on low crude costs. In June, international prices rose on higher oil prices. Domestic prices followed suit. In July, domestic prices rose on account of higher oil prices. In July, domestic prices continued their upturn. In August, prices rose on account of higher oil prices. In September, domestic prices remained stable. In October, domestic prices rose on greater demand and from exports, as well as a shortage of supply in the market. In November, domestic prices continued to trend upwards. In December, international prices rose alongside the spurt in oil prices. In January, domestic prices rose on the back of increased crude oil prices. In February, international prices rose on demand, while domestic prices remained constant. In March, domestic prices surged on high demand and tight supply. In April, domestic prices increased slightly due to supply tightness. In May, prices dipped due to ease in demand and supply tightness. In June, prices fell in line with LDPE. In July, international prices rose slightly due to higher crude oil prices whereas domestic prices remained stable. In August, domestic prices moved upwards due to increased demand for PP as a raw material in manufacturing Personal Protective Equipment (PPE).

Acrylonitrile Butadiene Styrene (ABS)



Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/tonne)
Sep-20	1664	133120
Oct-20	1788	142080
Nov-20	2142	172800
Dec-20	2213	176640
Jan-21	1982	158720
Feb-21	2195	176640
Mar-21	2460	197120
Apr-21	2567	207360
May-21	2513	203520
Jun-21	2390	194560
Jul-21	2354	193280
Aug-21	2443	199680
Sep-21		

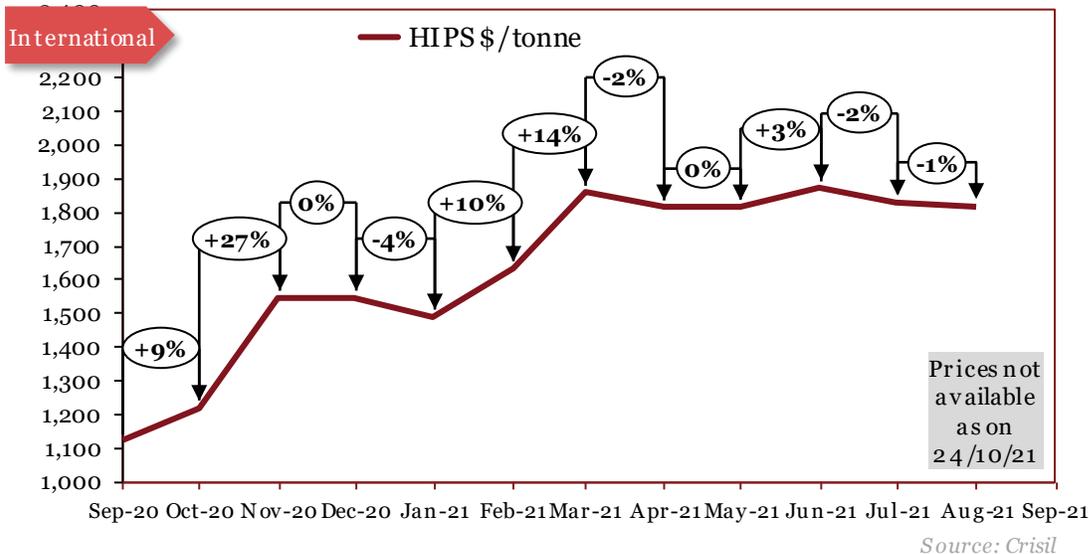


Outlook

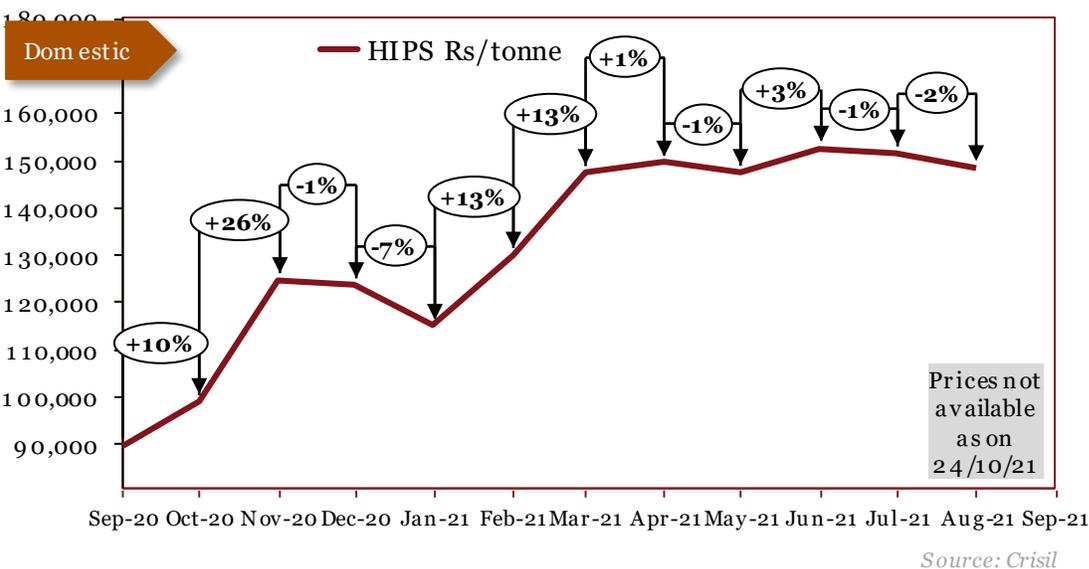
Acrylonitrile Butadiene Styrene (ABS) is a rigid thermoplastic polymer that provides properties such as flexibility, resilience to temperature and good appearance. It is popular due to its low production cost and the ease with which the material is machined by manufacturers. It is made by polymerizing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

In March and April, international prices rose on the back of increased demand from consumption in appliances and consumer goods. Domestic prices followed suit. In May, international as well as domestic prices dropped due to contracted margins which was a result of increase in raw material prices of styrene. In July, international prices marginally fell due to lower demand. Domestic prices followed suit. In August, both international and domestic prices increased due to rising oil prices.

High Impact Polystyrene (HIPS)



Monthly Average Prices		
Period	*Int'l (\$/tonne)	*Dom (Rs/tonne)
Sep-20	1122	89610
Oct-20	1221	98880
Nov-20	1548	124630
Dec-20	1548	123600
Jan-21	1491	114845
Feb-21	1633	129780
Mar-21	1860	147290
Apr-21	1818	149350
May-21	1818	147290
Jun-21	1874	152440
Jul-21	1832	151410
Aug-21	1818	148320
Sep-21		

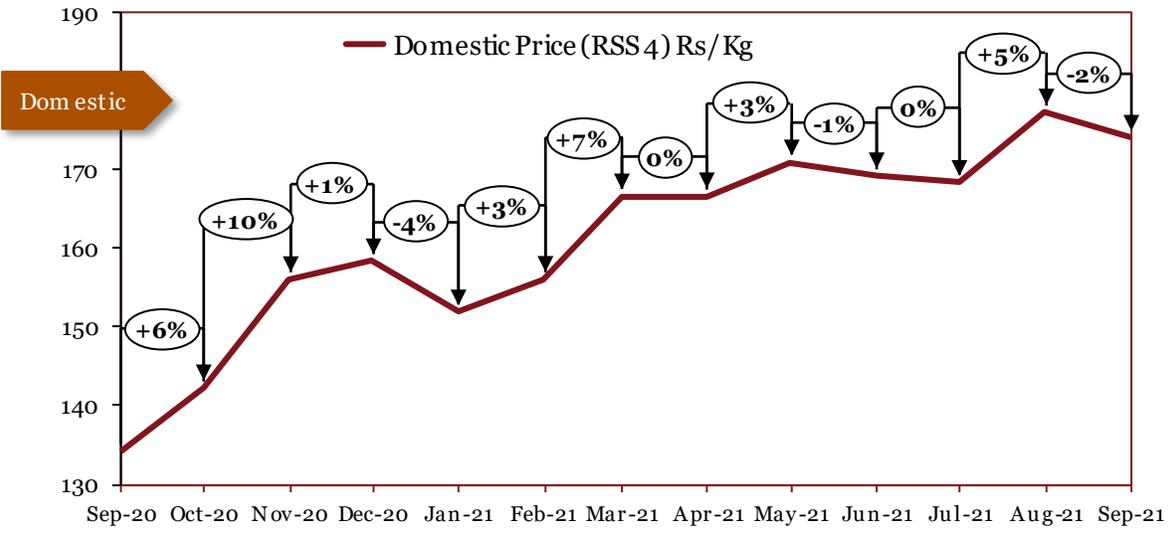


Outlook

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

In March, international as well as domestic prices rose in line with ABS. In April, international prices declined due to subdued demand, while domestic prices rose marginally. In May, international prices remained stable, while domestic prices dipped in line with ABS. In July, both domestic and international prices fell in accordance with raw material and ABS prices. In August, domestic prices fell due to a lack of demand. International prices remained relatively stable.

Rubber



Source: Rubber board

Monthly Average Prices	
Period	*Dom (Rs/kg)
Sep-20	134
Oct-20	142
Nov-20	156
Dec-20	158
Jan-21	152
Feb-21	156
Mar-21	167
Apr-21	167
May-21	171
Jun-21	169
Jul-21	168
Aug-21	177
Sep-21	174

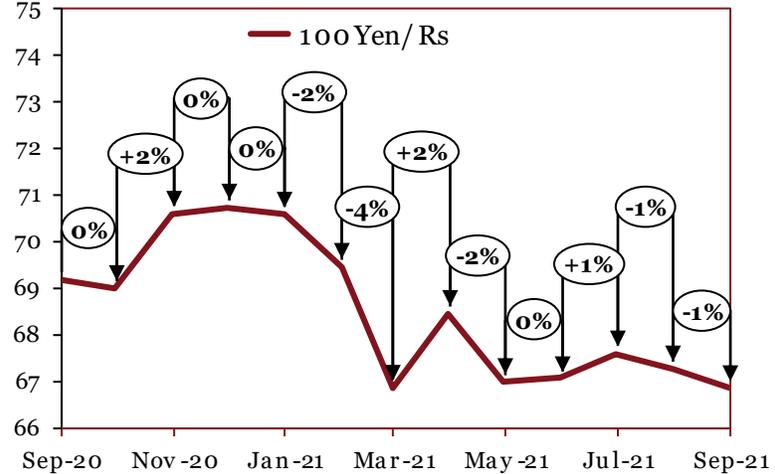
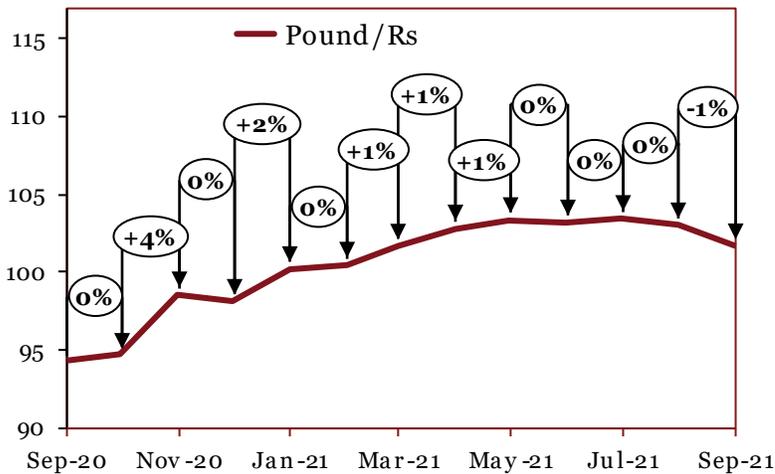
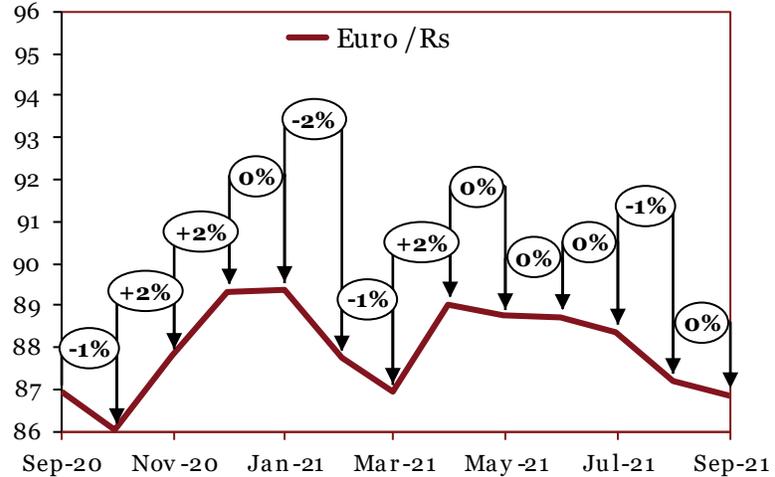
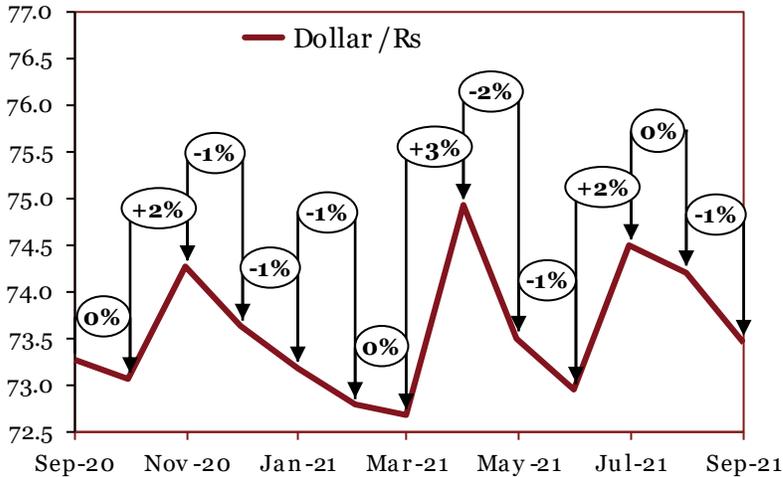
*The actual prices may vary depending on city, player, grade etc.

Outlook

In October, prices continued to move upwards due to continued demand in China. In November, domestic prices continued to move upwards, with strong demand from China along with supply constraints in Thailand and other parts of Southeast Asia partly responsible. In December, international prices rose alongside the spurt in oil prices. In December, prices rose slightly, stabilising after months of upward movement. In January, domestic rubber prices saw a dip due to reduced demand. In February, prices rose on the back of reluctance shown by growers to sell their produce at the prevailing levels in anticipation of future prices. In March, domestic prices rose due to higher oil prices and due to chronic labor shortages in regional rubber-growing areas of Kerala. In April, domestic rubber prices remained unchanged. In May, prices rose on the back fall in production in Kerala due to the Covid-19 pandemic. In June, prices dipped marginally due to lower demand from automotive and rubber gloves manufacturing players. In July, prices continued to gradually fall as rubber production started to bounce back to pre-pandemic levels. In August, prices increased due to seasonal supply disruptions. In September, prices fell marginally due to soft demand, caused by lower exports to China.

Appendices

Forex Movement



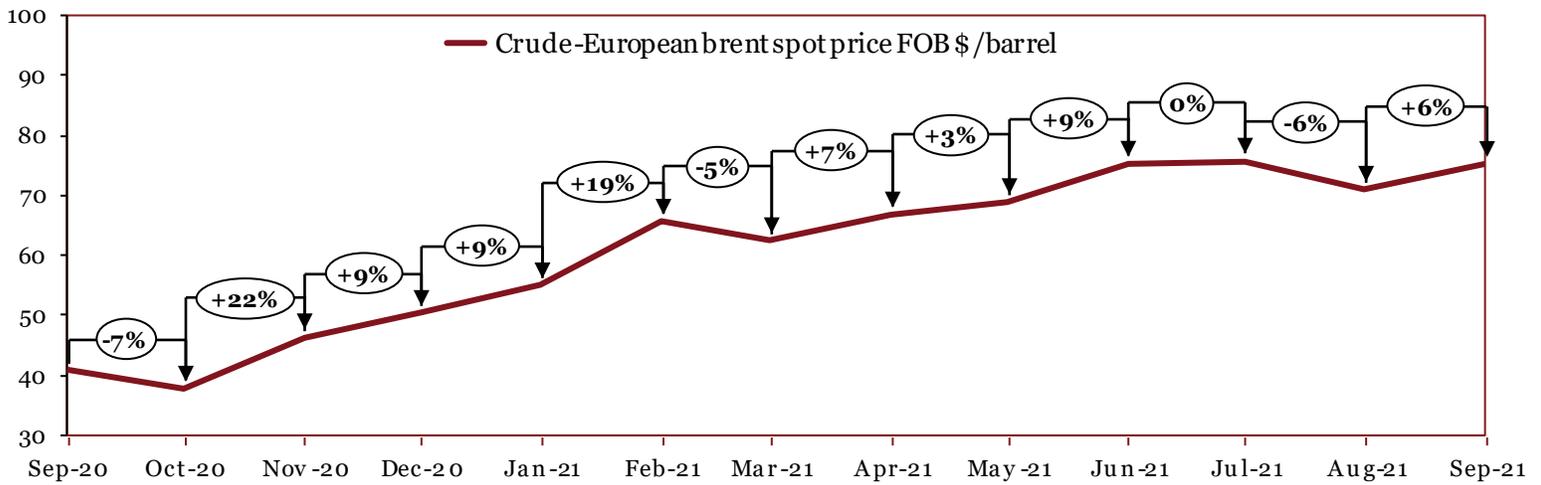
Source: Reserve Bank of India

Monthly Average Prices (Rs)

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

Crude Oil

Source: SIAM



Monthly Average Prices (\$/barrel)

	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21
	41	38	46	51	55	66	63	67	69	75	76	71	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 <i>Previously: Bloomberg BlackSea Steel Billet Spot FOB</i>	Crisil - 100^100 mm (Avg. prices collated from 2-3 locations)
Hot-rolled coils	Crisil -FOB Black Sea	Crisil - 14G 2mm (Avg. prices collated from 2-3 locations)
Cold-rolled coils	Crisil -(CIS) FOB Black Sea	Crisil - Mumbai 16G (Avg. prices collated from 2-3 locations)
Steel Scrap	NA	Crisil - Heavy melting (excl. GST)
EN 8	NA	PwC Research -EN8 Alloy forging
20MnCr5	NA	PwC Research -Alloy forging
Ferro chrome	Crisil : FOB Hong Kong Cr 50%	Crisil: Ex-factory Cr 60%
Ferro silicon	Crisil - FOB China Si 75%	Crisil - Ex-factory Si 70%

Commodity Specifications

Commodity	International	Domestic
Aluminium	<p>LME</p> <p>-Primary aluminium with impurities no greater than the chemical composition of one of the registered designations:</p> <ul style="list-style-type: none"> •P1020A in the North American and International Registration Record entitled “International Designations and Chemical Composition Limits for Unalloyed Aluminium” (revised March 2007) •Al99.70 in the GB/T 1196-2008 Standard entitled “Unalloyed aluminium ingots for remelting” 	<p>NCDEX, MCX (July’19 onwards)</p> <p>-Primary aluminium 99.7% purity (minimum) form: ingots, T-bars,</p>
Copper	<p>LME</p> <p>-Grade A copper must conform to the chemical composition of one of the following standards:</p> <ul style="list-style-type: none"> •BS EN 1978:1998 - Cu-CATH-1 •GB/T 467-2010 - Cu-CATH-1 •ASTM B115-10 - cathode Grade 1 	<p>MCX</p> <p>- Grade 1 electrolytic copper as per B115 specification</p>
Zinc	<p>LME</p> <p>-Special high-grade zinc of 99.995% purity (minimum) must conform to the chemical composition of one of the following standards:</p> <ul style="list-style-type: none"> •BS EN 1179:2003 - 99.995% grade •ISO 752:2004 - ZN-1 grade •ASTM B6-12 - LME grade •GB/T 470-2008 - Zn99.995 grade 	<p>NCDEX, MCX (July’19 onwards)</p> <p>- Zinc of 99.995% minimum purity. Zinc must conform with the 99.995% graded chemical composition of BS EN 1179:1996 Standard entitled “Zinc and Zinc alloys primary Zinc” Form: ingots</p>
Lead	<p>LME</p> <ul style="list-style-type: none"> - Lead of 99.97% purity (minimum) conforming to BS EN 12659:1999 - GB/T 469/2005 	<p>MCX</p> <ul style="list-style-type: none"> - Lead ingots with minimum purity of 99.97%

Commodity Specifications

Commodity	International	Domestic
Nickel	LME - Nickel of 99.80% purity (minimum) conforming to B39-79 (2013) - GB/T 6516-2010	NCDEX, MCX (July '19 onwards) - 4" x 4" approved pure cut Nickel of 99.80% purity (minimum)
Tin	LME - Tin of 99.85% purity (minimum) conforming to BS EN 610:1996	Bloomberg - Tin (min 99.85%) \$/tonne
Platinum	Metal in sponge form with minimum purities of 99.95% for platinum and palladium, and 99.9% for rhodium	
Palladium		
Rhodium		
Low density polyethylene (LDPE)	International price (C&F FEA) \$/tonne	RIL-16MA400 grade
Polypropylene (PP)	International Price (PPHP) \$/tonne	RIL-D120MA grade
Acrylonitrile Butadiene Styrene (ABS)	International price (C&F FEA) \$/tonne	Landed Cost Rs/tonne
High Impact Polystyrene (HIPS)	International price \$/tonne	Landed Cost Rs/tonne
Rubber Prices	NA	NCDEX/Rubber board - RSS 4 (Ribbed Smoked Sheet 4) ex-warehouse Kochi exclusive of all taxes
Forex Movement	RBI reference rates	
Crude	European Brent spot price FOB \$/barrel – Energy Information Administration (EIA)	



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