

## Steel Review & Outlook: June 2018

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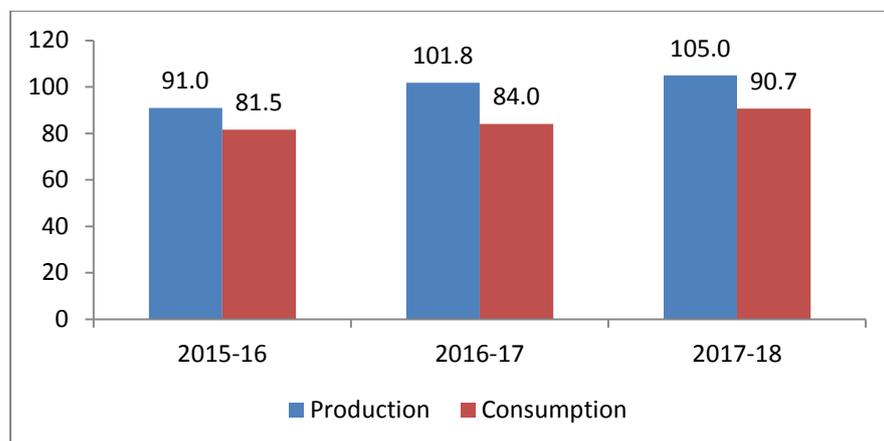
During financial year 2017-18, steel production in India grew by 3.1% to 105 million tonnes and consumption increased by 7.9% to 90.7 million tonnes. We expect the upward momentum in production and consumption to continue in the ongoing financial year 2018-19 as well.

The demand for steel from user industries is likely to result in increase in production and is expected to keep the prices firm during 2018-19, while we may see some moderation in steel prices during the monsoon months as infrastructure and construction activities slow down during these months. The prices had averaged 18%-21% higher during 2017-18.

### Steel production

India's steel production grew by 3.1% on a y-o-y basis to 105 million tonnes during the financial year 2017-18 backed by 7.9% growth in consumption during the year. The increase in output however is slower compared to 11.9% y-o-y growth reported by the industry during 2016-17 when production stood at 101.8 million tonnes.

**Chart 1: Finished steel production and consumption in India (in million tonnes)**



Source: Joint Plant Committee (JPC)

Consumption growth rate on the other hand accelerated to 7.9% during 2017-18 compared to 3.1% y-o-y rise registered by the industry during 2016-17.

### Product segments

Steel has its usage in different industries depending on its category. Steel products can be widely divided into two categories, long and flat products. There are various products manufactured within these two categories based on the needs of user industries. While long products

are generally used for construction, mechanical engineering, energy and automotive, flat products are generally used for automotive, heavy machinery, pipes and tubes, construction, packaging and appliances.

In addition to these two broad categories, finished steel production also includes alloy steel. It refers to steel that contains one or more alloying elements like chromium, manganese, silicon, nickel, copper, aluminium. This also includes stainless steel. Alloy steel has certain properties that are not observed in normal carbon steel and alloy steel is used in automotive, railways, defence and engineering.

**Table 1: Category-wise Production of Long and Flat Products (in '000 tonnes)**

	2015-16	2016-17	2017-18
Bars & Rods	33,512.0	34,951.0	35,530.0
Steel Structural	7,460.0	7,985.0	8,225.0
Railway Materials	937.0	1,076.0	1,255.0
<b>Long products</b>	<b>41,909.0</b>	<b>44,012.0</b>	<b>45,010.0</b>
GP/GC Sheets	7,183.0	7,742.0	7,644.0
HR Coils	19,451.0	24,117.0	23,931.0
CR Sheets/Coils	5,870.0	8,562.0	7,800.0
Pipes	2,163.0	2,083.0	2,164.0
Electrical Sheets	148.0	680.0	261.0
Tin Plates	331.0	340.0	428.0
HR Sheets	1,516.0	1,096.0	2,373.0
Plates	4,140.0	4,708.0	5,169.0
<b>Flat products</b>	<b>40,802.0</b>	<b>49,328.0</b>	<b>49,770.0</b>
<b>Alloy Steel</b>	<b>8,261.0</b>	<b>8,451.0</b>	<b>10,198.0</b>

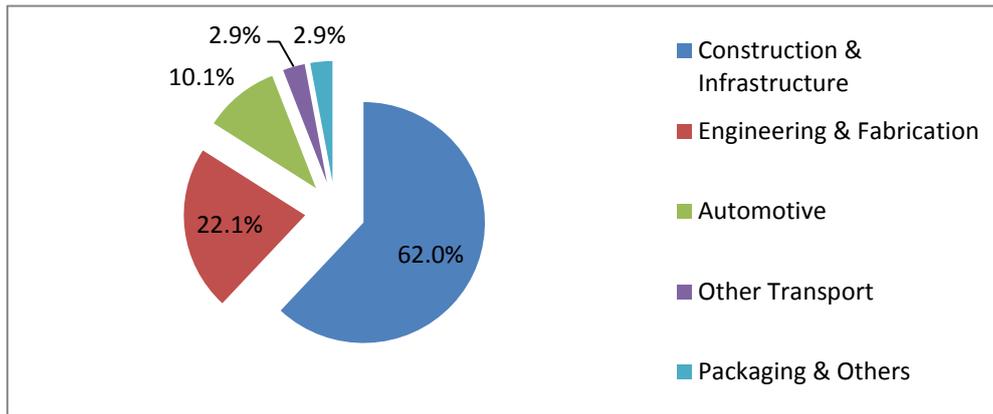
Source: CMIE

During 2016-17, the output of flat products grew by a healthy 20.9% to 49.3 million tonnes and long products increased by 5% to 44 million tonnes on a y-o-y basis. In the next year 2017-18, the output of long products rose by 2.3% to 45 million tonnes and that for flat products was up by 0.9% to 49.8 million tonnes.

The output of alloy steel on the other hand grew by a strong 20.7% to 10.2 million tonnes which led the rise in finished steel production during 2017-18. In the previous year, production of alloy steel had increased by 2.3% on a y-o-y basis to 8.5 million tonnes.

### Demand drivers for steel industry

India's steel production is expected to remain higher in the current financial year 2018-19 backed by growth in domestic demand from user industries during the year. The significant user industries that drive the demand for steel is shown below:

**Chart 2: Sector-wise steel consumption in India 2015-16 (in %)**


Source: National Steel Policy 2017

Construction & infrastructure sector is the largest consumer of steel in India, it accounted for a noteworthy share of 62% of the total finished steel consumed during 2015-16. This was followed by engineering & fabrication sector which had a second largest share of 22.1% of the total finished steel consumed during the year. The automotive sector was the third largest consumer of steel with a share of 10.1%, other transport and packaging & others sector had a share of 2.9% each in total finished steel consumption.

### Construction & Infrastructure

This sector includes building of highways, bridges, airports, ports, water transportation, pre-fabricated buildings, power projects, real estate – residential and industrial. A notable portion of the steel manufactured in India (both flat and long variety) finds its usage either directly or indirectly in the infrastructure sector. A noteworthy proportion of long product consumption is led by real estate sector.

*In the Union Budget 2018-19, infrastructure allocation for the financial year 2018-19 has been increased by 20.9% y-o-y to Rs.5.97 lakh crore from Rs.4.94 lakh crore in the corresponding period a year ago. The government thus continues its push towards infrastructure and construction which is likely to drive the demand for steel in India during 2018-19, the sector being the largest consumer of steel in the country.*

### Engineering & Fabrication

This segment involves industries such as capital goods, consumer durables, electrical goods, general engineering, defence equipment etc. Steel products including hot rolled coils & sheets are used in general engineering and galvanised sheets are used in consumer durables. *The consumer durables market is expected to grow by 6.5%-8.5% y-o-y on account of improvement in domestic consumption during 2018-19.*

### Automotive

This sector is a major demand driver for flat steel products (including basic and specialty steels). These products are key inputs for manufacture of automobiles and accounts for significant cost with respect to automobile production. Flat products such as hot rolled coils & sheets find their application in wheel-disc in the automotive segment. Other products

like cold rolled coils & sheets and galvanised coils & sheets find their application in auto parts viz. hood, roof, door, body side, floor, reinforcement pillar, structural safety components and impact beam. The automobiles sector is expected to register higher sales on a y-o-y basis during 2018-19 backed by a growth in demand from auto consumers.

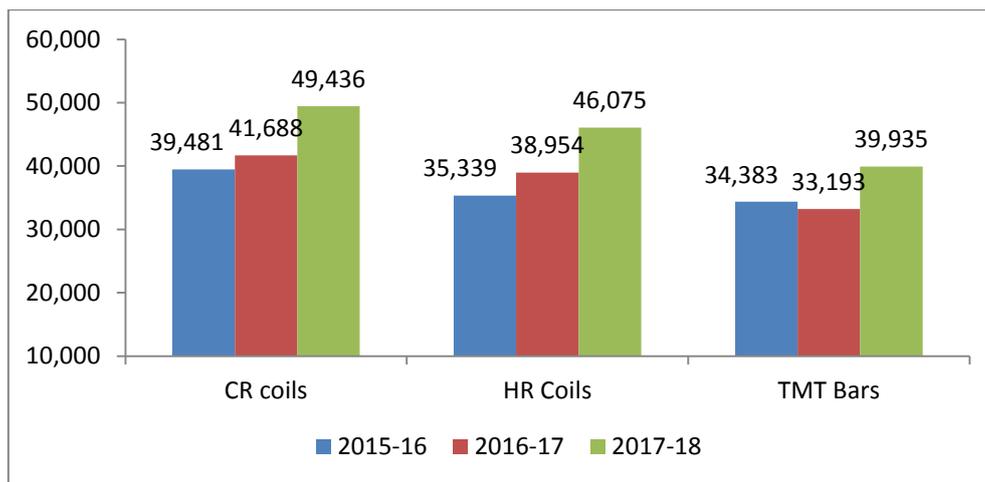
*Sales of the largest segment, two & three wheelers, is likely to grow by 17%-19%, and sales of the commercial vehicles (CV) and passenger vehicles (PV) segments' is expected to rise by 18%-20% and 8%-10%, respectively.*

**Subsequently, we expect the demand for steel from user industries to remain higher in the current financial year 2018-19 which is expected to drive steel production during the year. Thus, India's steel production is expected to grow by 6%-8% during 2018-19.**

**Steel prices**

During 2017-18, domestic steel prices remained buoyant as they rose in the range of 18%-21% on a y-o-y basis. The increase in prices was on account of a growth in domestic consumption and international prices. The movement in international steel prices generally have an impact on domestic steel prices. Besides, higher raw material prices also resulted in rise in steel prices.

**Chart 2: Price of steel products in India (in Rs/ tonne)**



Source: CMIE

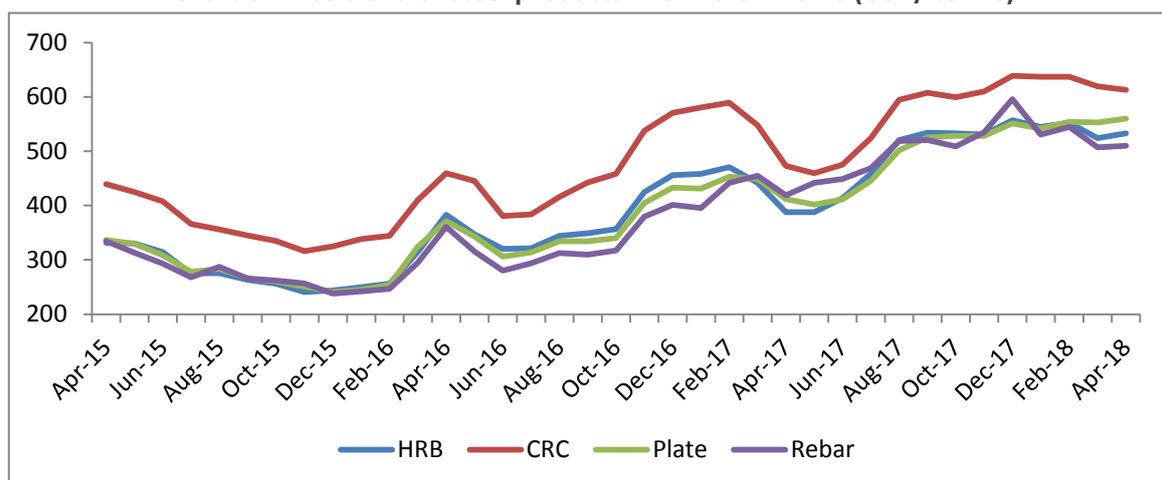
The prices of CR coils, HR coils and TMT bars averaged at Rs.49,436 per tonne, Rs.46,075 per tonne and Rs.39,935 per tonne, respectively, during 2017-18. During 2016-17, the prices of CR coils and HR coils rose by 5%-11% and the prices of TMT bars declined by 3.5% on a y-o-y basis.

The movement in international steel prices (that influences domestic steel prices) and raw material prices that had an impact on domestic steel prices during the year are explained below.

**Movement in international steel prices**

During the financial year 2017-18, the prices of HRC and CRC in China increased in the range of 18%-27% and the prices of plate and rebar grew by 31%-42% on a y-o-y basis. The growth in international steel prices also led to a rise in domestic steel prices during the year.

Chart 3: Price trend of steel products in China ex-works (USD/ tonne)



Source: SteelBenchmarker

This rise in prices was on account of production cuts undertaken by China to improve the quality of air and handle pollution. In addition to this, improved demand for steel backed by Chinese government stimulus also supported the growth in prices. The improvement in prices during 2017-18 was over 29%-40% y-o-y growth reported by prices during 2016-17. The Chinese government has plans to cut down 100 to 150 million tonnes of annual steel production during the period 2016-2020.

### Major inputs used in manufacturing of steel

The major raw materials used for the manufacturing of steel are coking coal and iron ore. While the demand for iron ore is majorly met domestically, coking coal is largely imported for manufacturing of steel. Around 85% of the coking coal requirements for domestic steel industry are fulfilled through imports as per National Steel Policy 2017.

Table 2: Trend in raw material prices

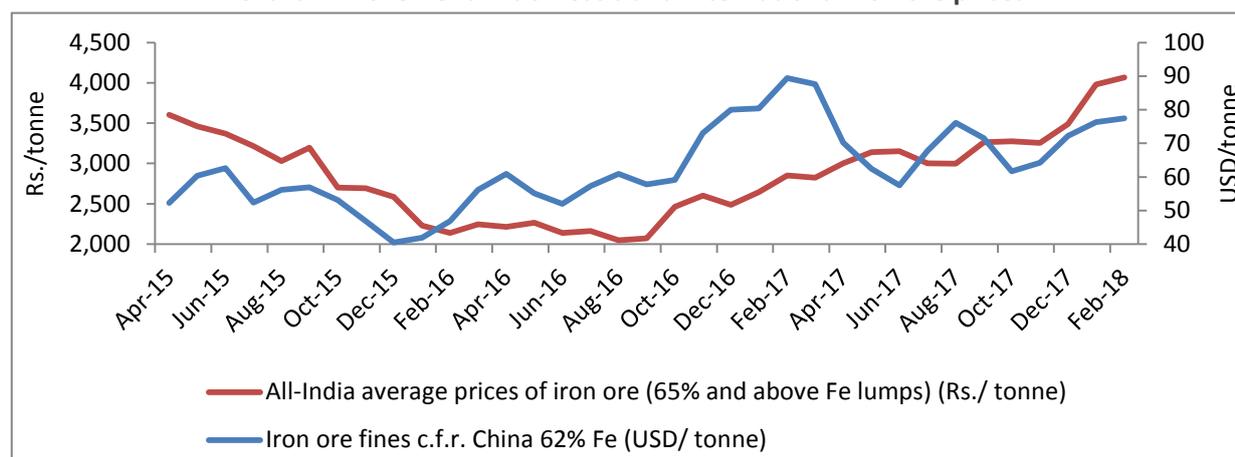
	Iron ore (65% and above Fe lumps) (in Rs./tonne)	y-o-y % change	Unit realisation of coking coal imported from Australia (in USD/tonne)	y-o-y % change
2015-16	2,872.3	-38.0	96.8	-23.4
2016-17	2,397.4	-16.5	147.4	52.3
2017-18 (till Feb' 2018)	3,328.8	41.1	192.6	36.3

Note: % change is y-o-y

#### a. Iron ore

India is mostly self-sufficient when it comes to meeting the requirements of iron ore for manufacturing of steel. Resultantly, the country does not depend much on iron ore imports. Exports accounted for about 15% of the total domestic production during 2016-17. As the country meets most of the iron ore requirements internally, the domestic iron ore prices are primarily influenced by the demand-supply situation in the country while the movement in international iron ore prices influences the domestic prices to some extent.

Chart 4: Movement in domestic and international iron ore prices



Source: CMIE, Indexmundi

The average domestic iron ore prices (65% and above Fe lumps) surged by 41.1% y-o-y to Rs.3,328.8 per tonne during April 2017-February 2018 while the international prices (iron ore fines c.f.r. China 62% Fe) increased by 1.7% y-o-y to USD 69 per tonne during financial year 2017-18. In April 2017, the domestic prices of iron ore stood at Rs.3,003 per tonne which increased sequentially in the initial few months and then declined to a low of Rs.2,996 per tonne in August 2017. Following this, the prices continued to rise on m-o-m basis in each of the months during September 2017-February 2018 except for November 2017 where prices declined by a marginal 0.5% to Rs.3,256 per tonne. In February 2018, the prices touched a high of Rs.4,065 per tonne.

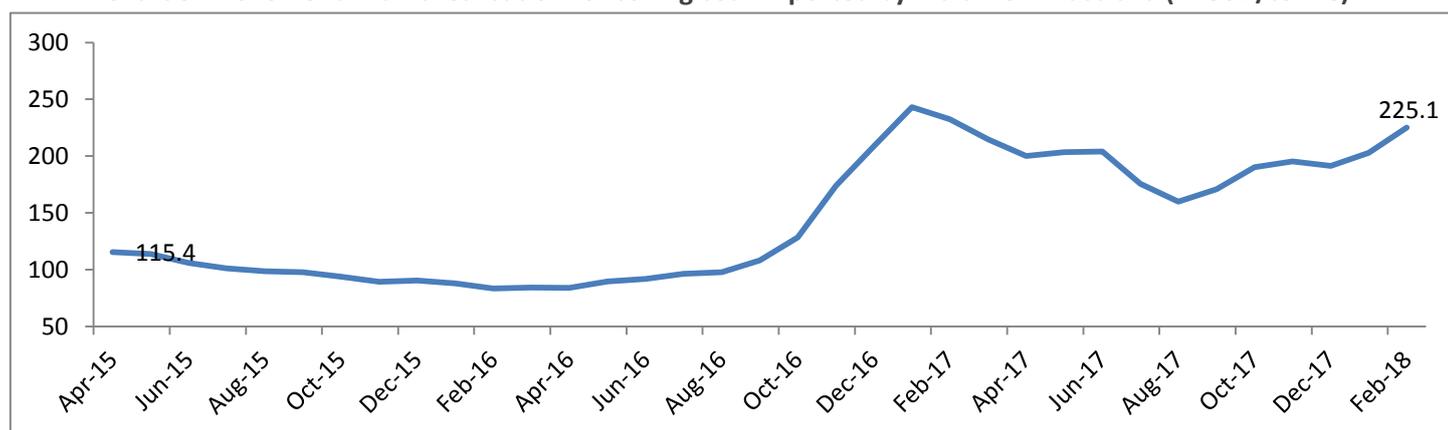
The domestic iron ore prices are believed to have increased on account of higher steel demand in the country. Also, suspension of operations at mines in Odisha due to non-payment of penalty for illegal extraction of ores also resulted in price hikes in January 2018.

During 2016-17, the international prices (iron ore fines c.f.r. China 62% Fe) averaged 30% higher on y-o-y basis at USD 67.8 per tonne backed by an improvement in international steel prices. The iron ore prices however fluctuated despite a rise in international steel prices during the financial year 2017-18. On a y-o-y basis, while the international iron ore prices averaged higher during the first half of 2017-18, they remained subdued during the second half of the year. Thus the prices were up by 1.7% y-o-y during 2017-18.

As per the World Bank April 2018 release, the iron ore prices are expected to average at USD 66.3 per dry metric ton during 2018 compared with USD 73.8 per dry metric ton during 2017, a fall of 10.2% y-o-y.

#### b. Coking coal

The price of coking coal imported by India from Australia averaged at USD 96.8 per tonne during the financial year 2015-16, y-o-y fall of 23.4%. However, the prices increased in the next year and averaged higher by 52.3% y-o-y to USD 147.4 per tonne partly on account of coal producing capacity cuts undertaken by China. During April 2017-February 2018, the prices increased by 36.3% y-o-y to average at USD 192.6 per tonne, this was on account of cyclone Debbie that disturbed coking coal supplies from Australia's major mines and ports towards the end of March 2017.

**Chart 5: Movement in unit realisation for coking coal imported by India from Australia (in USD/tonne)**


Source: CMIE

The coking coal prices increased on m-o-m basis in most of the months during April 2017-February 2018. The prices fell by 13.9% m-o-m to average at USD 175.6 per tonne in July 2017. Following this, the prices increased amid fluctuations and averaged at USD 225.1 per tonne in February 2018. To a large extent, India depends on imports to meet the domestic coking coal requirements for manufacturing of steel.

*As per the Budget 2018-19 released by the Australian government in May 2018, the spot price of metallurgical (coking) coal is assumed to fall over the June and September quarters of 2018 to reach USD 120 per tonne FOB in the December quarter 2018. The release cautioned that the commodity prices are volatile and the outlook for them remains a major uncertainty.*

### Outlook for domestic steel prices

Steel prices in India remained higher during the first two months of the financial year 2018-19. For May 2018, the prices of CR coils, HR coils and TMT bars stood at Rs.61,537 per tonne, Rs.56,480.5 per tonne and Rs.49,925 per tonne, respectively. The prices were at their peak during the month. **Considering this and a likely slowdown in construction and infrastructure activities in the coming months on account of monsoon, the prices may see some moderation on m-o-m basis. Post monsoon, we expect the prices to pick up and remain firm backed by higher domestic demand during the year. We do not expect much pressure from the raw material prices.**

**The domestic prices however could get impacted by the demand-supply situation in China (the world's largest steel producer). As per the World Steel Association's short range outlook, steel demand in China is expected to remain flat in 2018. While the outlook for demand remains static for China, the movement in steel prices here can take a cue from the production cuts that the country undertakes in 2018.**

### Global developments

In March 2018, the US imposed 25% and 10% import duty on foreign made steel and aluminium, respectively, in the name of national security and to protect the US from cheap imports. While Canada, Mexico and European Union (EU) were earlier given exemptions till May 2018, the US withdrew these exemptions recently. However, Argentina, Australia, Brazil and South Korea are indefinitely exempted from the import duty as they are believed to have adhered to some quotas.

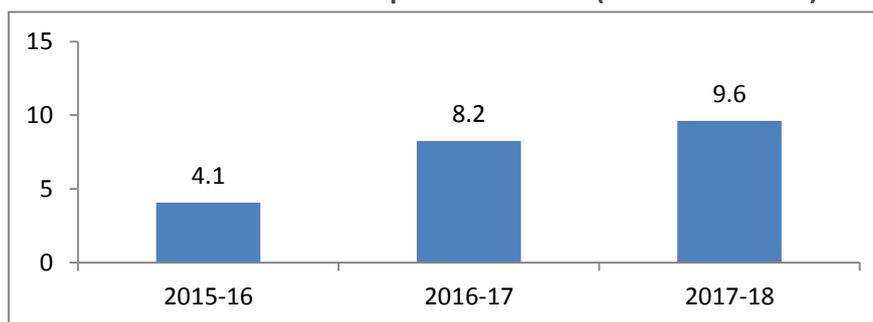
Considering import duty imposition, the countries that rely on the US as an export market would consider finding new destinations for their exports which, in turn, may lead to oversupply of steel in the international market and may put some

pressure on international steel prices outside the US. Given that the international steel prices are primarily influenced by demand-supply situation in China, the import duty hike is likely to have a restricted impact on international steel price movements.

### Impact of US tariff hike on Indian steel exports

Of the total steel exports by India during 2017-18, shipments to the US accounted for 3.1% of the total exports of finished steel in terms of value which stood at USD 301.6 million and accounted for 1.6% in terms of quantity that stood at 207.6 thousand tonnes during 2017-18. Thus, we expect that the imposition of import duty on India will have a marginal impact on steel exports from India.

**Chart 6: Finished steel exports from India (in million tonnes)**



Source: CMIE

The finished steel exports from India have been on a rise for the past two years. The exports that stood at 4.1 million tonnes during 2015-16 almost doubled to 8.2 million tonnes during 2016-17 and increased by 16.7% y-o-y to 9.6 million tonnes during 2017-18. We expect the exports would continue to rise in the ongoing financial year 2018-19. Exports however declined by 25.2% y-o-y to 558 thousand tonnes in April 2018.

### Concluding remarks

- We expect the demand for steel from user industries to remain higher in the current financial year 2018-19 which is expected to drive steel production during the year. Thus, India's steel production is expected to grow by 6%-8% during 2018-19.
- The domestic steel prices are expected to remain firm during the year 2018-19, while we may see some moderation in prices in the coming months on account of monsoon due to a likely slowdown in construction and infrastructure activities in these months. We do not expect much pressure from the raw material prices.
- The domestic prices however could get impacted by the demand-supply situation in China (the country being the largest steel producer) and the production cuts that the country undertakes in 2018.