

### Valuation of Indian companies

|             | Price | EV/<br>EBITDA (x) |       | P/B (x) |       |
|-------------|-------|-------------------|-------|---------|-------|
|             |       | FY26E             | FY27E | FY26E   | FY27E |
|             | (INR) |                   |       |         |       |
| Steel       |       |                   |       |         |       |
| Tata        | 160   | 8.3               | 7.2   | 2.3     | 2.1   |
| JSW         | 1,078 | 10.0              | 7.9   | 2.9     | 2.4   |
| JSP         | 1,009 | 9.6               | 6.5   | 2.0     | 1.7   |
| SAIL        | 123   | 7.2               | 5.8   | 0.8     | 0.8   |
| Non-ferrous |       |                   |       |         |       |
| Vedanta     | 450   | 4.7               | 4.1   | 3.6     | 3.0   |
| Hindalco    | 701   | 5.9               | 5.6   | 1.4     | 1.2   |
| Nalco       | 191   | 5.4               | 4.4   | 1.7     | 1.5   |
| Mining      |       |                   |       |         |       |
| Coal        | 385   | 4.1               | 3.4   | 2.0     | 1.7   |
| HZL         | 429   | 10.1              | 10.4  | 5.3     | 14.0  |
| NMDC        | 71    | 5.4               | 4.6   | 1.8     | 1.6   |

### Valuation of global companies

| Company     | M. Cap<br>USD b | EV/EBITDA (x)  |                | P/B (x)        |
|-------------|-----------------|----------------|----------------|----------------|
|             |                 | CY25/<br>FY26E | CY25/<br>FY27E | CY25/<br>FY26E |
| Steel       |                 |                |                |                |
| AM          | 30              | 4.9            | 4.5            | 0.5            |
| SSAB        | 6               | 3.9            | 4.3            | 0.8            |
| Nucor       | 33              | 7.4            | 6.3            | 1.4            |
| POSCO       | 17              | 5.5            | 5.1            | 0.4            |
| JFE         | 8               | 7.1            | 5.9            | 0.4            |
| Aluminum    |                 |                |                |                |
| Norsk Hydro | 13              | 5.0            | 4.5            | 1.2            |
| Alcoa       | 8               | 5.1            | 3.8            | 1.1            |
| Zinc        |                 |                |                |                |
| Teck        | 15              | 4.9            | 4.7            | 0.8            |
| Korea Zinc  | 11              | 12.9           | 12.3           | 1.9            |
| Iron ore    |                 |                |                |                |
| Vale        | 44              | 3.8            | 3.7            | 0.9            |
| Diversified |                 |                |                |                |
| BHP         | 136             | 6.0            | 6.2            | 2.6            |
| Rio         | 103             | 5.4            | 5.1            | 1.5            |

## Ferrous prices soften amid seasonal weakness; non-ferrous prices remain firm in Jul'25

- The domestic steel market continued to remain under pressure in Jul'25, with steel prices drifting lower MoM. Domestic HRC prices dipped INR1,500/t to INR49,500/t, and rebar prices softened to INR47,750/t (from INR53,100/t in Jun'25), driven by a monsoon-led slowdown in construction activities and demand.
- According to the Joint Plant Committee (JPC), crude steel production remained flat MoM (+11% YoY) at 13.6mt and finished steel production rose 1% MoM (+11% YoY) to 13mt in Jul'25.
- In Jul'25, India steel imports dipped 36% MoM and 65% YoY to 0.28mt, led by a 12% safeguard duty. Meanwhile, exports increased 9% MoM and 64% YoY to 0.49mt.
- Channel checks indicated that leading domestic steel producers have raised the prices for HRC/CRC by INR1,000-2,000/t for Aug'25. Further, India's export HRC prices in Aug'25 rose USD5/t, supported by improved global market sentiment and higher Chinese export offers. Additionally, the rebar prices also jumped INR2,000/t in Aug'25 amid demand recovery and the gradual arrival of the festive season. Average Chinese flat steel prices for Jul'25 stood at USD458/t (vs. USD447/t in Jun'25), driven by demand recovery, production cuts, and rising input costs.
- Prices for non-ferrous commodities remained stable MoM during Jul'25, where the copper price stood flat MoM at USD9,780/t, while aluminum and zinc prices rose ~4% each to USD2,600/t and USD2,750/t, respectively, during Jul'25.
- Alumina and nickel prices stood at USD370/t and USD15,030/t (flat MoM) and remained capped by global oversupply during Jul'25. The nickel inventories rose 195kt (vs. ~40kt last year).

## Input costs continue to remain stable in Jul'25

- In Jul'25, NMDC took a price cut of INR600/t for lumps and INR500/t for fines (vs. a price cut of INR140/t in Jun'25 for both lumps and fines), led by weak demand from pellet, sponge, and steel markets.
- NMDC took a hike of INR400/t for lumps and fines during Aug'25, supported by domestic steel price recovery.
- Premium hard coking coal prices (CNF Paradip, India) remained range-bound at USD180-200/t, driven by weak demand globally. Average coking coal prices in Jul'25 stood flat MoM at USD193/t.
- Domestic coal production was down by 12% YoY to ~65mt (achieved ~80% of its monthly target), while Coal India's production dipped 16% YoY to 46mt in Jul'25. Domestic coal dispatches declined 9% YoY to 74mt as dispatches to the power sector fell 10% YoY to 59mt in Jul'25.

## Commodities and forex tracker

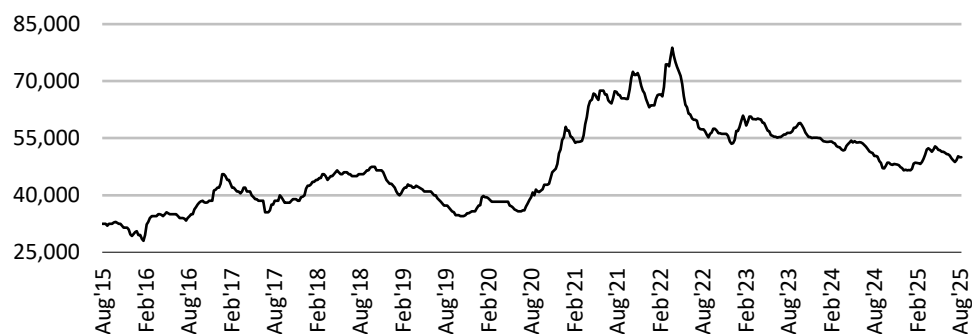
|              |   | UoM   | Spot   | WoW (%) | MoM (%) |
|--------------|---|-------|--------|---------|---------|
| Steel        | India HRC (ex-Mum)                      | INR/t | 50,000 | -       | 1.6     |
|              | India TMT Prime (ex-Mum)                | INR/t | 48,400 | -       | -       |
|              | Korea HRC - FoB                         | USD/t | 480    | 2.1     | 1.1     |
|              | Dom. HRC (Prem/(Disc) vs FTA            | INR/t | 8,258  | (7.0)   | 0.6     |
|              | China HRC Dom.                          | USD/t | 484    | (1.1)   | 1.6     |
|              | China HRC - FoB                         | USD/t | 485    | (2.0)   | 5.9     |
| Coking Coal  | India Prem HCC CNF                      | USD/t | 207    | 3.0     | 9.5     |
|              | Australia Premium HCC FOB               | USD/t | 191    | 3.2     | 11.0    |
|              | India 64 Mid Vols CNF                   | USD/t | 173    | 2.4     | 13.1    |
| Thermal Coal | RB1 (6000 NAR) SA FoB                   | USD/t | 102    | 2.5     | 3.0     |
| Metallics    | Iron Ore (62% Aus origin – CNF Rizhao)  | USD/t | 101    | (2.9)   | 1.0     |
|              | Iron Ore (62% Import Fines CFR Qingdao) | USD/t | 97     | (1.7)   | (1.9)   |
| Non-Ferrous  | Aluminium                               | USD/t | 2,573  | (2.0)   | (2.9)   |
|              | Copper                                  | USD/t | 9,622  | (1.3)   | (1.6)   |
|              | Zinc                                    | USD/t | 2,758  | (2.9)   | (3.1)   |
|              | Nickel                                  | USD/t | 14,801 | (1.7)   | (3.4)   |
|              | Lead                                    | USD/t | 1,932  | (1.9)   | (2.3)   |
|              | Alumina SMM - FOB                       | USD/t | 370    | -       | -       |
|              | Ali UBC Scrap                           | USD/t | 1,742  | (1.3)   | (1.3)   |
|              | Ali UBC Scrap Spread                    | USD/t | 831    | (3.6)   | (6.2)   |
| FX           | INR:USD                                 | x     | 87.0   | (0.6)   | 0.8     |
|              | CNY:USD                                 | "     | 7.2    | 0.1     | 0.2     |

## CONTENTS

|  |              |
|--|--------------|
| <b>Ferrous</b>   | <b>4-12</b>  |
| Indian steel prices .....  | 4            |
| Domestic spreads .....   | 6            |
| China prices/spreads .....   | 9            |
| Global prices .....  | 11           |
| Inventories .....  | 12           |
| <b>Non-ferrous</b>   | <b>13-18</b> |
| Aluminum .....   | 13           |
| Copper .....   | 15           |
| Zinc .....   | 18           |
| Lead .....   | 19           |
| Nickel .....   | 20           |
| <b>INDIA: Steel production, consumption, EXIM, and inventory .....</b> | <b>19-20</b> |
| <b>GLOBAL: Steel production .....</b>                                  | <b>21-22</b> |
| <b>MACRO: China macro data .....</b>                                   | <b>23-25</b> |
| <b>Commodity heat map .....</b>  | <b>26-27</b> |
| <b>Metals valuation matrix .....</b>                                   | <b>28-29</b> |

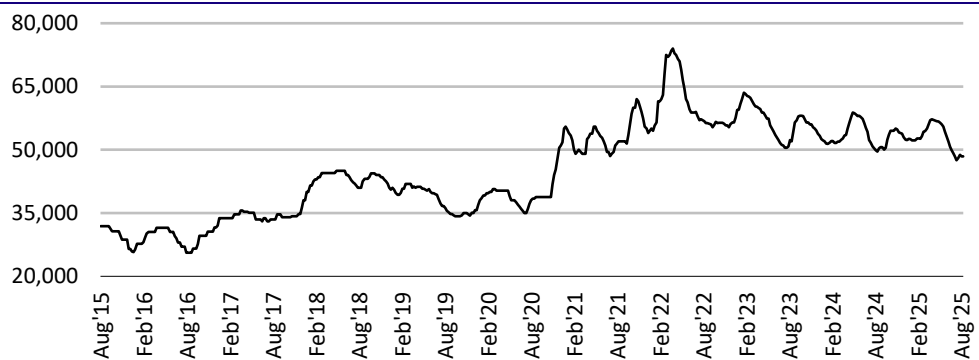
## FERROUS: India prices

**Exhibit 1: HRC – Mumbai (INR/t)**



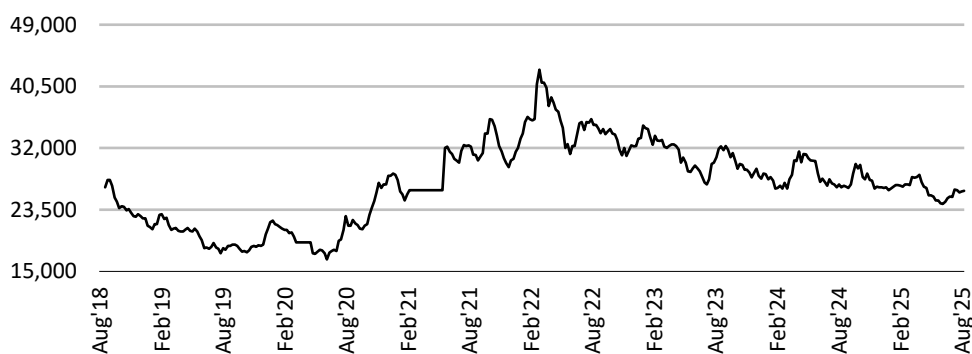
Source: MOFSL, BigMint

**Exhibit 2: TMT Primary – Mumbai (INR/t)**



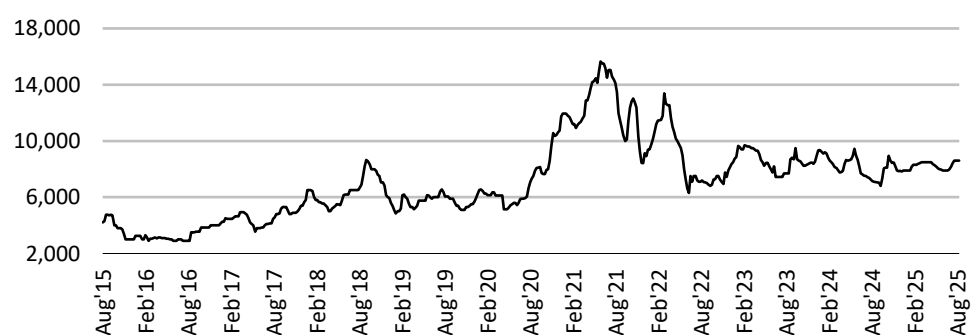
Source: MOFSL, BigMint

**Exhibit 3: C-DRI (sponge iron), ExW-Raipur (INR/t)**



Source: MOFSL, BigMint

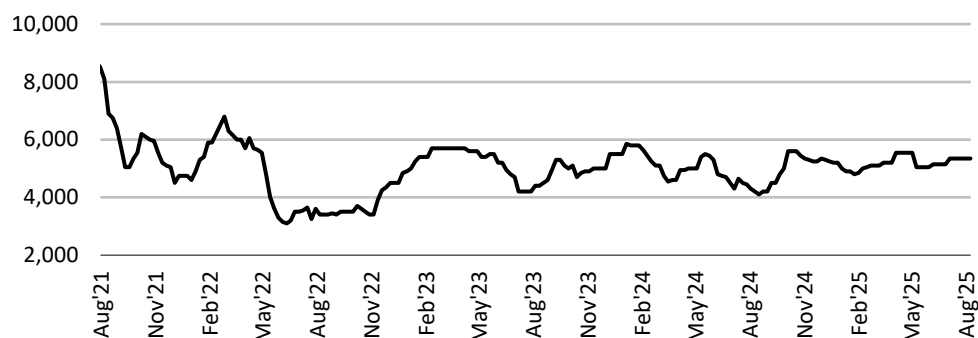
**Exhibit 4: Domestic Pellet – Barbil – 63% Fe (INR/t)**



Source: MOFSL, BigMint

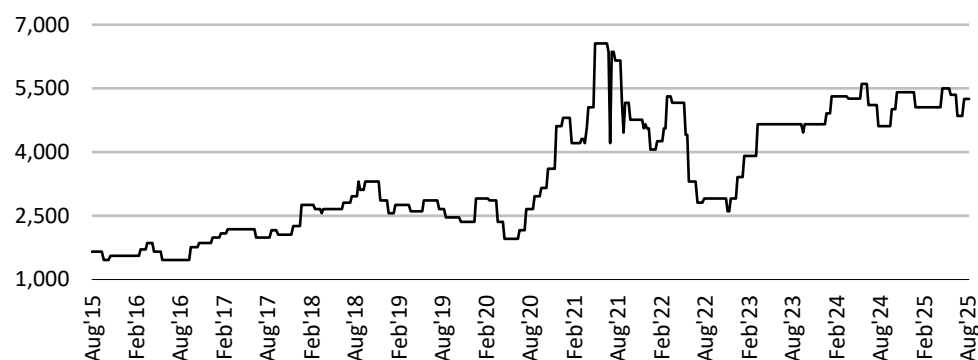
## FERROUS: India prices

**Exhibit 5: Iron Ore Fines Odisha – Fe 62% (INR/t)**



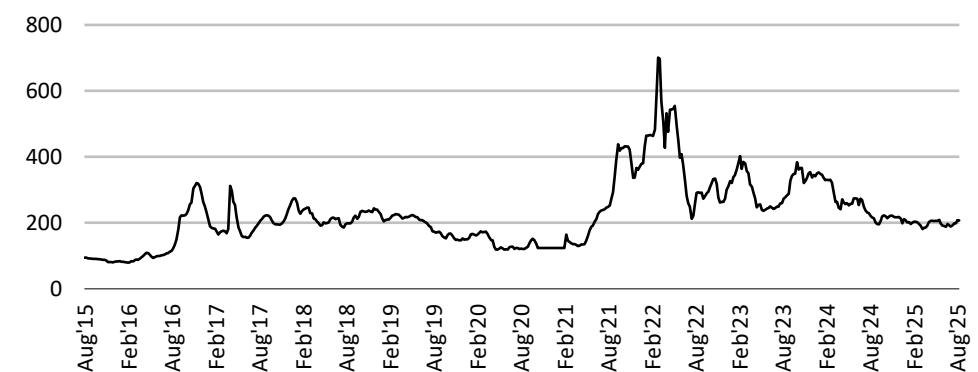
Source: MOFSL, BigMint

**Exhibit 6: NMDC Fines – Fe 64% (INR/t)**



Source: MOFSL, Company

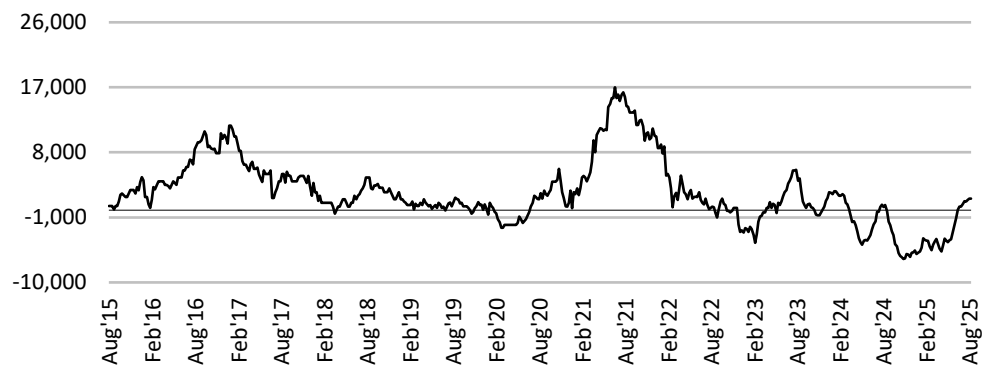
**Exhibit 7: Premium HCC CNF Paradip (USD/t)**



Source: MOFSL, BigMint

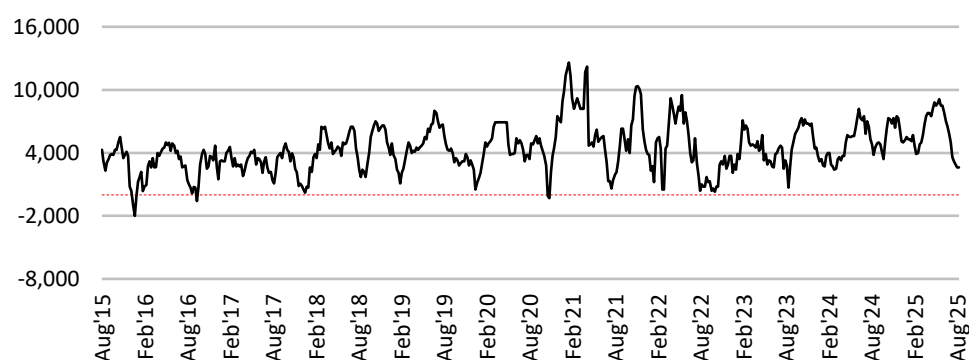
## FERROUS: Domestic spreads

**Exhibit 8: Primary HRC vs. Primary TMT (INR/t)**



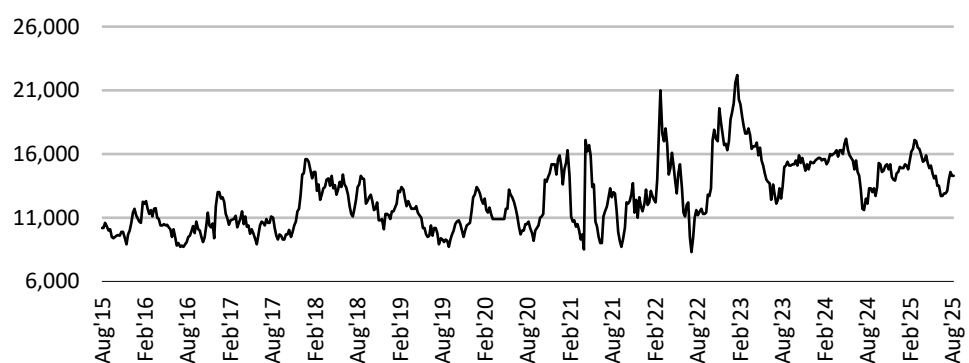
Source: MOFSL, BigMint

**Exhibit 9: Primary TMT vs. Secondary TMT (INR/t)**



Source: MOFSL, BigMint

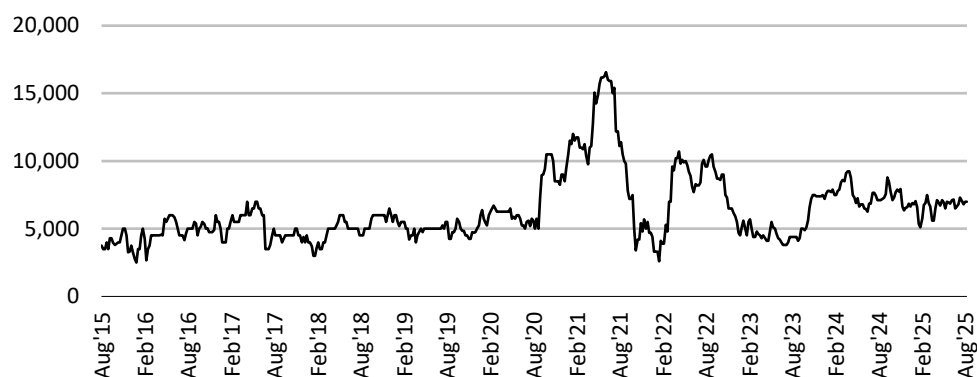
**Exhibit 10: Secondary TMT vs. Domestic Scrap (INR/t)**



Source: MOFSL, BigMint

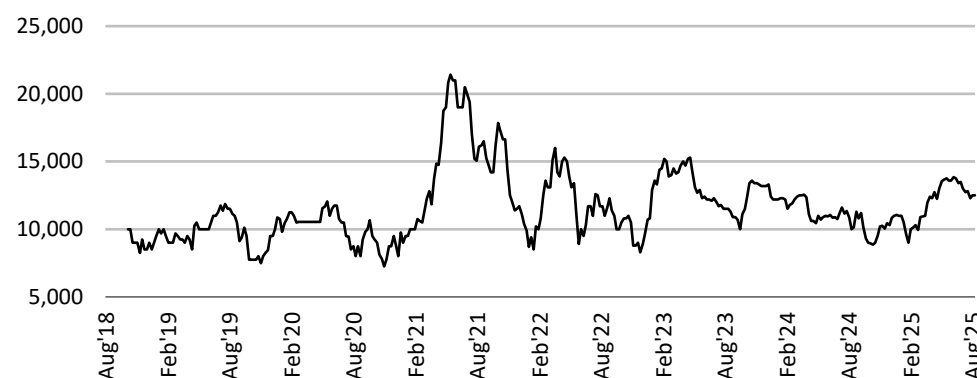
## FERROUS: Domestic spreads

**Exhibit 11: HRC vs. CRC (INR/t)**



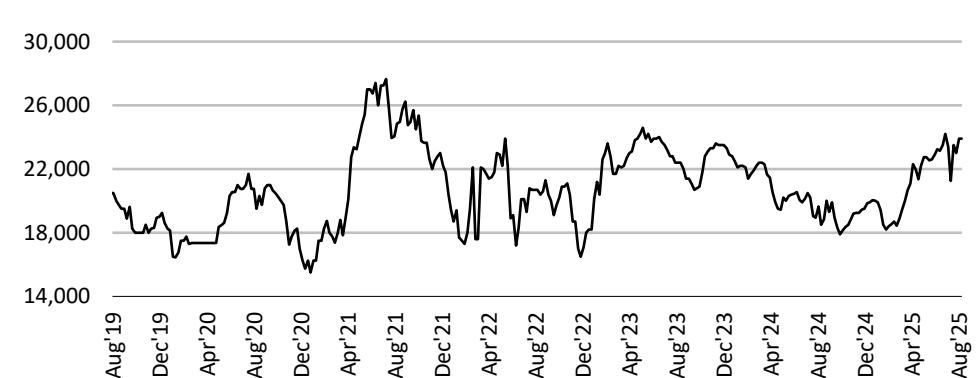
Source: MOFSL, BigMint

**Exhibit 12: HRC vs. HRC Galvanized (INR/t)**



Source: MOFSL, BigMint

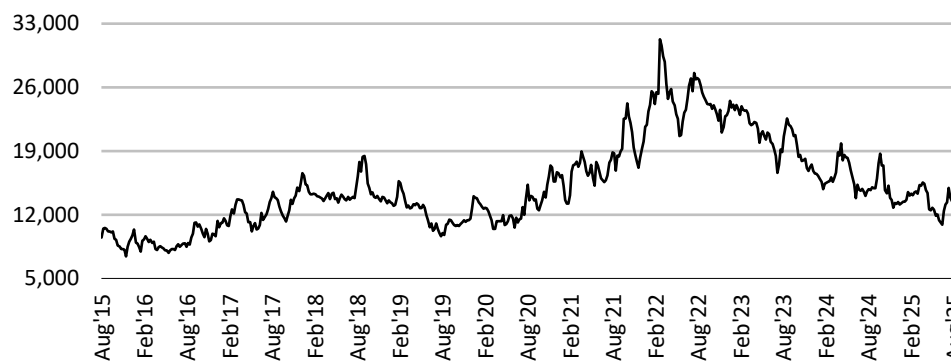
**Exhibit 13: HRC vs. HRC Color Coated (INR/t)**



Source: MOFSL, BigMint

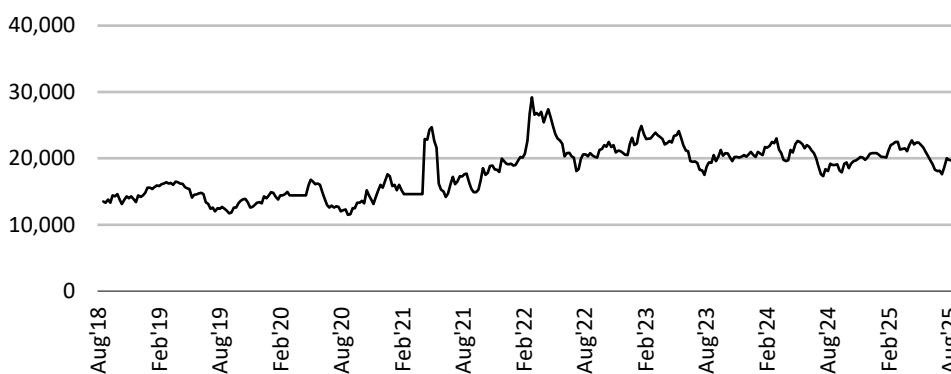
## FERROUS: Domestic spreads

**Exhibit 14: DRI vs. NMDC Lumps (INR/t)**



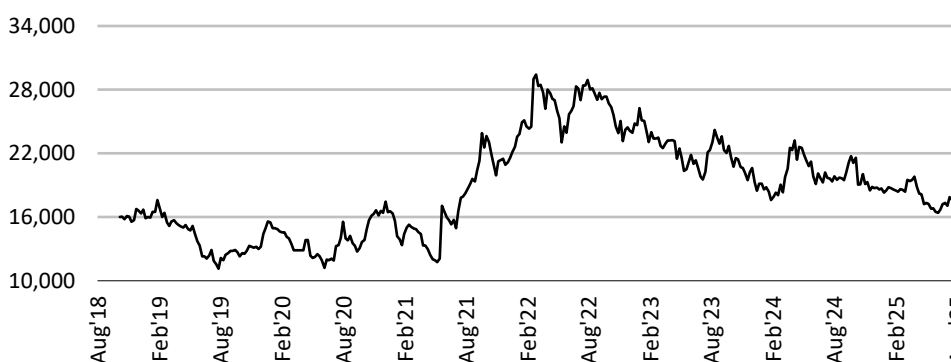
Source: MOFSL, BigMint

**Exhibit 15: Secondary TMT vs. DRI (INR/t)**



Source: MOFSL, BigMint

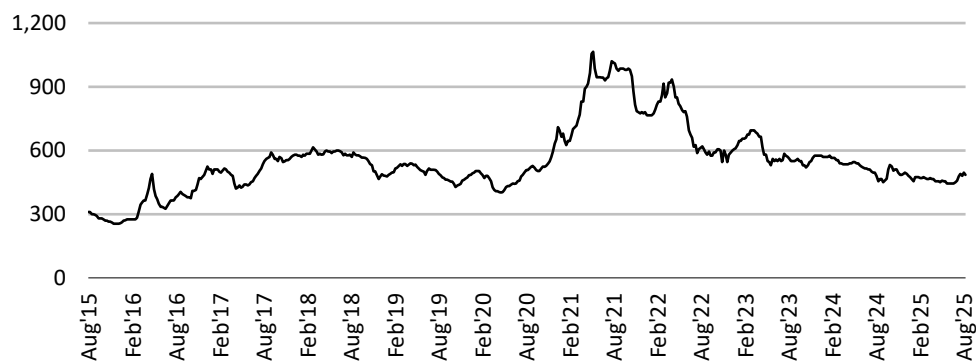
**Exhibit 16: DRI vs. Pellet (INR/t)**



Source: MOFSL, BigMint

## FERROUS: China prices & spreads

**Exhibit 17: China HRC FoB (USD/t)**



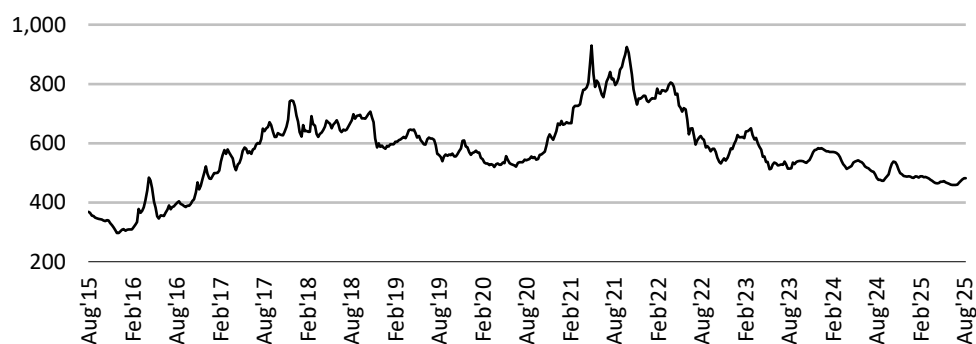
Source: MOFSL, BigMint

**Exhibit 18: China HRC Domestic (USD/t)**



Source: MOFSL, Bloomberg

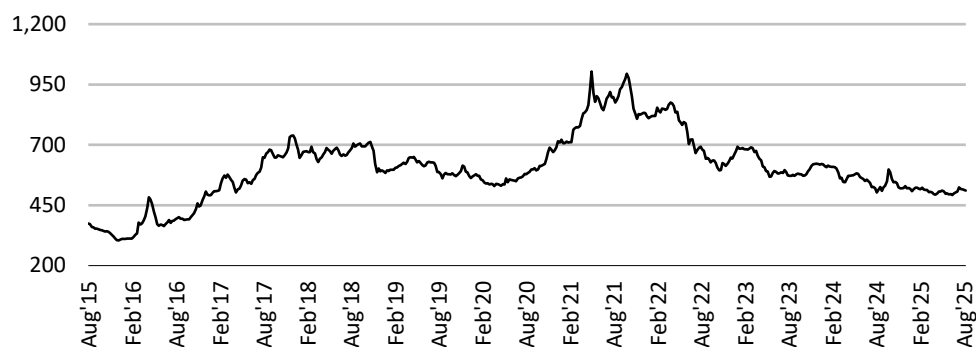
**Exhibit 19: China Domestic TMT (USD/t)**



Source: MOFSL, Bloomberg

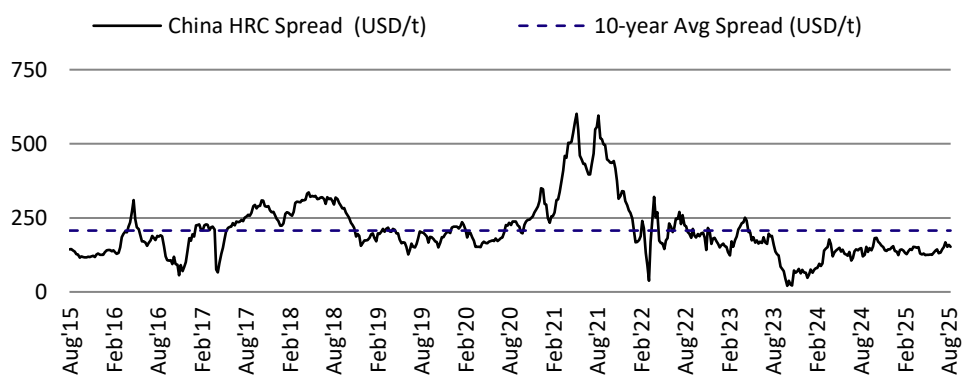
## FERROUS: China prices & spreads

**Exhibit 20: China Domestic Wire Rod (USD/t)**



Source: MOFSL, Bloomberg

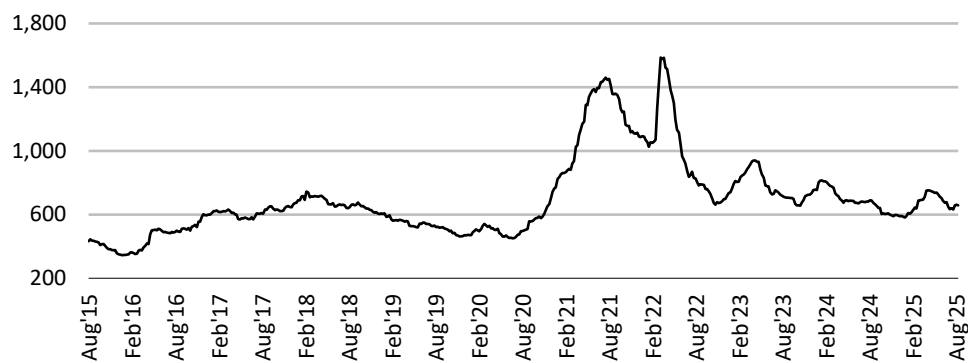
**Exhibit 21: China HRC Spread (1.6x IO and 0.85x HCC)**



Source: MOFSL, Bloomberg

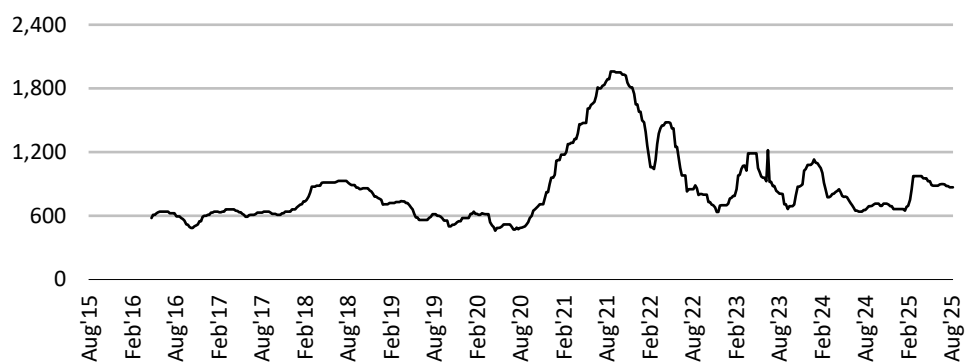
## FERROUS: Global prices

**Exhibit 22: Northern Europe HRC Domestic (USD/t)**



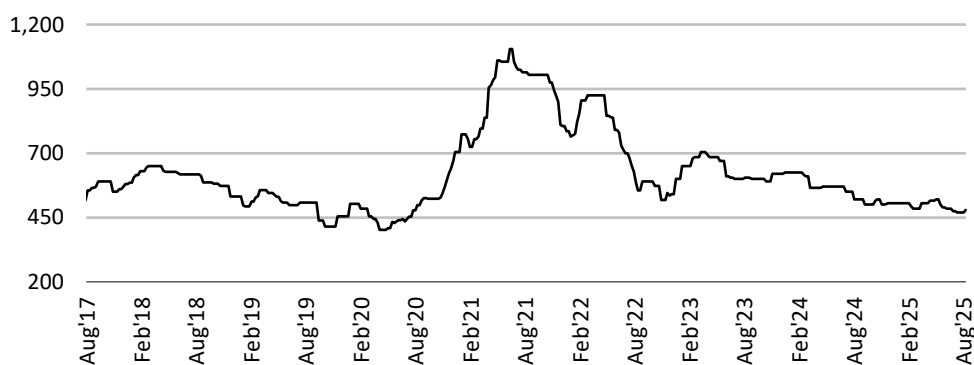
Source: MOFSL, Bloomberg

**Exhibit 23: North America HRC Domestic (USD/short ton)**



Source: MOFSL, Bloomberg

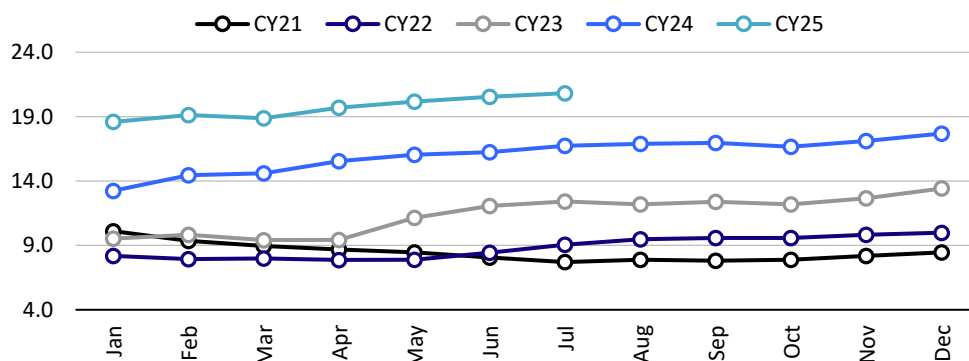
**Exhibit 24: Korea HRC FOB (USD/t)**



Source: MOFSL, BigMint

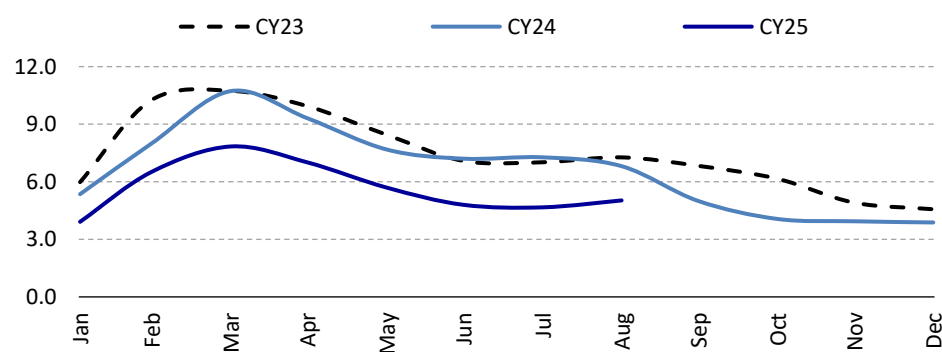
## FERROUS: Inventories

**Exhibit 25: India Steel Inventory (mt)**



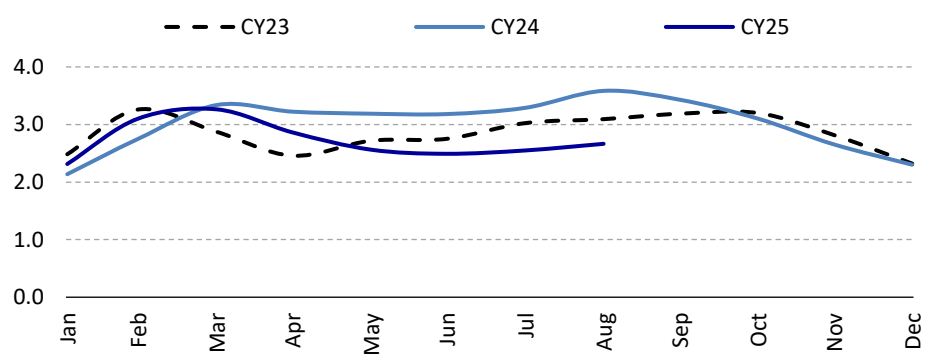
Source: MOFSL, JPC

**Exhibit 26: China Wire Rod and TMT Inventory (mt)**



Source: MOFSL, Bloomberg

**Exhibit 27: China HRC Inventory (mt)**



Source: MOFSL, Bloomberg

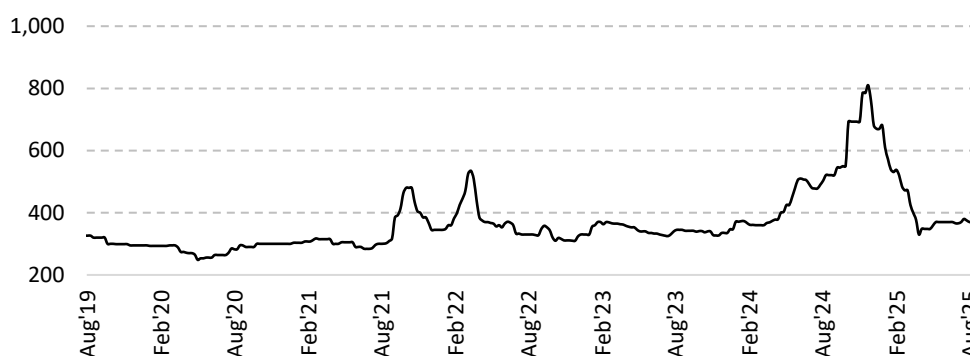
## NON-FERROUS: Aluminum

**Exhibit 28: LME Spot (USD/t)**



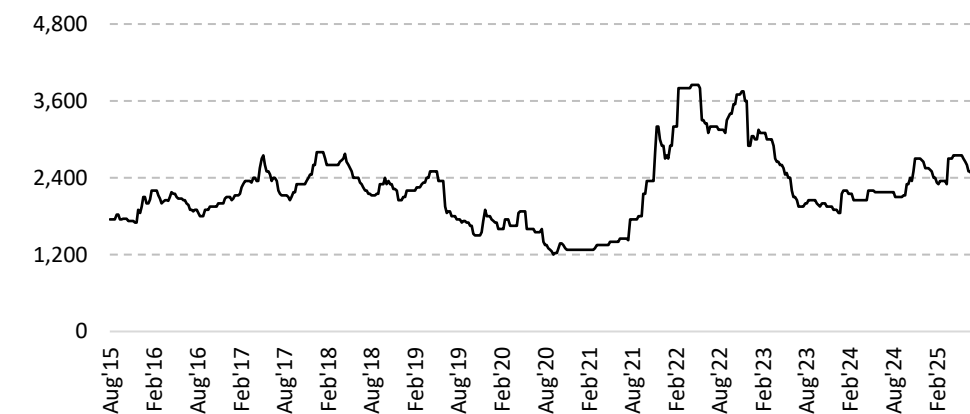
Source: MOFSL, Bloomberg

**Exhibit 29: Alumina FoB Australia (USD/t)**



Source: MOFSL, Bloomberg

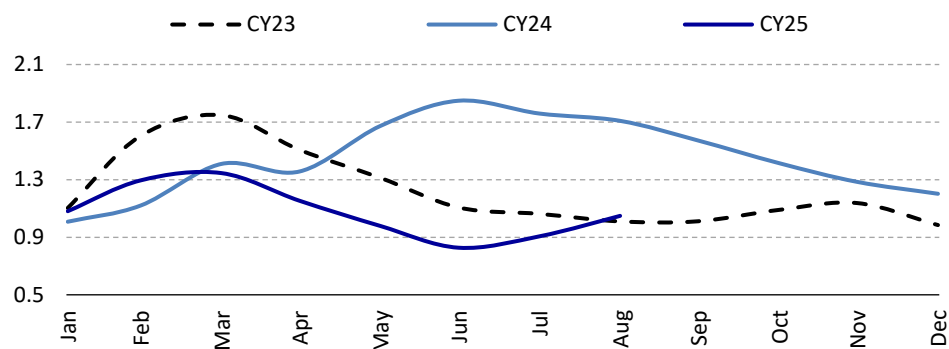
**Exhibit 30: Caustic Soda (INR/ 50kg bag)**



Source: MOFSL, Bloomberg

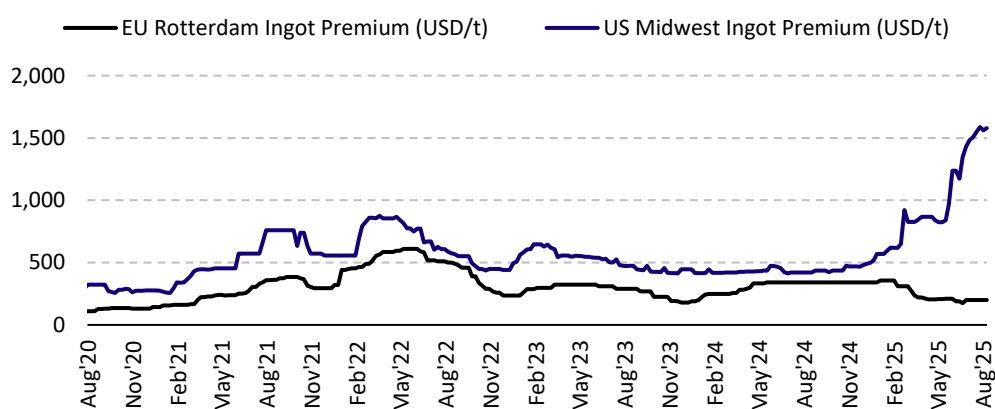
## NON-FERROUS: Aluminum

**Exhibit 31: Total Inventory (LME + SHFE, mt)**



Source: MOFSL, Bloomberg

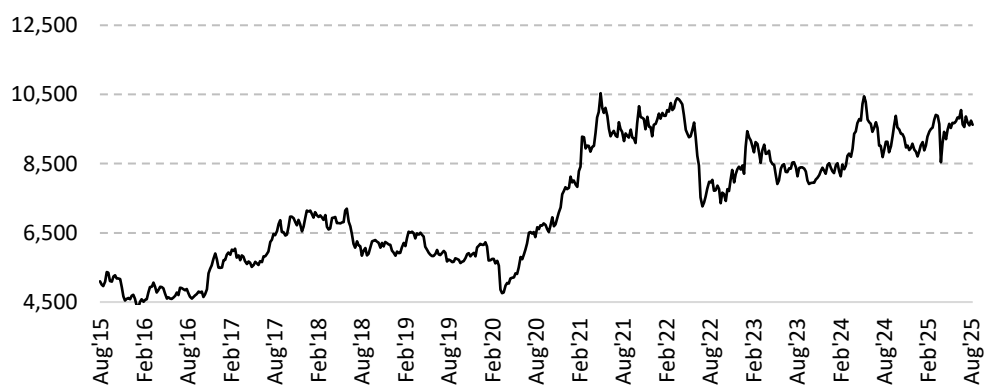
**Exhibit 32: Ingot Premium (mt)**



Source: MOFSL, Bloomberg

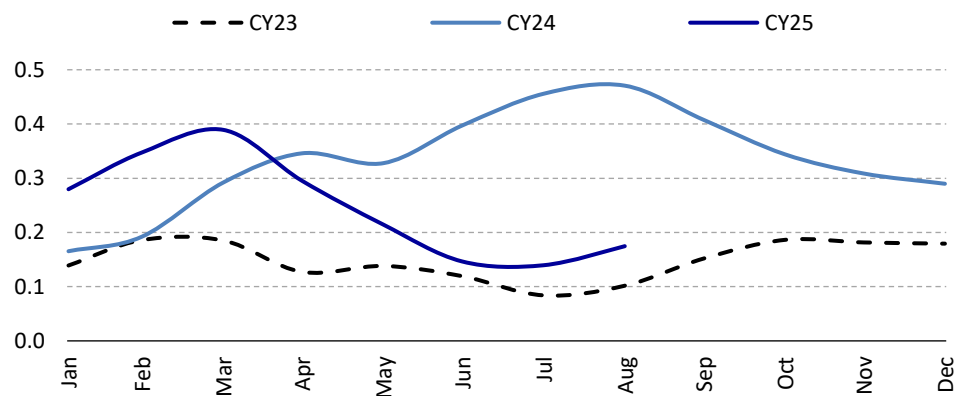
## NON-FERROUS: Copper

### Exhibit 33: LME Spot (USD/t)



Source: MOFSL, Bloomberg

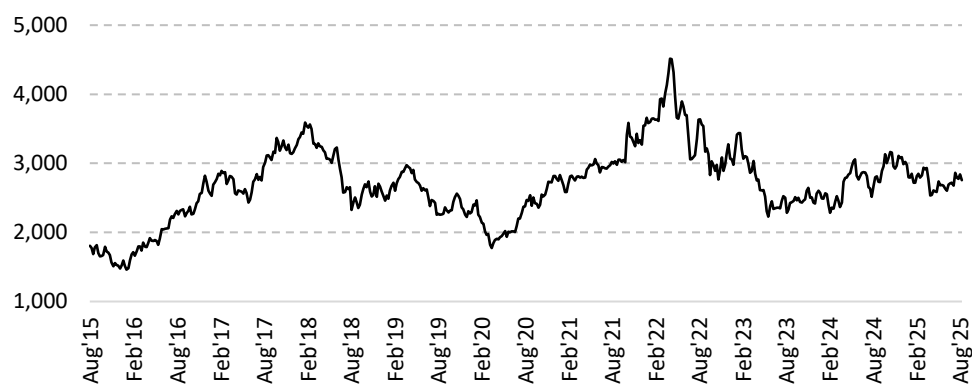
**Exhibit 34: Total Inventory (LME+SHFE, mt)**



Source: MOFSL, Bloomberg

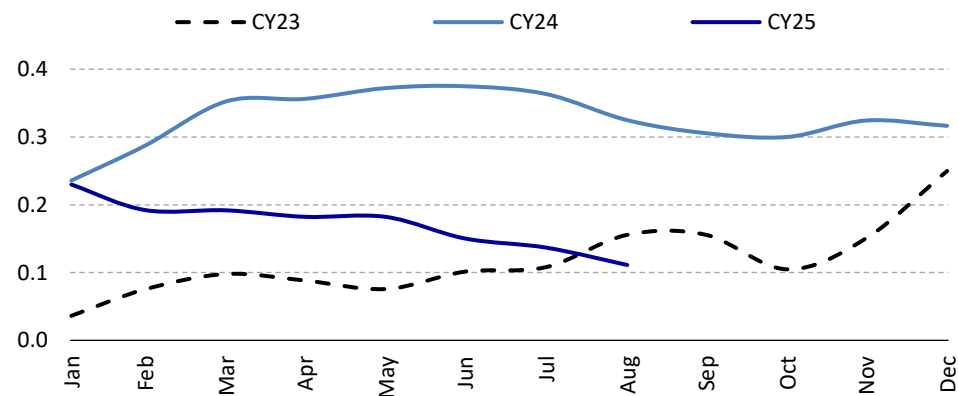
## NON-FERROUS: Zinc

**Exhibit 35: LME Spot (USD/t)**



Source: MOFSL, Bloomberg

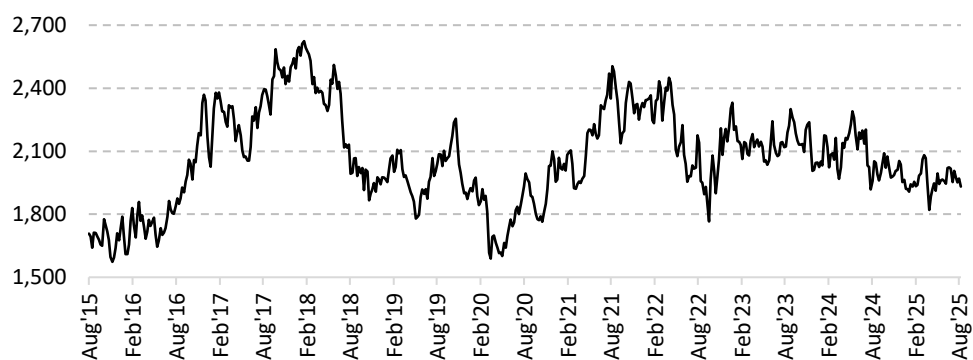
**Exhibit 36: Total Inventory (LME+SHFE, mt)**



Source: MOFSL, Bloomberg

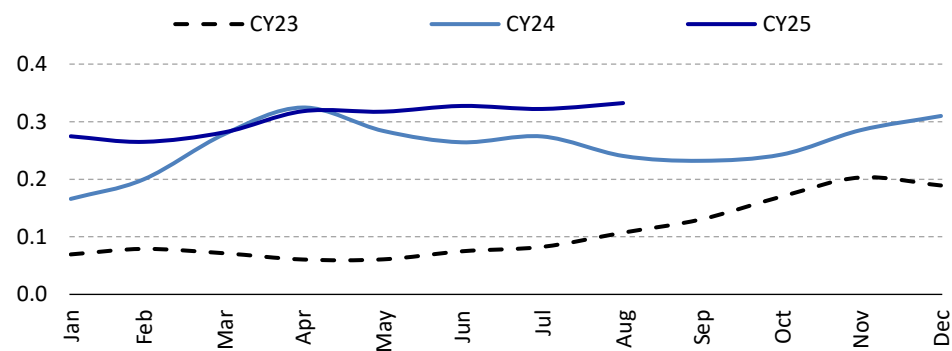
## NON-FERROUS: Lead

**Exhibit 37: LME Spot (USD/t)**



Source: MOFSL, Bloomberg

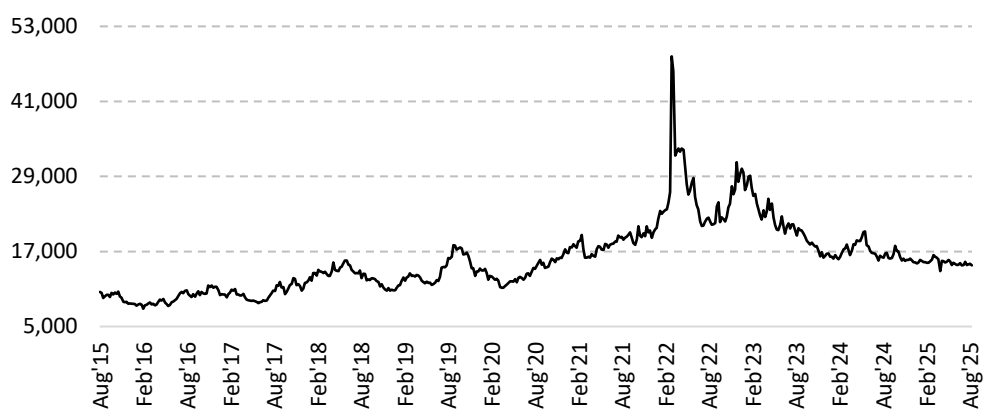
**Exhibit 38: Total Inventory (LME+SHFE, mt)**



Source: MOFSL, Bloomberg

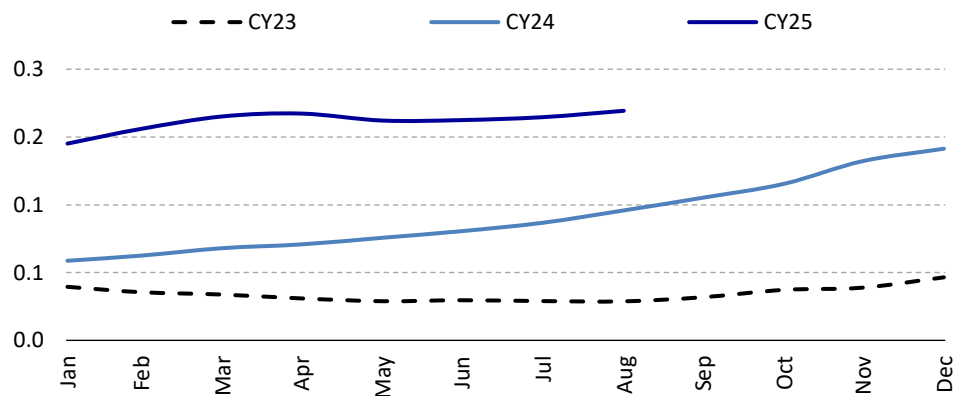
## NON-FERROUS: Nickel

**Exhibit 39: LME Spot (USD/t)**



Source: MOFSL, Bloomberg

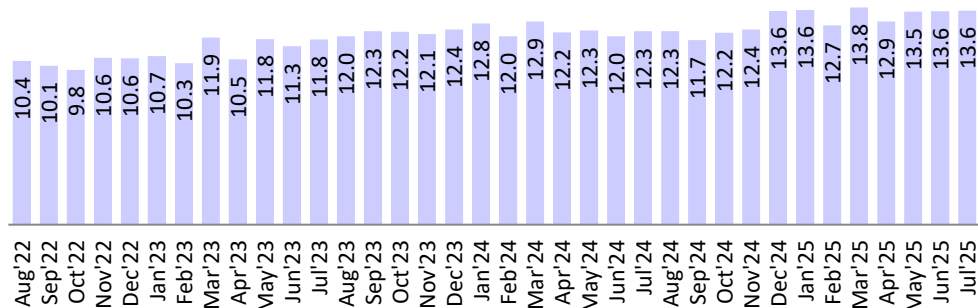
**Exhibit 40: Total Inventory (LME+SHFE, mt)**



Source: MOFSL, Bloomberg

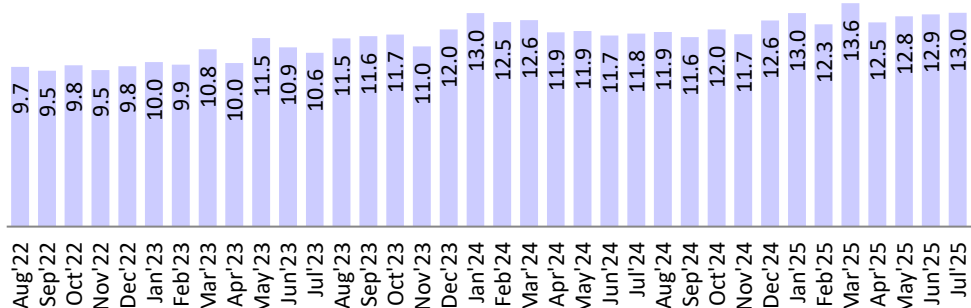
## INDIA: Steel production, consumption, EXIM, and inventory

**Exhibit 41: Crude Steel Production (mt)**



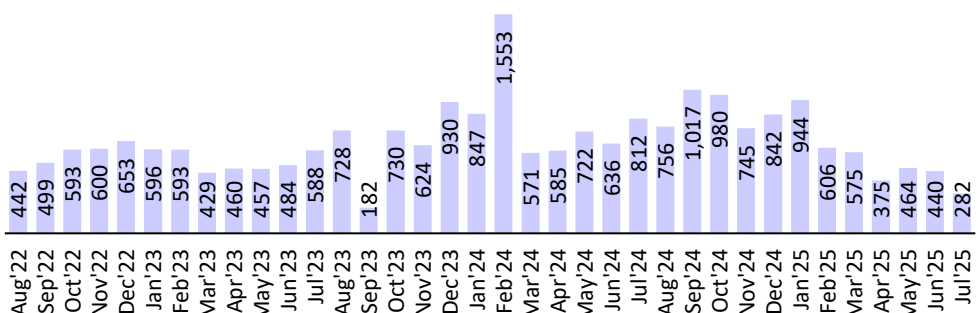
Source: MOFSL, JPC

**Exhibit 42: Finished Steel Production (mt)**



Source: MOFSL, JPC

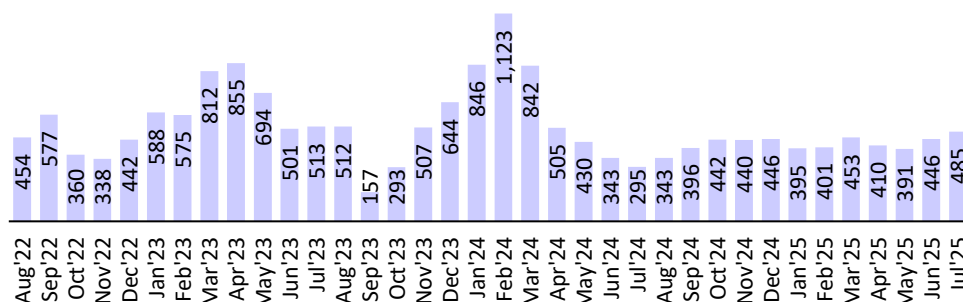
**Exhibit 43: Imports including Semis (kt)**



Source: MOFSL, JPC

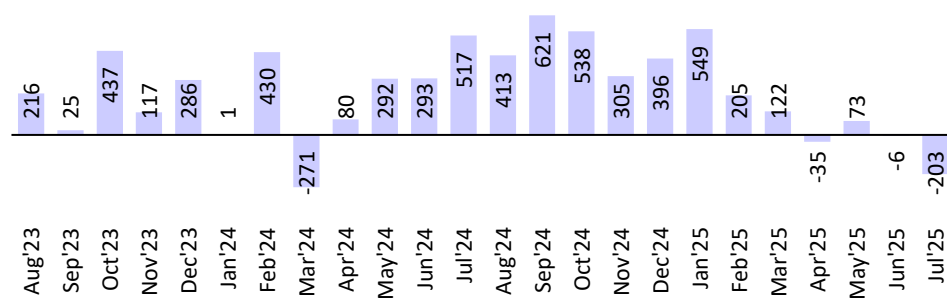
## INDIA: Steel production, consumption, EXIM, and inventory

Exhibit 44: Exports including Semis (kt)



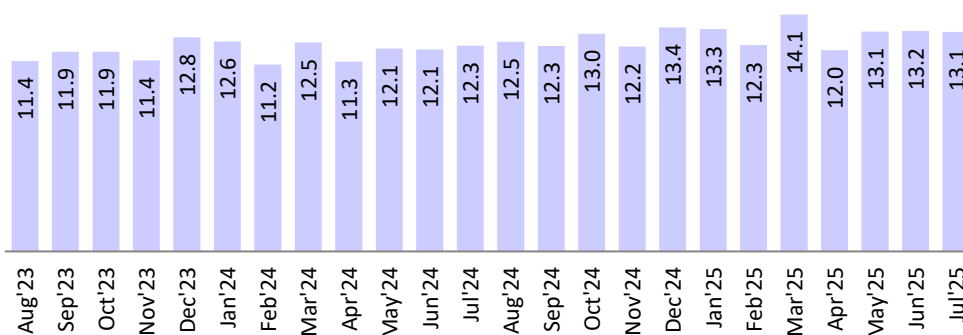
Source: MOFSL, JPC

Exhibit 45: Net Imports/(exports) of Finished Steel (kt)



Source: MOFSL, JPC

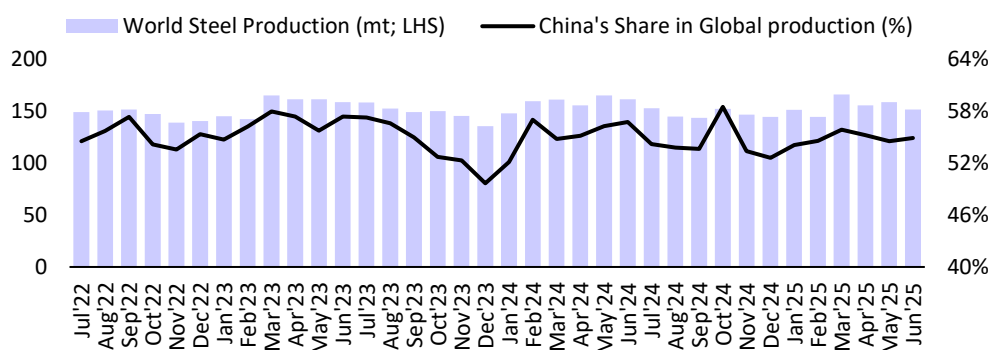
Exhibit 46: Steel Consumption (mt)



Source: MOFSL, JPC

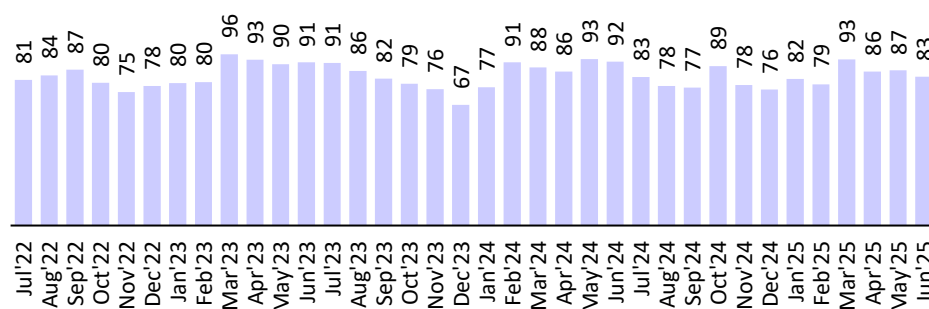
## GLOBAL: Production trends

**Exhibit 47: World Crude Steel Production and China's Share**



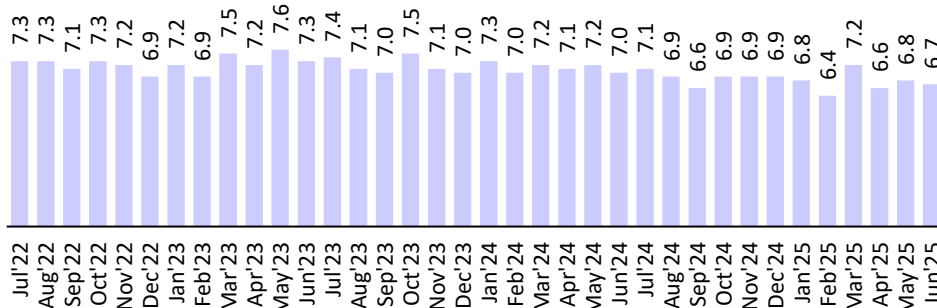
Source: MOFSL, WSA

**Exhibit 48: Crude Steel Production in China (mt)**



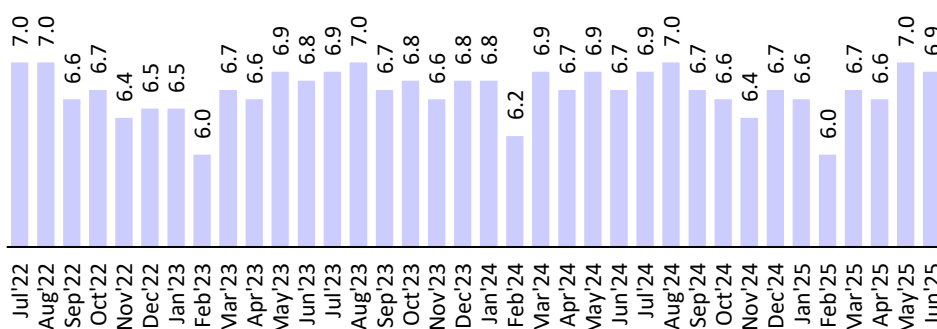
Source: MOFSL, WSA

**Exhibit 49: Crude Steel Production in Japan (mt)**



Source: MOFSL, WSA

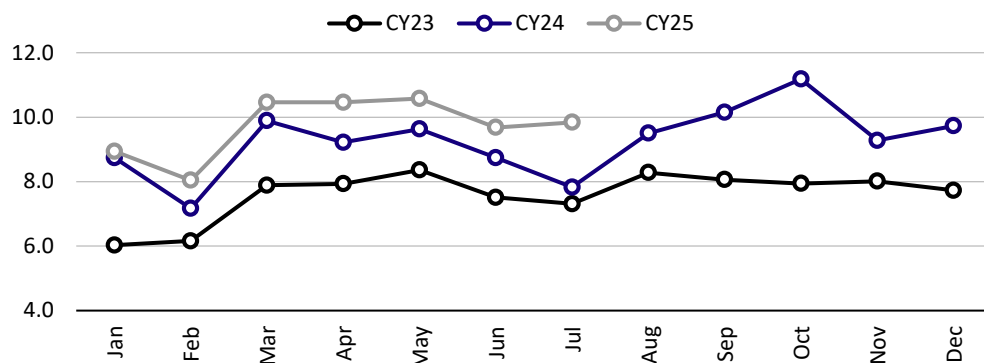
**Exhibit 50: Crude Steel Production in the US (mt)**



Source: MOFSL, WSA

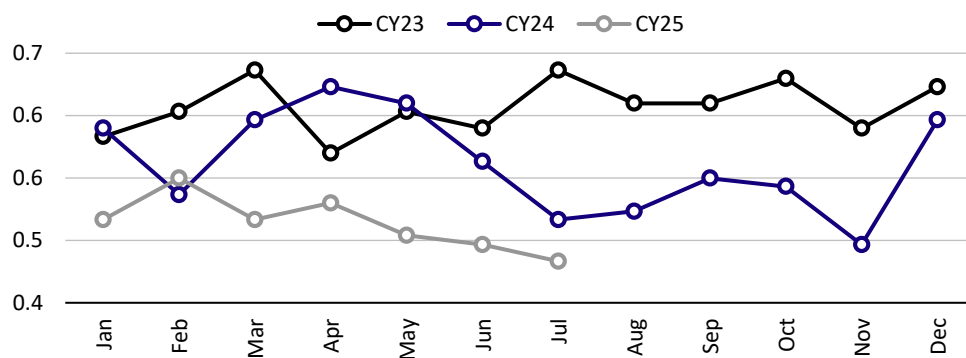
## MACRO: China macro data

**Exhibit 51: China's Gross Steel Exports (mt)**



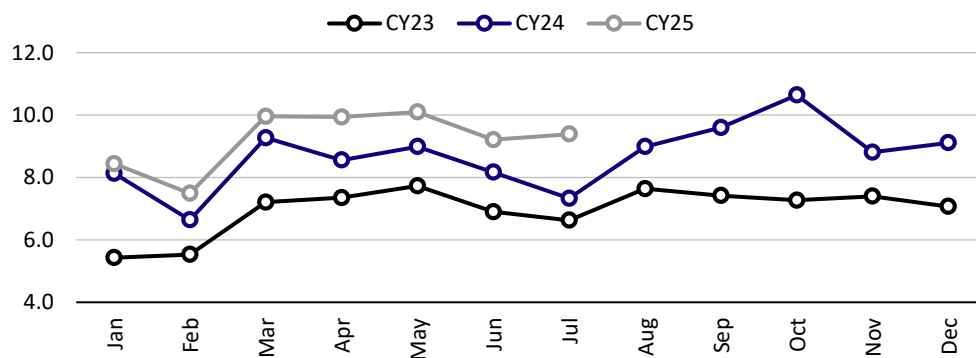
Source: MOFSL, Bloomberg

**Exhibit 52: China's Gross Steel Imports (mt)**



Source: MOFSL, Bloomberg

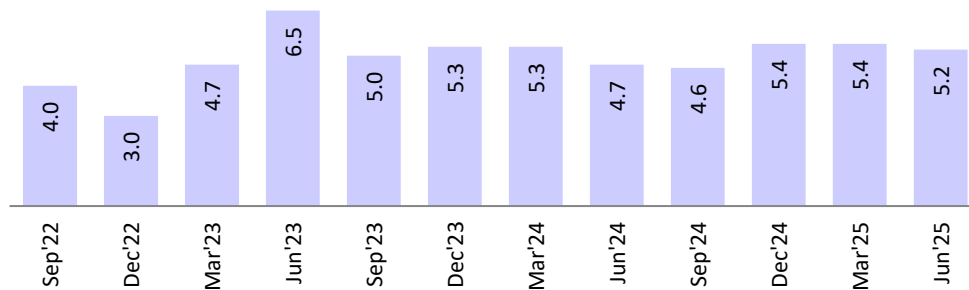
**Exhibit 53: China's Net Steel Exports/(Imports) (mt)**



Source: MOFSL, Bloomberg

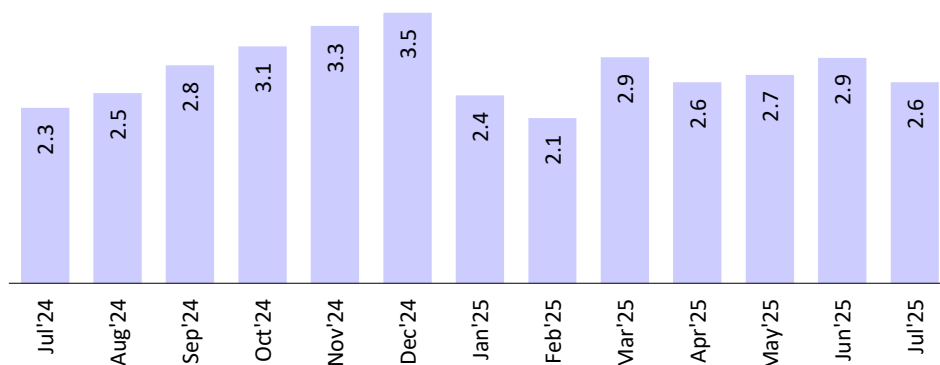
## MACRO: China macro data

**Exhibit 54: China's GDP Growth YoY (constant prices)**



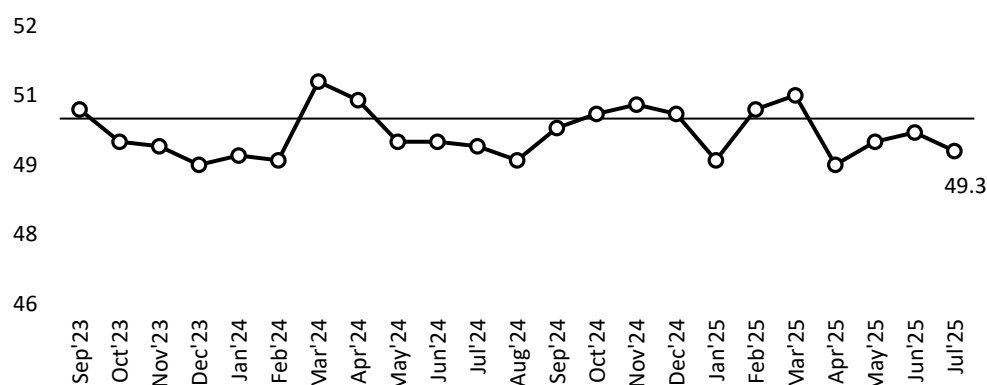
Source: MOFSL, Bloomberg

**Exhibit 55: Automobile Registration (m units)**



Source: MOFSL, Bloomberg

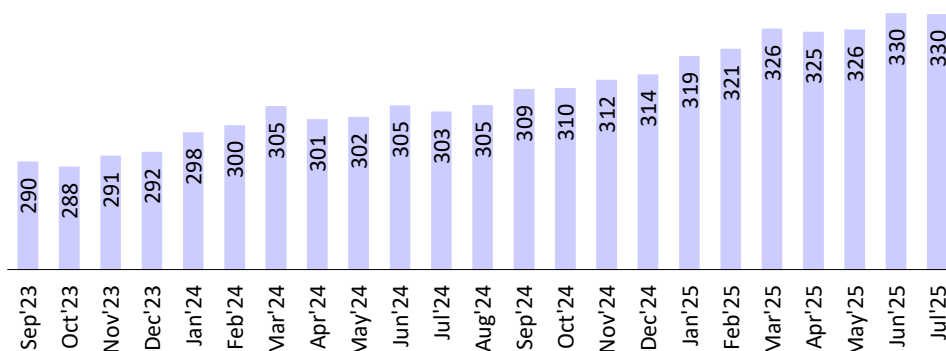
**Exhibit 56: Manufacturing PMI**



Source: MOFSL, Bloomberg

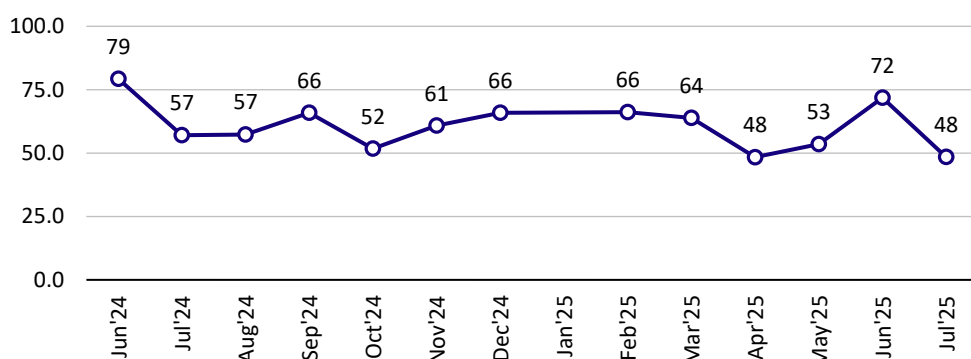
## MACRO: China macro data

**Exhibit 57: M2 Money Supply (CNY t)**



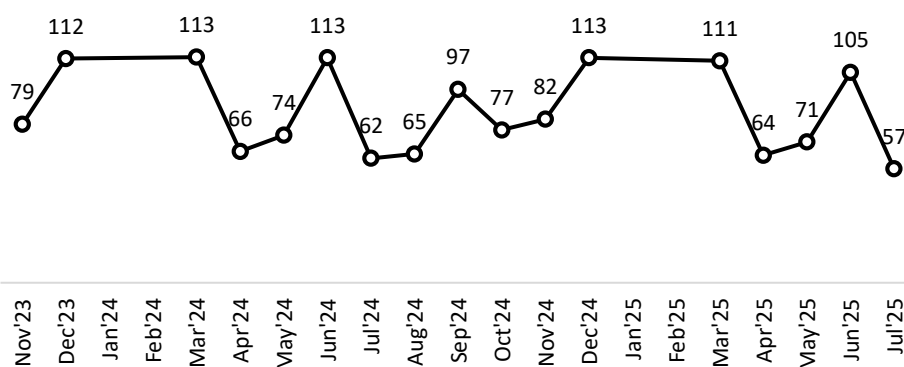
Source: MOFSL, Bloomberg

**Exhibit 58: China Floor Space - start (mn. sq. mts.)**



Source: MOFSL, Bloomberg

**Exhibit 59: China Floor Space - sold (mn. sq. mts.)**



Source: MOFSL, Bloomberg

## Commodity monthly heat map

| Commodity                                  | UoM     | Aug'24 | Sep'24 | Oct'24 | Nov'24 | Dec'24 | Jan'25 | Feb'25 | Mar'25 | Apr'25 | May'25 | Jun'25 | Jul'25 | MoM   |
|--|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| <b>Oil and non-ferrous - prices</b>        |         |        |        |        |        |        |        |        |        |        |        |        |        |       |
| Brent Crude                                | USD/bbl | 81     | 74     | 76     | 74     | 74     | 79     | 75     | 73     | 68     | 64     | 71     | 71     | (0.7) |
| Copper                                     | USD/t   | 8,969  | 9,263  | 9,555  | 9,123  | 8,913  | 8,966  | 9,329  | 9,731  | 9,184  | 9,526  | 9,834  | 9,778  | (0.6) |
| Aluminum                                   | USD/t   | 2,342  | 2,455  | 2,602  | 2,587  | 2,539  | 2,572  | 2,653  | 2,657  | 2,376  | 2,440  | 2,516  | 2,604  | 3.5   |
| Zinc                                       | USD/t   | 2,716  | 2,845  | 3,104  | 3,002  | 3,041  | 2,832  | 2,800  | 2,888  | 2,616  | 2,643  | 2,651  | 2,759  | 4.1   |
| Lead                                       | USD/t   | 2,006  | 2,008  | 2,040  | 1,992  | 1,991  | 1,922  | 1,955  | 2,034  | 1,907  | 1,958  | 1,973  | 1,995  | 1.1   |
| Nickel                                     | USD/t   | 16,296 | 16,141 | 16,821 | 15,755 | 15,428 | 15,382 | 15,287 | 16,048 | 15,146 | 15,306 | 15,004 | 15,034 | 0.2   |
| Alumina                                    | USD/t   | 505    | 536    | 631    | 727    | 714    | 611    | 517    | 435    | 347    | 361    | 370    | 370    | (0.0) |
| Aluminum Ingot Premium (Asia - MJP)        | USD/t   | 140    | 154    | 162    | 162    | 193    | 231    | 230    | 197    | 161    | 131    | 114    | 114    | -     |
| Aluminum Ingot Premium (EU - Rotterdam)    | USD/t   | 340    | 340    | 340    | 340    | 340    | 353    | 329    | 279    | 215    | 207    | 201    | 193    | (3.9) |
| Aluminum Ingot Premium (US Midwest)        | USD/t   | 421    | 435    | 435    | 467    | 489    | 567    | 628    | 851    | 865    | 835    | 1,142  | 1,467  | 28.5  |
| Aluminum scrap                             | USD/t   | 1,604  | 1,684  | 1,754  | 1,668  | 1,650  | 1,687  | 1,767  | 1,814  | 1,631  | 1,638  | 1,667  | 1,743  | 4.5   |
| Aluminum scrap spread                      | USD/t   | 737    | 771    | 848    | 919    | 888    | 885    | 886    | 843    | 745    | 802    | 849    | 862    | 1.4   |
| USD:INR (Bloomberg)                        | INR     | 83.9   | 83.8   | 84.0   | 84.3   | 85.0   | 86.3   | 87.1   | 86.5   | 85.6   | 85.3   | 85.9   | 86.1   | 0.2   |
| <b>Ferrous- International Prices</b>       |         |        |        |        |        |        |        |        |        |        |        |        |        |       |
| China HRC domestic                         | RMB/t   | 3,292  | 3,177  | 3,594  | 3,548  | 3,518  | 3,430  | 3,432  | 3,393  | 3,319  | 3,289  | 3,204  | 3,339  | 4.2   |
| China HRC domestic                         | USD/t   | 460    | 449    | 507    | 493    | 483    | 470    | 472    | 468    | 455    | 456    | 446    | 466    | 4.3   |
| China TMT domestic                         | RMB/t   | 3,483  | 3,380  | 3,687  | 3,717  | 3,536  | 3,545  | 3,538  | 3,498  | 3,398  | 3,386  | 3,323  | 3,313  | (0.3) |
| China TMT domestic                         | USD/t   | 487    | 477    | 520    | 516    | 486    | 486    | 486    | 483    | 466    | 469    | 463    | 462    | (0.2) |
| China HRC FoB                              | USD/t   | 481    | 462    | 518    | 500    | 488    | 468    | 473    | 469    | 460    | 455    | 447    | 458    | 2.4   |
| Korea HRC FoB                              | USD/t   | 535    | 512    | 504    | 510    | 504    | 505    | 503    | 489    | 508    | 518    | 490    | 476    | (2.8) |
| North Europe HRC domestic                  | EUR/t   | 620    | 581    | 555    | 561    | 566    | 575    | 606    | 638    | 658    | 654    | 601    | 555    | (7.7) |
| North America HRC domestic (USD/short ton) | USD/st  | 655    | 697    | 706    | 712    | 675    | 664    | 705    | 951    | 966    | 923    | 886    | 894    | 0.9   |
| India HRC Export FoB (USD/t)               | USD/t   | 560    | 560    | 560    | 535    | 535    | 535    | 505    | 497    | 495    | 495    | 495    | 495    | -     |
| Australia Fe 62% iron ore CNF              | USD/t   | 99     | 93     | 103    | 102    | 104    | 101    | 107    | 103    | 100    | 99     | 95     | 99     | 4.6   |
| <b>Chinese steel futures</b>               |         |        |        |        |        |        |        |        |        |        |        |        |        |       |

|  |       |        |         |         |         |         |         |         |         |         |         |         |        |        |
|--|-------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| TMT - Shanghai futures                                       | RMB/t | 3,234  | 3,178   | 3,425   | 3,387   | 3,344   | 3,309   | 3,321   | 3,231   | 3,135   | 3,058   | 2,976   | 3,163  | 6.3    |
| HRC - Shanghai futures                                       | RMB/t | 3,378  | 3,242   | 3,560   | 3,518   | 3,474   | 3,418   | 3,425   | 3,401   | 3,248   | 3,190   | 3,095   | 3,311  | 7.0    |
| Iron ore - Dalian Commodity Exchange                         | RMB/t | 739    | 702     | 782     | 775     | 789     | 785     | 815     | 771     | 715     | 713     | 703     | 742    | 5.5    |
| Coking coal - Dalian Commodity Exchange                      | RMB/t | 1,388  | 1,291   | 1,425   | 1,303   | 1,198   | 1,136   | 1,111   | 1,054   | 988     | 857     | 784     | 1,021  | 30.3   |
| China HRC FOB spread over RM (HRC - 1.7x iron ore -.85x HCC) | RMB/t | 942    | 952     | 1,020   | 1,093   | 1,115   | 1,117   | 1,095   | 1,195   | 1,192   | 1,249   | 1,233   | 1,182  | (4.1)  |
| <b>India steel and metallic prices</b>                       |       |        |         |         |         |         |         |         |         |         |         |         |        |        |
| India HRC ex-Mumbai 5-10mm                                   | INR/t | 50,738 | 48,360  | 48,250  | 48,100  | 47,110  | 46,663  | 48,438  | 49,840  | 51,925  | 52,288  | 51,130  | 49,513 | (3.2)  |
| Dom HRC prem to India export FoB price                       | INR/t | 3,751  | 1,422   | 1,194   | 2,979   | 1,636   | 513     | 4,461   | 6,830   | 9,564   | 10,088  | 8,592   | 6,874  | (20.0) |
| CRC ex-Mumbai - 0.9mm  | INR/t | 57,925 | 56,220  | 55,713  | 55,663  | 53,710  | 53,500  | 54,175  | 56,550  | 58,463  | 59,100  | 58,140  | 56,325 | (3.1)  |
| Galvanized plain - 120 GSM                                   | INR/t | 61,575 | 59,080  | 57,275  | 58,133  | 57,640  | 57,550  | 58,125  | 60,460  | 64,275  | 65,400  | 64,840  | 62,675 | (3.3)  |
| Color coated /PPGI ex-Mumbai 90GSM                           | INR/t | 69,775 | 67,760  | 66,425  | 67,233  | 66,700  | 66,500  | 66,850  | 68,940  | 73,425  | 74,550  | 74,020  | 72,600 | (1.9)  |
| Wire rod - Primary Producers                                 | INR/t | 53,480 | 52,850  | 55,675  | 55,800  | 54,250  | 54,540  | 54,300  | 55,125  | 55,525  | 53,580  | 51,550  | 50,400 | (2.2)  |
| TMT primary - Mumbai   | INR/t | 50,150 | 50,400  | 53,750  | 54,633  | 53,100  | 52,375  | 52,550  | 54,580  | 57,050  | 56,475  | 53,120  | 48,750 | (8.2)  |
| TMT secondary - Mumbai                                       | INR/t | 45,268 | 45,736  | 48,254  | 47,479  | 46,896  | 47,074  | 47,946  | 49,358  | 49,404  | 47,796  | 44,776  | 43,552 | (2.7)  |
| Domestic scrap-HMS(80:20) - Mumbai                           | INR/t | 32,744 | 32,592  | 33,271  | 32,725  | 32,620  | 32,044  | 32,404  | 32,633  | 33,631  | 32,848  | 31,160  | 30,641 | (1.7)  |
| Sponge iron (DRI)  | INR/t | 24,066 | 24,854  | 26,990  | 24,892  | 24,072  | 23,965  | 24,429  | 25,019  | 25,117  | 23,467  | 22,228  | 23,046 | 3.7    |
| Domestic pellet prices- Barbil - 63% Fe                      | INR/t | 7,219  | 7,055   | 8,300   | 8,438   | 7,870   | 7,900   | 8,269   | 8,460   | 8,500   | 8,213   | 7,935   | 8,119  | 2.3    |
| Pellet Export Prices - FoB 64%Fe                             | USD/t | 92     | 89      | 98      | 97      | 100     | 98      | 105     | 97      | 93      | 94      | 90      | 94     | 4.8    |
| <b>Domestic ferrous spreads</b>                              |       |        |         |         |         |         |         |         |         |         |         |         |        |        |
| Primary HRC vs. primary TMT                                  | INR/t | 588    | (2,040) | (5,500) | (6,533) | (5,990) | (5,713) | (4,113) | (4,740) | (5,125) | (4,188) | (1,990) | 763    | NA     |
| Primary TMT vs. secondary TMT                                | INR/t | 4,882  | 4,664   | 5,496   | 7,154   | 6,204   | 5,301   | 4,604   | 5,222   | 7,646   | 8,679   | 8,344   | 5,198  | (37.7) |
| Secondary TMT vs. domestic Scrap                             | INR/t | 12,524 | 13,144  | 14,983  | 14,754  | 14,276  | 15,030  | 15,542  | 16,725  | 15,773  | 14,948  | 13,616  | 12,911 | (5.2)  |
| Hot rolled vs. cold rolled                                   | INR/t | 7,188  | 7,860   | 7,463   | 7,563   | 6,600   | 6,838   | 5,738   | 6,710   | 6,538   | 6,813   | 7,010   | 6,813  | (2.8)  |
| Hot rolled - galvanized Plan                                 | INR/t | 10,838 | 10,720  | 9,025   | 10,033  | 10,530  | 10,888  | 9,688   | 10,620  | 12,350  | 13,113  | 13,710  | 13,163 | (4.0)  |
| Hot rolled - color coated                                    | INR/t | 19,038 | 19,400  | 18,175  | 19,133  | 19,590  | 19,838  | 18,413  | 19,100  | 21,500  | 22,263  | 22,890  | 23,088 | 0.9    |
| <b>Coking coal</b>   |       |        |         |         |         |         |         |         |         |         |         |         |        |        |
| India premium HCC CNF  | USD/t | 223    | 203     | 219     | 219     | 213     | 205     | 201     | 189     | 197     | 207     | 193     | 193    | (0.4)  |
| India 64 mid vols coking coal CNF                            | USD/t | 204    | 176     | 185     | 186     | 175     | 165     | 158     | 155     | 160     | 163     | 153     | 155    | 1.3    |
| <b>NMDC iron ore - Chhattisgarh</b>                          |       |        |         |         |         |         |         |         |         |         |         |         |        |        |
| 64% Bailadila fines  | INR/t | 4,610  | 4,610   | 5,210   | NA      | NA      | 5,060   | NA      | 5,060   | 5,060   | 5,500   | 5,350   | 4,850  | (9.3)  |

|                                |           |            |            |            |            |            |            |            |            |            |            |            |            |              |
|--------------------------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|
| Iron ore lump                  | INR/t     | 5,350      | 5,350      | 6,050      | NA         | NA         | 6,000      | NA         | 6,000      | 6,000      | 6,440      | 6,300      | 5,700      | (9.5)        |
| <b>Domestic ferro alloys</b>   |           |            |            |            |            |            |            |            |            |            |            |            |            |              |
| Silico manganese               | INR/t     | 68,813     | 66,540     | 68,919     | 65,870     | 66,179     | 69,900     | 73,175     | 72,885     | 71,627     | 71,236     | 71,914     | 72,911     | 1.4          |
| Ferro manganese                | INR/t     | 75,163     | 71,190     | 70,360     | 67,075     | 68,017     | 73,639     | 75,665     | 75,535     | 74,536     | 72,516     | 72,138     | 71,563     | (0.8)        |
| Ferro chrome                   | INR/t     | 32,744     | 32,592     | 33,271     | 32,725     | 32,620     | 32,044     | 32,404     | 32,633     | 33,631     | 32,848     | 31,160     | 30,641     | (1.7)        |
| <b>Ferrous - inventory</b>     |           |            |            |            |            |            |            |            |            |            |            |            |            |              |
| China HRC                      | mt        | 3.6        | 3.4        | 3.1        | 2.7        | 2.3        | 2.3        | 3.1        | 3.3        | 2.9        | 2.6        | 2.5        | 2.5        | 2.3          |
| China wire rod                 | mt        | 1.4        | 1.1        | 1.0        | 0.9        | 0.9        | 0.8        | 1.4        | 1.6        | 1.4        | 1.0        | 0.9        | 0.9        | 4.2          |
| China TMT                      | mt        | 5.5        | 3.9        | 3.1        | 3.0        | 3.0        | 3.1        | 5.2        | 6.2        | 5.7        | 4.7        | 3.9        | 3.7        | (4.6)        |
| <b>Non-ferrous - inventory</b> |           |            |            |            |            |            |            |            |            |            |            |            |            |              |
| <b>Aluminum</b>                |           |            |            |            |            |            |            |            |            |            |            |            |            |              |
| LME                            | kt        | 892        | 819        | 765        | 722        | 670        | 611        | 554        | 494        | 439        | 395        | 353        | 413        | 17.2         |
| SHFE                           | kt        | 82         | 73         | 65         | 57         | 53         | 47         | 79         | 85         | 70         | 58         | 47         | 49         | 4.1          |
| <b>Total</b>                   | <b>kt</b> | <b>974</b> | <b>893</b> | <b>830</b> | <b>779</b> | <b>723</b> | <b>657</b> | <b>633</b> | <b>580</b> | <b>509</b> | <b>453</b> | <b>400</b> | <b>463</b> | <b>15.6</b>  |
| <b>Zinc</b>                    |           |            |            |            |            |            |            |            |            |            |            |            |            |              |
| LME                            | kt        | 250        | 245        | 242        | 253        | 263        | 205        | 165        | 156        | 156        | 162        | 130        | 113        | (12.5)       |
| SHFE                           | kt        | 41         | 29         | 28         | 30         | 18         | 1          | 11         | 17         | 6          | 2          | 7          | 10         | 56.3         |
| <b>Total</b>                   | <b>kt</b> | <b>291</b> | <b>274</b> | <b>270</b> | <b>283</b> | <b>281</b> | <b>206</b> | <b>176</b> | <b>173</b> | <b>162</b> | <b>163</b> | <b>136</b> | <b>124</b> | <b>(9.2)</b> |
| <b>Lead</b>                    |           |            |            |            |            |            |            |            |            |            |            |            |            |              |
| LME                            | kt        | 202        | 189        | 195        | 221        | 259        | 230        | 221        | 218        | 259        | 268        | 278        | 265        | (4.7)        |
| SHFE                           | kt        | 39         | 43         | 48         | 61         | 51         | 45         | 44         | 64         | 60         | 50         | 49         | 58         | 17.4         |
| <b>Total</b>                   | <b>kt</b> | <b>241</b> | <b>232</b> | <b>243</b> | <b>282</b> | <b>310</b> | <b>275</b> | <b>265</b> | <b>282</b> | <b>318</b> | <b>317</b> | <b>327</b> | <b>323</b> | <b>(1.4)</b> |
| <b>Copper</b>                  |           |            |            |            |            |            |            |            |            |            |            |            |            |              |
| LME                            | kt        | 297        | 310        | 288        | 272        | 271        | 262        | 257        | 235        | 209        | 178        | 113        | 115        | 1.2          |
| SHFE                           | kt        | 167        | 79         | 56         | 44         | 18         | 19         | 119        | 150        | 69         | 37         | 32         | 25         | (21.7)       |
| <b>Total</b>                   | <b>kt</b> | <b>464</b> | <b>389</b> | <b>344</b> | <b>316</b> | <b>289</b> | <b>281</b> | <b>376</b> | <b>385</b> | <b>279</b> | <b>216</b> | <b>145</b> | <b>140</b> | <b>(3.9)</b> |
| <b>Nickel</b>                  |           |            |            |            |            |            |            |            |            |            |            |            |            |              |
| LME                            | kt        | 114        | 124        | 135        | 153        | 163        | 168        | 184        | 199        | 203        | 200        | 202        | 205        | 1.8          |
| SHFE                           | kt        | 20         | 23         | 27         | 31         | 35         | 35         | 35         | 32         | 32         | 28         | 26         | 25         | (2.5)        |
| <b>Total</b>                   | <b>kt</b> | <b>134</b> | <b>147</b> | <b>162</b> | <b>184</b> | <b>198</b> | <b>203</b> | <b>219</b> | <b>231</b> | <b>234</b> | <b>227</b> | <b>228</b> | <b>231</b> | <b>1.3</b>   |

## Metals valuation matrix

**Exhibit 60: Global Steel Comparative Valuation**

| Company        | M-Cap<br>USD m | P/E (x)        |                | EV/EBITDA (x)  |                | P/B (x)        |                | RoE (%)        |                |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                |                | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E |
| India          |                |                |                |                |                |                |                |                |                |
| Tata*          | 22,939         | 18.3           | 12.3           | 8.3            | 7.2            | 2.3            | 2.1            | 12.6           | 17.8           |
| JSW*           | 30,266         | 22.2           | 14.5           | 10.0           | 7.9            | 2.9            | 2.4            | 14.0           | 18.3           |
| JSP*           | 11,825         | 18.6           | 10.8           | 9.6            | 6.5            | 2.0            | 1.7            | 11.1           | 16.7           |
| SAIL*          | 5,834          | 17.2           | 9.1            | 7.2            | 5.8            | 0.8            | 0.8            | 4.9            | 8.8            |
| Japan          |                |                |                |                |                |                |                |                |                |
| JFE            | 7,829          | 14.0           | 8.2            | 7.1            | 5.9            | 0.4            | 0.4            | 3.3            | 5.5            |
| Nippon Steel   | 22,114         | 14.8           | 7.6            | 7.8            | 6.3            | 0.6            | 0.6            | 3.5            | 7.8            |
| Kobe Steel     | 4,814          | 7.3            | 7.1            | 5.5            | 4.9            | 0.6            | 0.5            | 8.1            | 8.5            |
| Korea          |                |                |                |                |                |                |                |                |                |
| POSCO          | 17,186         | 12.1           | 10.5           | 5.5            | 5.1            | 0.4            | 0.4            | 3.4            | 3.9            |
| Hyundai Steel  | 3,058          | 8.5            | 6.7            | 4.6            | 4.3            | 0.2            | 0.2            | 2.6            | 3.2            |
| US             |                |                |                |                |                |                |                |                |                |
| Nucor          | 33,492         | 13.4           | 11.6           | 7.4            | 6.3            | 1.4            | 1.3            | 11.0           | 11.8           |
| US Steel       | NA             | NA             | NA             | NA             | NA             | NA             | NA             | 5.4            | 6.4            |
| Steel Dynamics | 18,875         | 10.1           | 8.9            | 6.9            | 6.0            | 1.8            | 1.5            | 18.3           | 18.7           |
| Europe         |                |                |                |                |                |                |                |                |                |
| AM             | 29,666         | 7.5            | 6.6            | 4.9            | 4.5            | 0.5            | 0.4            | 6.4            | 7.2            |
| SSAB           | 5,904          | 8.5            | 8.3            | 3.9            | 4.3            | 0.8            | 0.7            | 9.2            | 8.7            |
| TKA            | 6,357          | 10.7           | 7.6            | 1.4            | 1.4            | 0.5            | 0.5            | 5.6            | 6.9            |
| VOE            | 5,885          | 12.9           | 9.4            | 4.7            | 4.2            | 0.6            | 0.6            | 5.2            | 6.8            |
| China          |                |                |                |                |                |                |                |                |                |
| Baosteel       | 21,644         | 12.8           | 11.4           | 5.1            | 4.7            | 0.8            | 0.7            | 5.8            | 6.3            |

Source: MOFSL, Company, Bloomberg(\*) denotes MOFSL estimates

**Exhibit 61: Diversified Miners Global Comparative Valuation**

| Company  | M-Cap<br>USD m | P/E (x)        |                | EV/EBITDA (x)  |                | P/B (x)        |                | RoE (%)        |                |
|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|          |                | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E |
| Vedanta* | 20,229         | 11.2           | 9.5            | 4.7            | 4.1            | 3.6            | 3.0            | 35.1           | 34.5           |
| BHP      | 1,36,085       | 13.7           | 14.3           | 6.0            | 6.2            | 2.6            | 2.4            | 21.8           | 19.6           |
| Rio      | 1,02,978       | 10.2           | 9.6            | 5.4            | 5.1            | 1.5            | 1.4            | 15.5           | 15.5           |
| Glencore | 46,843         | 12.8           | 9.7            | 4.6            | 4.0            | 1.2            | 1.2            | 8.8            | 12.1           |
| Anglo    | 34,473         | 17.8           | 15.7           | 7.3            | 6.6            | 1.5            | 1.5            | 9.4            | 9.7            |
| South 32 | 8,358          | 11.5           | 8.8            | 4.5            | 3.9            | 0.9            | 0.8            | 8.9            | 10.5           |

Source: MOFSL, Company, Bloomberg(\*) denotes MOFSL estimates

**Exhibit 62: Zinc global comparative valuation**

| Company    | M-Cap<br>USD m | P/E (x)        |                | EV/EBITDA (x)  |                | P/B (x)        |                | RoE (%)        |                |
|------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|            |                | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E |
| HZL*       | 20,806         | 18.6           | 17.2           | 10.1           | 10.4           | 5.3            | 14.0           | 29.3           | 44.5           |
| Korea Zinc | 11,209         | 20.7           | 19.3           | 12.9           | 12.3           | 1.9            | 1.8            | 9.4            | 9.7            |
| Teck       | 15,392         | 17.8           | 18.0           | 4.9            | 4.7            | 0.8            | 0.8            | 4.5            | 4.8            |

Source: MOFSL, Company, Bloomberg(\*) denotes MOFSL estimates

### Exhibit 63: Coal Global Comparative Valuation

| Company       | M-Cap<br>USD m | P/E (x)        |                | EV/EBITDA (x)  |                | P/B (x)        |                | RoE (%)        |                |
|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|               |                | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E |
| <b>Coal*</b>  | <b>27,274</b>  | <b>6.7</b>     | <b>5.8</b>     | <b>4.1</b>     | <b>3.4</b>     | <b>2.0</b>     | <b>1.7</b>     | <b>30.6</b>    | <b>30.0</b>    |
| China Shenhua | 1,03,346       | 13.0           | 13.3           | 7.8            | 7.9            | 1.5            | 1.4            | 11.1           | 10.9           |
| Banpu         | 1,414          | 7.8            | 10.1           | 5.4            | 5.2            | 0.4            | 0.4            | 2.8            | 2.9            |
| Bukit Asam    | 1,705          | 7.6            | 6.5            | 4.9            | 4.4            | 1.2            | 1.1            | 15.8           | 16.8           |

Source: MOFSL, Company, Bloomberg(\*) denotes MOFSL estimates

### Exhibit 64: Aluminum Global Comparative Valuation

| Company          | M-Cap<br>USD m | P/E (x)        |                | EV/EBITDA (x)  |                | P/B (x)        |                | RoE (%)        |                |
|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                  |                | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E |
| <b>Hindalco*</b> | <b>18,097</b>  | <b>10.1</b>    | <b>9.5</b>     | <b>5.9</b>     | <b>5.6</b>     | <b>1.4</b>     | <b>1.2</b>     | <b>14.9</b>    | <b>13.8</b>    |
| <b>Nalco*</b>    | <b>4,029</b>   | <b>10.7</b>    | <b>9.4</b>     | <b>5.4</b>     | <b>4.4</b>     | <b>1.7</b>     | <b>1.5</b>     | <b>17.2</b>    | <b>17.0</b>    |
| Alcoa            | 7,729          | 12.1           | 10.0           | 5.1            | 3.8            | 1.1            | 1.0            | 9.3            | 10.6           |
| Norsk Hydro      | 12,517         | 10.2           | 9.2            | 5.0            | 4.5            | 1.2            | 1.1            | 11.6           | 12.2           |
| CHALCO           | 17,466         | 8.1            | 7.6            | 4.5            | 3.9            | 1.2            | 1.1            | 15.7           | 15.3           |
| RUSAL            | 8,953          | 5.4            | 4.2            | 7.3            | 6.0            | 0.7            | 0.6            | 13.3           | 14.3           |

Source: MOFSL, Company, Bloomberg(\*) denotes MOFSL estimates

### Exhibit 65: Stainless Steel Global Comparative Valuation

| Company    | M-Cap<br>USD m | P/E (x)        |                | EV/EBITDA (x)  |                | P/B (x)        |                | RoE (%)        |                |
|------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|            |                | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E | CY25/<br>FY26E | CY26/<br>FY27E |
| <b>JSL</b> | <b>7,276</b>   | <b>21.0</b>    | <b>16.9</b>    | <b>12.6</b>    | <b>10.4</b>    | <b>3.2</b>     | <b>2.8</b>     | <b>16.5</b>    | <b>17.2</b>    |
| POSCO      | 17,186         | 12.1           | 10.5           | 5.5            | 5.1            | 0.4            | 0.4            | 3.4            | 3.9            |
| Acerinox   | 3,177          | 8.7            | 7.0            | 5.8            | 4.9            | 1.0            | 1.0            | 12.2           | 14.2           |
| Outokumpu  | 1,966          | 12.9           | 9.4            | 4.7            | 4.0            | 0.5            | 0.4            | 3.4            | 4.9            |
| Aperam     | 2,271          | 7.9            | 6.2            | 5.0            | 4.2            | 0.6            | 0.6            | 7.9            | 10.3           |

Source: MOFSL, Company, Bloomberg(\*) denotes MOFSL estimates

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

## NOTES

| Explanation of Investment Rating |  |
|----------------------------------|--|
| Investment Rating                | Expected return (over 12-month)  |
| BUY                              | >=15%  |
| SELL                             | < - 10%  |
| NEUTRAL                          | < - 10 % to 15%  |
| UNDER REVIEW                     | Rating may undergo a change  |
| NOT RATED                        | We have forward looking estimates for the stock but we refrain from assigning recommendation |

\*In case the recommendation given by the Research Analyst is inconsistent with the investment rating legend for a continuous period of 30 days, the Research Analyst shall be within following 30 days take appropriate measures to make the recommendation consistent with the investment rating legend.

#### Disclosures

The following Disclosures are being made in compliance with the SEBI Research Analyst Regulations 2014 (herein after referred to as the Regulations).

Motilal Oswal Financial Services Ltd. (MOFSL) is a SEBI Registered Research Analyst having registration no. INH000000412. MOFSL, the Research Entity (RE) as defined in the Regulations, is engaged in the business of providing Stock broking services, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on [www.motilaloswal.com](http://www.motilaloswal.com). MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at <http://online.reports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf>

MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.

MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

A graph of daily closing prices of securities is available at [www.nseindia.com](http://www.nseindia.com), [www.bseindia.com](http://www.bseindia.com). Research Analyst views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of MOFSL or its associates maintains arm's length distance with Research Team as all the activities are segregated from MOFSL research activity and therefore it can have an independent view with regards to Subject Company for which Research Team have expressed their views.

#### Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL & its group companies to registration or licensing requirements within such jurisdictions.

#### For Hong Kong:

This report is distributed in Hong Kong by Motilal Oswal capital Markets (Hong Kong) Private Limited, a licensed corporation (CE AYY-301) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) "SFO". As per SEBI (Research Analyst Regulations) 2014 Motilal Oswal Securities (SEBI Reg. No. INH000000412) has an agreement with Motilal Oswal capital Markets (Hong Kong) Private Limited for distribution of research report in Hong Kong. This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The Indian Analyst(s) who compile this report is/are not located in Hong Kong & are not conducting Research Analysis in Hong Kong.

#### For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts"), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement.

The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

#### For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets (Singapore) Pte. Ltd. ("MOCMSPL") (UEN 201129401Z), which is a holder of a capital markets services license and an exempt financial adviser in Singapore. This report is distributed solely to persons who (a) qualify as "institutional investors" as defined in section 4A(1)(c) of the Securities and Futures Act of Singapore ("SFA") or (b) are considered "accredited investors" as defined in section 2(1) of the Financial Advisers Regulations of Singapore read with section 4A(1)(a) of the SFA. Accordingly, if a recipient is neither an "institutional investor" nor an "accredited investor", they must immediately discontinue any use of this Report and inform MOCMSPL.

In respect of any matter arising from or in connection with the research you could contact the following representatives of MOCMSPL. In case of grievances for any of the services rendered by MOCMSPL write to [grievances@motilaloswal.com](mailto:grievances@motilaloswal.com).

Nainesh Rajani

Email: [nainesh.rajani@motilaloswal.com](mailto:nainesh.rajani@motilaloswal.com)

Contact: (+65) 8328 0276

#### Specific Disclosures

- Research Analyst and/or his/her relatives do not have a financial interest in the subject company(ies), as they do not have equity holdings in the subject company(ies). MOFSL has financial interest in the subject company(ies) at the end of the week immediately preceding the date of publication of the Research Report: Yes.  
Nature of Financial interest is holding equity shares or derivatives of the subject company
- Research Analyst and/or his/her relatives do not have actual/beneficial ownership of 1% or more securities in the subject company(ies) at the end of the month immediately preceding the date of publication of Research Report.  
MOFSL has actual/beneficial ownership of 1% or more securities of the subject company(ies) at the end of the month immediately preceding the date of publication of Research Report: No
- Research Analyst and/or his/her relatives have not received compensation/other benefits from the subject company(ies) in the past 12 months.  
MOFSL may have received compensation from the subject company(ies) in the past 12 months.
- Research Analyst and/or his/her relatives do not have material conflict of interest in the subject company at the time of publication of research report.  
MOFSL does not have material conflict of interest in the subject company at the time of publication of research report.
- Research Analyst has not served as an officer, director or employee of subject company(ies).
- MOFSL has not acted as a manager or co-manager of public offering of securities of the subject company in past 12 months.
- MOFSL has not received compensation for investment banking /merchant banking/brokerage services from the subject company(ies) in the past 12 months.
- MOFSL may have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company(ies)

in the past 12 months.

9. MOFSL may have received compensation or other benefits from the subject company(ies) or third party in connection with the research report.
10. MOFSL has not engaged in market making activity for the subject company.

The associates of MOFSL may have:

- financial interest in the subject company
- actual/beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report.
- acted as a manager or co-manager of public offering of securities of the subject company in past 12 months
- be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies)
- received compensation from the subject company in the past 12 months for investment banking / merchant banking / brokerage services or from other than said services.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report

Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

#### Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

#### Terms & Conditions:

This report has been prepared by MOFSL and is meant for sole use by the recipient and not for circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of MOFSL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. MOFSL will not treat recipients as customers by virtue of their receiving this report.

#### Disclaimer:

The report and information contained herein is strictly confidential and meant solely for the selected recipient and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent. This report and information herein is solely for informational purpose and may not be used or considered as an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. This may not be taken in substitution for the exercise of independent judgment by any recipient. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. No representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document. The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval. MOFSL, its associates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document. This report has been prepared on the basis of information that is already available in publicly accessible media or developed through analysis of MOFSL. The views expressed are those of the analyst, and the Company may or may not subscribe to all the views expressed therein. This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject MOFSL to any registration or licensing requirement within such jurisdiction. The securities described herein may or may not be eligible for sale in all jurisdictions or to certain category of investors. Persons in whose possession this document may come are required to inform themselves of and to observe such restriction. Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information. The person accessing this information specifically agrees to exempt MOFSL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold MOFSL or any of its affiliates or employees responsible for any such misuse and further agrees to hold MOFSL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

This report is meant for the clients of Motilal Oswal only.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263;

www.motilaloswal.com. Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of

Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No.:022-40548085.

Grievance Redressal Cell:

| Contact Person     | Contact No.                 | Email ID                     |
|--------------------|-----------------------------|------------------------------|
| Ms. Hemangi Date   | 022 40548000 / 022 67490600 | query@motilaloswal.com       |
| Ms. Kumud Upadhyay | 022 40548082                | servicehead@motilaloswal.com |
| Mr. Ajay Menon     | 022 40548083                | am@motilaloswal.com          |

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst:

INH000000412 . AMFI: ARN : 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dpgrievances@motilaloswal.com.