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# Advanced Materials/Metals

## Overweight (Maintain)

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### Steel overcapacity is decreasing

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- April global crude steel utilization rises to a five-year high of 76.9%
  - China's industry restructuring and robust global demand are the key drivers
  - Global steel demand/supply is finding a balance
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#### April global crude steel utilization rises to a five-year high of 76.9%

In April, global crude steel utilization rose to 76.9% (+2.4%p YoY, +2.4%p MoM), the highest level in five years. In the January-April period, average utilization was 74.4%, up 2.3%p YoY. It appears that the current pickup in utilization was due to output growth (rather than decreasing capacity). In April, global crude steel output expanded 4.1% YoY to 148mn tonnes. In the January-April period, global crude steel output was 574mn tonnes, up 4.1%, or 23mn tonnes, YoY. On the other hand, production capacity is estimated to have increased just 0.9%, or 7mn tonnes, YoY during that period.

#### China's restructuring and robust global demand are the key drivers

We believe the rise in global crude steel utilization stems from China's steel industry restructuring and robust global demand.

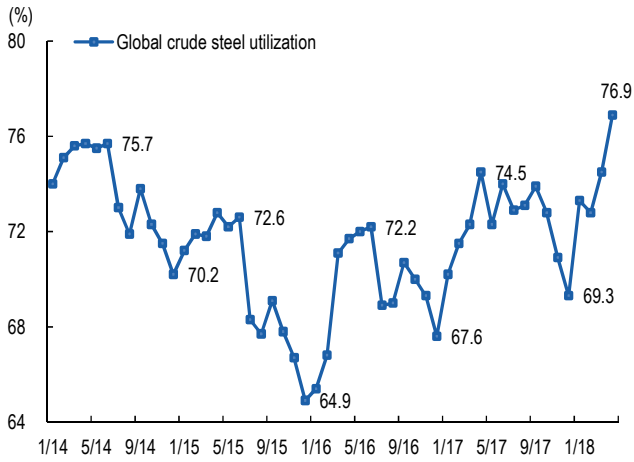
1) In our view, utilization is rising partly because the void left by the closures of China's outdated and illegal steel plants (which are not captured in official data) is being filled by the country's legal plants. China's shutdown of obsolete and illegal capacity has also led to a decline in the country's exports. We believe steel mills in other regions are picking up the slack, further pushing up utilization. Therefore, while data may show an increase in nominal output, we believe actual output has decreased, considering the shutdown of capacity that was unaccounted for.

2) On the other hand, steel demand appears robust, as evidenced by the strength in steel prices. If demand is weak, an increase in supply typically leads to a decline in prices. However, average steel prices since the beginning of the year are 15-30% higher than the 2017 average levels (depending on region). Several other indicators also suggest demand is robust. April global PMI came in at 53.5, remaining in expansionary territory, while China's construction starts based on area increased 7.3% YoY from January to April.

#### Global steel demand/supply is finding a balance

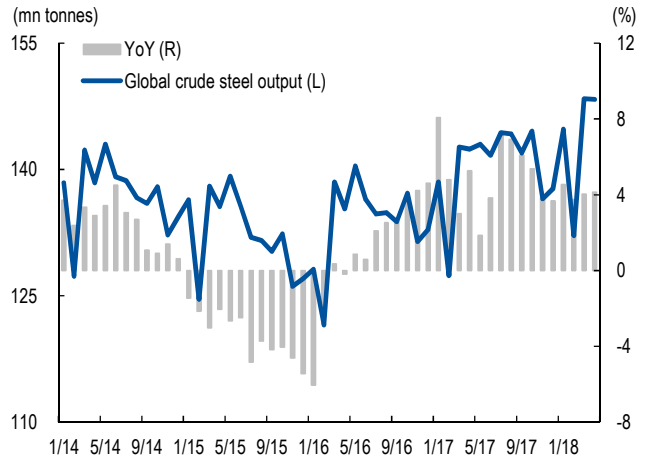
We believe global steel supply/demand is gradually finding a balance, supported by the rise in crude steel utilization. Assuming 80% as the balanced utilization rate, we forecast global steel overcapacity to shrink from 220mn tonnes in 2016 to 120mn tonnes in 2018. The key will be whether China maintains its policy of containing supply and stimulating demand. We believe this policy will remain in place and therefore expect the global steel cycle to continue to improve (see our 2H18 outlook report "Winds of change").

**Figure 1. Global crude steel utilization on the rise**



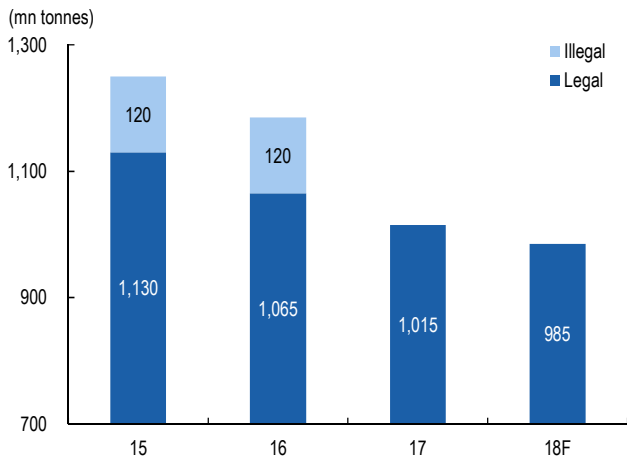
Source: WSA, Mirae Asset Daewoo Research

**Figure 2. Uptrend in global crude steel output**



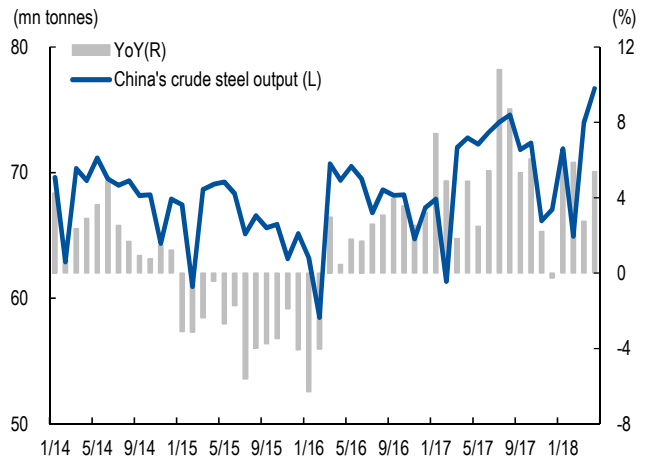
Source: WSA, Mirae Asset Daewoo Research

**Figure 3. Ongoing closures of outdated/illegal steel plants in China**



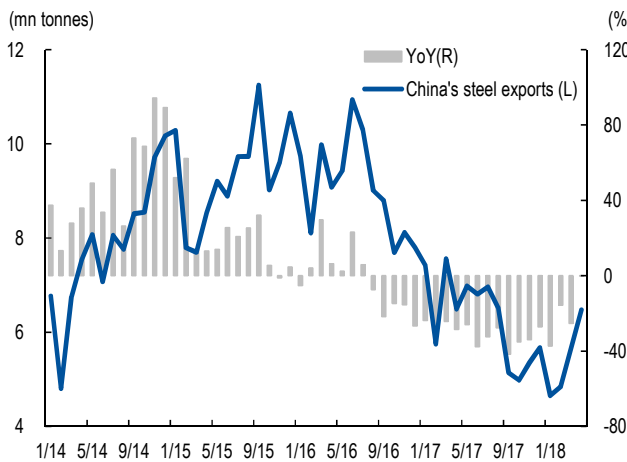
Source: Mirae Asset Daewoo Research

**Figure 4. Uptrend in China's crude steel output**



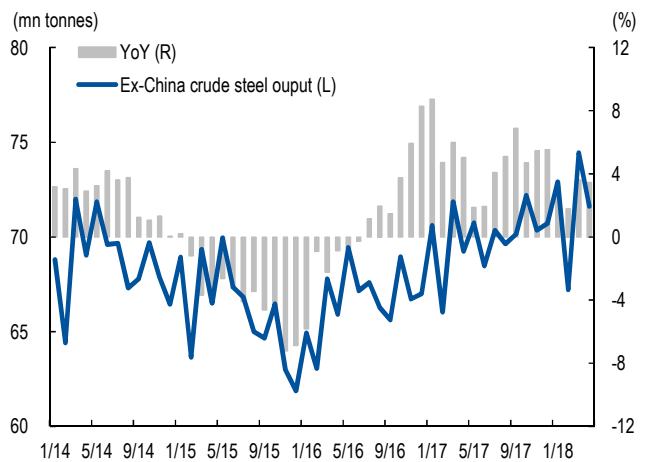
Source: WSA, Mirae Asset Daewoo Research

**Figure 5. China's steel exports trending downward**



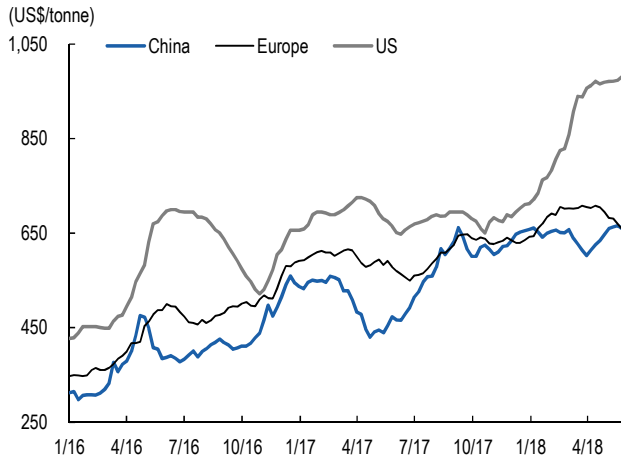
Source: China Customs, Mirae Asset Daewoo Research

**Figure 6. Uptrend in crude steel output in other regions**



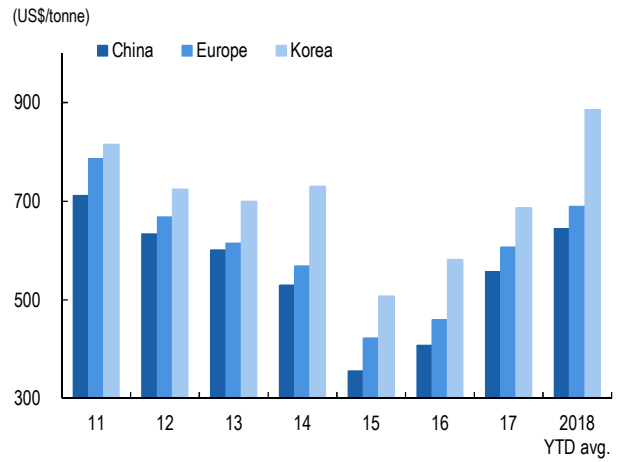
Source: WSA, Mirae Asset Daewoo Research

**Figure 7. Global HRC prices on the uptrend (1)**



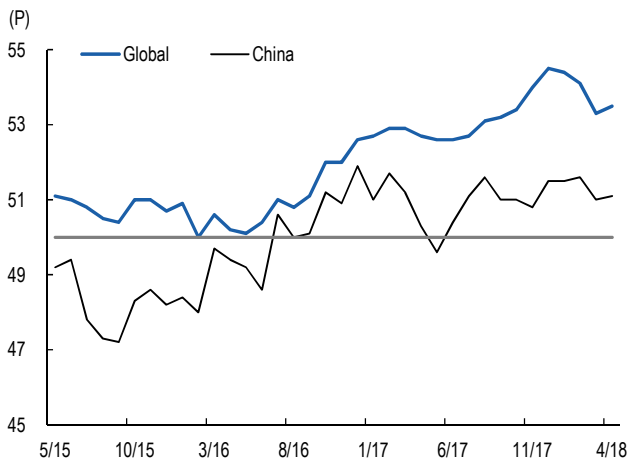
Source: Platts, Mirae Asset Daewoo Research

**Figure 8. Global HRC prices on the uptrend (2)**



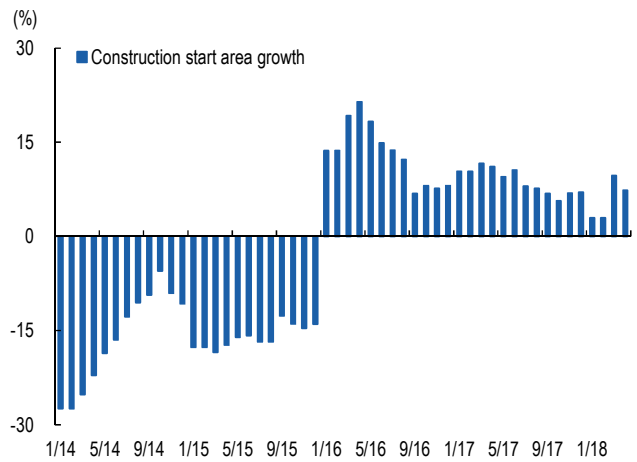
Source: Platts, Mirae Asset Daewoo Research

**Figure 9. Both global and China PMIs on the rise**



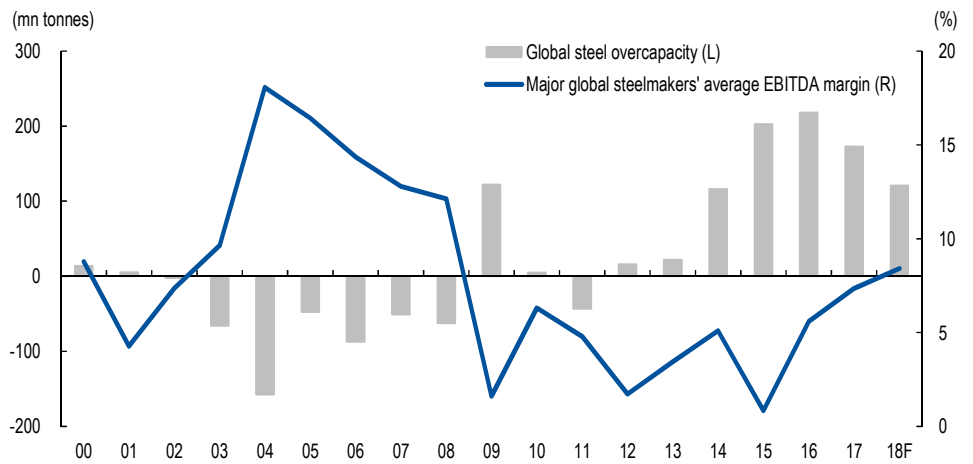
Source: Markit, Mirae Asset Daewoo Research

**Figure 10. China's construction starts trending upward**



Source: National Bureau of Statistics of China, Mirae Asset Daewoo Research

**Figure 11. Steelmakers' profitability is rising with the global steel market approaching supply/demand balance**



Source: Industry data, Mirae Asset Daewoo Research

# APPENDIX 1

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Stock Ratings	Industry Ratings
Buy : Relative performance of 20% or greater	Overweight : Fundamentals are favorable or improving
Trading Buy : Relative performance of 10% or greater, but with volatility	Neutral : Fundamentals are steady without any material changes
Hold : Relative performance of -10% and 10%	Underweight : Fundamentals are unfavorable or worsening
Sell : Relative performance of -10%	

Ratings and Target Price History (Share price (—), Target price (→), Not covered (■), Buy (▲), Trading Buy (■), Hold (●), Sell (◆))

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- \* Although it is not part of the official ratings at Mirae Asset Daewoo Co., Ltd., we may call a trading opportunity in case there is a technical or short-term material development.
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- \* The achievement of the target price may be impeded by risks related to the subject securities and companies, as well as general market and economic conditions.

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	Buy	Trading Buy	Hold	Sell
Equity Ratings Distribution	75.00%	11.11%	13.89%	0.00%
Investment Banking Services	70.73%	19.51%	9.76%	0.00%

\* Based on recommendations in the last 12-months (as of March 31, 2018)

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