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### SECTOR COMMENT

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#### Contacts

**Carol Cowan** 212-553-4999  
Senior Vice President MIS  
carol.cowan@moodys.com

**Anna Zubets-Anderson** 212-553-4617  
VP-Senior Analyst  
anna.zubets-anderson@moodys.com

**Brian Oak** 212-553-2946  
MD-Corporate Finance  
brian.oak@moodys.com

**Barbara Mattos, CFA** 55-11-3043-7357  
VP-Sr Credit Officer  
barbara.mattos@moodys.com

**Gianmarco Migliavacca** 4420-7772-5217  
Vice President- Senior Credit Officer  
gianmarco.migliavacca@moodys.com

**Elena Nadtotchi** 44-20-7772-5380  
VP-Sr Credit Officer  
elena.nadtotchi@moodys.com

**Artem Frolov** 7-495-228-6110  
VP-Senior Analyst  
artem.frolov@moodys.com

**Matthew Moore** 612-9270-8108  
VP-Sr Credit Officer  
matthew.moore@moodys.com

**Douglas Rowlings** 971-4-237-9543  
Analyst  
douglas.rowlings@moodys.com

**Brian Grieser** 65-6398-3713  
VP-Senior Analyst  
brian.grieser@moodys.com

**Jamie Koutsoukis** 416-214-3845  
VP-Senior Analyst  
jamie.koutsoukis@moodys.com

### Base Metals - Global

## Ratings Recalibration Amid Fundamental Shift in Mining Sector

We believe that the current severe downturn in the mining industry represents a fundamental shift in the operating environment and that, as a consequence, a wholesale recalibration of ratings is required. As a result, on January 21 we placed 55 companies in the base metal, precious metal, iron ore and coal industries rated between A1 and B3 under review for downgrade. While severity varies among issuers, all are impacted and many companies could be downgraded, some multiple notches. Our broad review, which will be largely completed during the first quarter, will consider each mining company's asset base, cost structure, likely cash burn and liquidity, as well as strategies for coping with a prolonged downturn. We will assess each company's cash flow and credit metrics closer to our latest stressed price assumptions and the relative rating positioning.

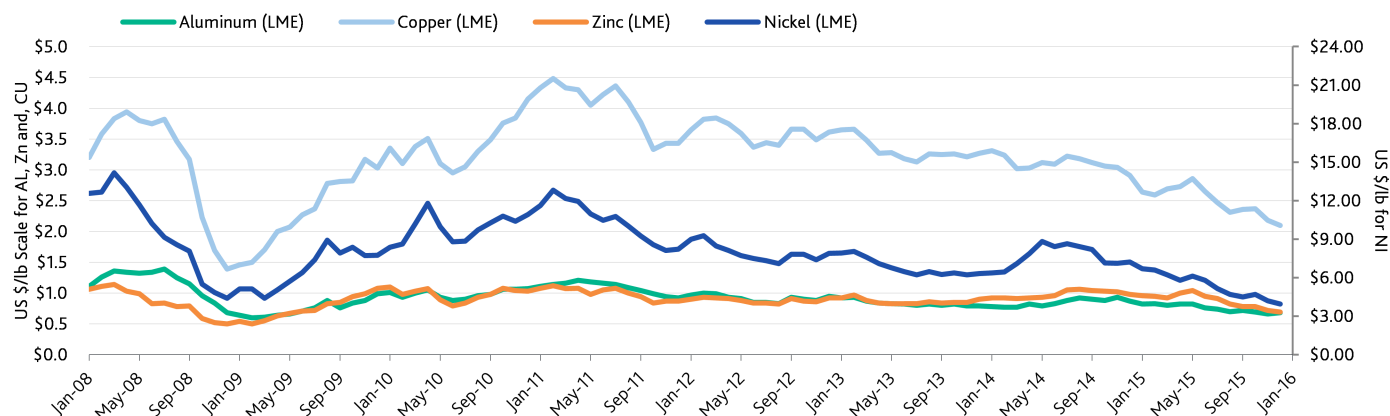
This is not a normal cyclical downturn, but rather, one we perceive to be unprecedented. Stress on companies in the metals & mining industry could surpass what we saw during the 2008/2009 period. Prices peaked in 2012 for most base metals, with a subsequent gradual price decline in 2013 and 2014 that allowed companies to adjust mining plans and exploration expenses. However, price declines accelerated sharply in mid- and late- 2015 and that has continued in the first few weeks of 2016.

Metals prices continue on a downward trend (see Exhibit 1) as slowing economic growth in China and weakening global demand take a toll. Some metal prices have fallen below levels reached during the 2008/2009 financial crisis and are now moving closer to the "stress case" scenario included in our revised price assumption from just last month. The Institute for Supply Management's US Purchasing Managers Index (PMI) was 48.2 for the month of December, and has been slowly contracting since June 2015. Similarly, Caixin's China General Manufacturing PMI was 48.2 in December. This reflects ongoing contraction and is a figure that is unlikely to see any sharp improvement as China moves toward a service economy.

Exhibit 1

**Base Metals Prices**

January 2008- December 2015



Source: LME

There is little light on the horizon and we expect the physical supply/demand imbalance to widen further, leaving industry conditions extremely weak and making a return to normality unlikely for several years. We expect the US dollar to continue to strengthen as interest rates rise, which will maintain pressure on base metal prices. While some miners benefit from lower costs on weaker local currencies and oil prices, this is only delaying the supply adjustments needed to bring the industry back into balance.

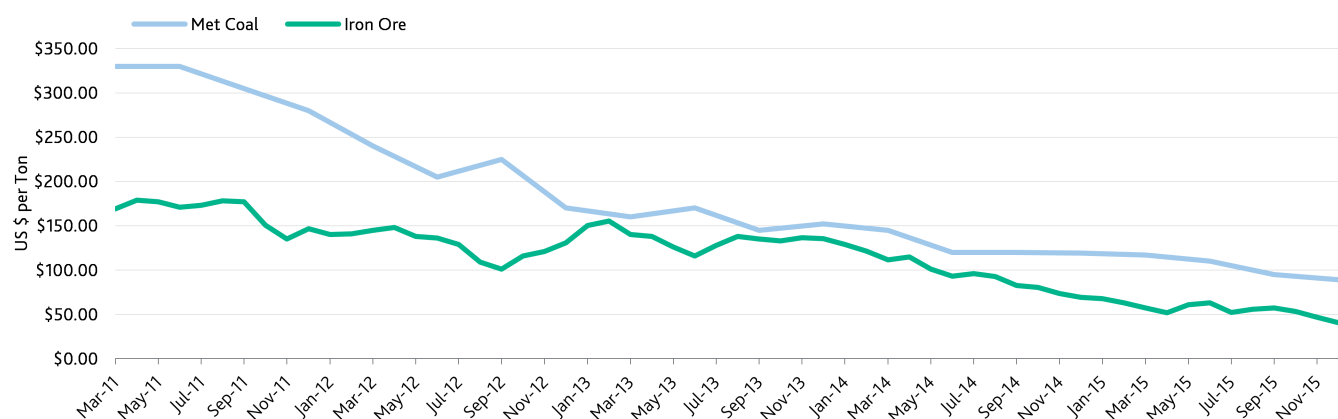
This imbalance can trace its roots to the overly optimistic expectations for growth in China, which consumes some 40%-50% of the key metals like aluminum, copper and nickel, coupled with a favorable financing that led to massive investments by miners in building capacity -- particularly in high tech "super mines" that are difficult to scale back.

In addition, Chinese steel production, the catalyst for the seaborne iron ore and met coal markets, slowed in 2014 and 2015. This in combination with new supply in these markets has maintained downward pressure on iron ore and met coal prices, with prices decelerating more in 2015 as evidenced in Exhibit 2 below.

Exhibit 2

**Iron Ore and Metallurgical Coal Prices**

March 2011- December 2015



Iron Ore Prices are monthly average prices and Met Coal prices are quarterly settlement prices

Source: Steel First, Platts

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Gold is driven by different dynamics and has not evidenced the same magnitude of price compression seen in the base metals. Gold tends to be more resilient thanks to its store value as a reserve currency and safe-haven characteristics. Nonetheless, gold declined roughly 8% in 2015 and hit monthly averages below \$1,100/oz in both November and December. Overall, gold prices have been declining since 2012 and are expected to remain responsive to economic and sovereign concerns as well as the strength of the USD, oil price and equity price movements. The gold industry is included in the review of mining companies as at current prices, the ability to generate free cash flow for ongoing investment and debt repayment is expected to be pressured, given where overall industry all in sustaining costs are. Additionally, gold companies with exposure to other metals such as copper could fare worse than their peers, while those with operations in countries with weaker currencies could benefit from lower costs.

## Moody's Related Research

### Sector in- Depths:

- » [Base Metals- Global: Demand, Growth Sentiment Further Deteriorate, Driving Prices Ever Lower](#) , December 2015
- » [Non-Financial Corporates - Global: Growing Stress in Commodity Sectors Is a Credit Hazard for 2016](#) , December 2015

### Outlooks:

- » [2016 Global Base Metals Outlook: Downside Risk Remains on China Concerns, Slowing Global Growth](#) , October 2015

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