

Article Title: ARCHIVE | Criteria | Corporates | Industrials: Assumptions Updated For Base-Case Metals Prices Data: (Editor's Note: This article has been superseded by "Standard & Poor's Changes Short-Term Metals Pricing Assumptions And Maintains Long-Term Price Decks," published on Oct. 2, 2009.) Standard & Poor's Ratings Services is updating its assumptions for base-case metals price assumptions used in its analysis for 2009 and beyond. We are publishing this article to keep market participants better informed about our approach to reviewing corporate credits in the metals sector. This article is related to our criteria article "Principles Of Corporate And Government Ratings," which we published on June 26, 2007, on RatingsDirect at www.ratingsdirect.com and Standard & Poor's Web site at www.standardandpoors.com. This article supersedes "Standard & Poor's Lowers Its Near-Term Base-Case Metals Prices On Weakening Demand," published Dec. 18, 2008. This update does not represent any change to our general corporate criteria (see "Corporate Ratings Criteria 2008," published April 15, 2008). It does, however, provide additional clarification to the analysis of this sector.

Base-Case Metals Price Assumptions For 2009 And Beyond We have revised our base-case metals price assumptions in response to changes in metals commodity prices. The revisions are not uniform, as we believe each metal is subject to its own short-term price expectations and longer-term demand and supply fundamentals. For 2009, our price assumptions for copper, nickel, and gold are increased since our last update in December 2008 thanks to higher market prices year-to-date, and also futures prices. Our 2009 price assumption for aluminum, on the other hand, is lower due to ongoing weak demand and supply. As part of this review, we have also updated our assumptions for certain metals for 2010, 2011, and the long term (see table).

	2009	2010	2011	LONG TERM
Aluminum (US\$/lb.)	0.65	0.75	0.80	0.85
Copper (US\$/lb.)	1.75	1.75	1.75	1.75
Nickel (US\$/lb.)	5.00	5.00	5.00	5.25
Zinc (US\$/lb.)	0.60	0.60	0.65	0.70
Gold (US\$/oz.)	850	750	650	625

600 Following substantial falls in base metals prices in the second half of 2008, prices stabilized at low levels in early 2009. In recent weeks, prices have strengthened on hopes of global economic recovery, and as producers have cut production. Gold prices have similarly improved, supported by investor demand and financial market uncertainty. Generally, we continue to expect near-term prices for base metals to be relatively weak, as demand in industrial end markets such as auto and construction remains depressed due to the global slowdown. Despite production cutbacks by companies in response to the difficult industry conditions, which are partly due to cash losses being generated by high-cost assets, we see that inventories are still high in certain segments. Our long-term price assumptions are also in some cases revised, to more closely reflect broader market views of demand and supply fundamentals, and cost curves. Aluminum and zinc assumptions are lower, compared with their respective positions in December 2008, while those for nickel and gold are higher. Overall, we believe these price assumptions, which we use to derive base-case forecasts and ultimately our issuer credit ratings, remain conservative. Our near-term price assumptions for 2009-2011 are based on discounts to forward curves, which we believe most accurately embody current market expectations of future pricing. For 2009, we use a blend of actual prices for the four months ended April 2009 and discounted forward curves for the remainder of the year. Currently, the forward curve for aluminum is upward sloping, reflecting market expectations of higher prices. As a result, our price assumptions for this metal have a similar slope. By contrast, the forward curves for copper, nickel, and zinc are broadly flat, or show a relatively shallow upward slope. So our price assumptions for these metals reflect this trend. The following summarizes Standard & Poor's views on each metal:

Aluminum. We have lowered our aluminum price assumptions to \$0.65/lb (\$1,433 per metric tonne) for 2009, to \$0.75-\$0.85 (\$1,654-\$1,874) for 2010-2011, and to \$0.90 (\$1,985) for the long term. We consider that aluminum continues to experience demand and supply fundamentals that are among the weakest in the base metals complex. Average prices in the first quarter of 2009 were \$0.62 (\$1,360), which is 26% below the average of \$0.83 (\$1,836) for the fourth quarter in 2008 and 50% lower than the same period in 2008. Demand has fallen significantly in key end markets such as auto and construction. However, even though a sizeable portion of the global aluminum industry has been suffering cash losses, and producers have had constrained access to credit, inventories have risen significantly as producers have been slow to cut production. Despite the weak demand and high inventories that continue to build, spot prices have risen to about \$0.63 (\$1,400) at present from a low of about \$0.57 (\$1,250) in February 2009. Nevertheless, we think that the sizeable amount of spare

capacity in the industry, especially in China, could continue to act as a dampening factor, limiting price upside over the medium term. Prices are also affected by the price and availability of power, due to high energy intensity. Although we have lowered our latest price assumptions for 2009-2011 and the long term, we continue to believe that market conditions will improve. In our view, losses will eventually compel producers to cut back on supply, and positive demand trends will gradually reassert themselves. As a consequence, our base-case price assumptions remain modestly upward sloping, albeit from a lower level than in our previous update in December 2008.

Copper. We have raised our copper price assumptions for 2009-2011 to \$1.75 (\$3,860) and kept our long-term price unchanged at \$1.50 (\$3,308). Copper exhibits relatively better demand and supply fundamentals compared with other base metals. The vast majority of producers remain profitable, as output responds relatively more quickly to lower demand. Average prices in the first quarter of 2009 were \$1.56 (\$3,435), which is 13% below the \$1.80 (\$3,959) recorded in the fourth quarter of 2008 and 56% lower than the same period in 2008. Spot prices have risen strongly to a current level of about \$2.09. (\$4,600), from a low of about \$1.27 (\$2,800) in December 2008. Inventory levels are starting to unwind, in our view driven mainly by a shortage of copper scrap, stockpiling by Chinese authorities, and modest production cuts. However, current price strength could be vulnerable if supportive factors were to diminish. Our long-term price assumption remains well above the historical average.

Nickel. We have raised our nickel price assumptions for 2009-2011 to \$5.00 (\$11,025) and for the long term to \$5.50 (\$12,128). Prices averaged \$4.74 (\$10,460) in the first quarter of 2009, which is 4% below the average for the fourth quarter of 2008 and 64% lower than the same period in 2008. End markets of stainless steel and other steels remain weak, and inventory levels remain high. That said, improving market sentiment and production shutdowns have had a positive effect on spot prices, which rose strongly to their current level of about \$6.03 (\$13,300) from a low of \$4.10 (\$9,055) in December 2008. We regard the long-term prospects for nickel prices to be sound.

Zinc. We have maintained our 2009 zinc price assumption at \$0.60 (\$1,323), but have lowered them for 2010-2011 to \$0.60-\$0.65 (\$1,323-\$1,433) and for the long term to \$0.70 (\$1,544). This reflects a more cautious view. Average prices in the first quarter of 2009 were \$0.53 (\$1,174), which is flat compared with the average for the fourth quarter of 2008 and 52% lower than the same period in 2008. Inventories are no longer rising, and spot prices have strengthened to their current level of \$0.68 (\$1,500) from around \$0.47 (\$1,050) in December 2008.

Gold. We have raised our 2009 gold price assumption to \$850 per ounce and our long-term price assumption to \$600 per ounce, while our assumptions for 2010 and 2011 remain unchanged. Prices for 2009 are supported by investors seeking a hedge on inflation risks and against uncertainty in financial markets. Long-term prospects are supported by the precious metal's properties as a safe haven and, to a lesser extent, by the demand for jewelry.

Use Of Base-Case Price Assumptions In Our Analysis

Standard & Poor's metals and mining ratings team employs a standard set of price assumptions for rated metal producers. We use these assumptions to evaluate a company's ability to repay its short- and long-term debt obligations, to compare the relative credit quality of a broad and diverse set of peer companies, and to assess the likelihood that operating cash flow will be sufficient to fund a company's capital requirements and support its overall strategy. We expect that changes in our assumptions will have a more immediate potential effect on speculative-grade credits, given our shorter rating horizon compared with investment-grade companies. Such changes will likely also feed through more rapidly to companies with, for example, limited diversity, high capital spending programs, or recent debt-funded acquisitions.

Related Research "Standard & Poor's Lowers Its Near-Term Base-Case Metals Prices On Weakening Demand," published Dec. 18, 2008, on RatingsDirect. "Corporate Ratings Criteria," published April 15, 2008. "Principles Of Corporate And Government Ratings," published June 26, 2007. This article is part of a broad series of measures to enhance our governance, analytics, dissemination of information, and investor education initiatives. These initiatives are aimed at augmenting our independence, strengthening the rating process, and increasing our transparency to better serve the global markets. These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would

affect our credit judgment.