

Global Credit Research - 14 Jul 2011

Santiago, Chile

## Ratings

Category	Moody's Rating
Outlook	Stable
Senior Unsecured	A1

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## Key Indicators

### Corporación Nacional del Cobre de Chile[1]

	12/31/2010	12/31/2009	12/31/2008	12/31/2007	12/31/2006
EBIT Margin	28.5%	25.4%	26.5%	43.5%	47.4%
Return on Average Tangible Assets (EBIT / Avg. Tangible Assets)	23.8%	19.7%	26.5%	52.5%	68.4%
Debt / Book Capitalization	55.3%	48.3%	51.0%	44.3%	41.3%
Debt / EBITDA	1.1x	1.1x	1.0x	0.5x	0.5x
EBIT / Interest Expense	20.8x	14.9x	16.0x	30.1x	34.3x
FCF / Debt	-22.8%	10.7%	-40.7%	18.4%	13.2%
(CFO - Dividends) / Debt	12.8%	45.6%	0.2%	54.6%	43.7%

[1] All ratios are calculated using Moody's Standard Adjustments. Source: Moody's Financial MetricsTM

Note: For definitions of Moody's most common ratio terms please see the accompanying [User's Guide](#).

## Opinion

### Rating Drivers

- > Largest copper producer globally, significant molybdenum production, long lived reserve base
- > Multiple mine operating profile diversifies risk of operating problems
- > Increased cost position, but still competitive
- > Absent government approval to some level of profit retention, significant debt increases will be required to fund strategic growth

### Corporate Profile

Headquartered in Santiago, Chile, Corporacion Nacional del Cobre de Chile (CODELCO) is 100% owned by the Chilean State and is the largest producer of copper globally, holding an approximate 11% share of mined copper production. The company also ranks as one of the top two global molybdenum (moly) producers (as a by-product of copper production) with a market share of approximately 9%. Operating through seven divisions, Chuquicamata, Radomiro Tomic, Ministro Hales, Andina, El Teniente, Salvador, and Ventanas. CODELCO's operations include several world class mines from a reserve, production capacity, and cost perspective, as well as smelting and refining capability. In addition, CODELCO owns 100% of Minera Gaby S.A. and 49% of the El Abra mining operation in Chile. Revenues in 2010 were \$16.1 billion.

### SUMMARY RATING RATIONALE

As a government related Issuer ("GRI"), the A1 foreign currency rating on CODELCO's senior unsecured debt comprises the following inputs: the baseline credit assessment ("BCA") at the low end of the 5-7 range, the Chilean Government's Aa3 bond rating, high dependence and high support levels.

CODELCO's BCA reflects its position as the world's largest copper producer (approximately 1.8 million metric tons in 2010 including its share

of El Abra) and the second largest molybdenum producer, its competitive cost position and its substantial reserve base, approximately 70 years at current production levels. The company's multiple mine operating profile, which reduces the degree of operational risk, together with its vertical integration, which encompasses SX/EW and conventional smelting facilities, further support its BCA ranking. This footprint contributes to robust operating performance in a strong copper market and acceptable performance during cyclical downturns.

The BCA incorporates the large investment requirements to increase production and improve ore grades, which we anticipate will require increased debt levels over the next several years. In addition, the potential for production disruptions, the impact of lower ore grades in the near term, and ongoing industry wide cost challenges are key factors in the BCA and will be more evident in a copper price environment less robust than currently exists. Nonetheless, the company's strategic growth investments, competitive cost position, and production levels support performance over the medium to longer-term.

CODELCO's ownership by the Chilean State and the framework in which it operates are also important considerations in the rating. CODELCO's ownership structure requires the company to pay 100% of its income to the Chilean Treasury and the company pays significant amounts in export, royalty and income taxes. Under its new code of corporate governance, approved by the Chilean congress in late 2009, CODELCO can request that it be allowed to retain profits within the company, particularly to support strategic capital expenditures (capex) for growth. The government has indicated its support of CODELCO through its \$1 billion equity investment in 2009 to support strategic capex and has approved the retention of 20% of 2010 net profit - approximately \$376 million. In addition, the government in early 2011 authorized the sale of CODELCO's share in E-CL (fka Edelnor) and the retention by CODELCO of the sale proceeds (>\$1.0 billion). Since 2007, the government has authorized the retention of almost \$3 billion within CODELCO.

Consequently, the BCA contemplates the level of earnings and cash flow generation that the asset base and cost position of CODELCO can generate, and the importance of CODELCO within the Chilean economy. Moody's believes that CODELCO's cash generation capacity on a "normalized basis" is capable of supporting its capital spending requirements and debt obligations and that given CODELCO's budget approval process within Chile, sufficient funds will continue available to the company to meet debt obligations.

## **DETAILED RATING CONSIDERATIONS**

### **UPWARD COST PRESSURE TO CONTINUE**

CODELCO continues to evidence a competitive cost position although cash costs have been increasing in recent years. Many critical cost elements such as labor costs, fuel, energy and other necessary inputs have increased and we expect similar pressures to exist going forward. In addition, costs will continue to be impacted, positively and negatively by inflation and exchange rates. Despite an increase in energy and material supplies in the quarter to March 31, 2011, the company was able to maintain stable labor costs on a per pound basis and benefited from significantly improved by-product credits on higher moly prices. As a consequence 1st quarter 2011 cash costs were \$0.98/lb versus \$1.02/lb in the comparable 2010 quarter and \$1.04/lb in fiscal 2010.

Given the improved global steel production levels (the industry is a key consumer of moly), we expect that CODELCO's net cash costs will continue to benefit from favorable moly by-product credits in 2011. However, we anticipate that the ability to maintain let alone reduce other costs will be challenging, particularly with respect to labor costs, which are increasing globally. However, given the robust copper prices through June 2011 and our expectation that the second half of the year will continue to benefit from prices not too dissimilar, CODELCO's earnings in 2011 should advance sharply from the prior year.

While we expect CODELCO's costs per pound to be challenged going forward as key input costs increase and grades and recovery rates are likely to continue to fluctuate, we expect the company to remain cost competitive and able to generate solid profitability.

In addition, availability of sufficient water supply and cost will become an increasing issue over time for copper producers in Chile.

### **LEVERAGE LIKELY TO INCREASE TO SUPPORT AGGRESSIVE CAPITAL SPENDING**

CODELCO has increased its capital spending in recent years and has relatively aggressive spending plans over the next several years to maintain and improve its production profile, reverse falling ore grades, and consequently maintain a solid profitability profile. Announced expenditures for 2011 are \$3.2 billion as compared with \$2.3 billion and \$1.7 billion in 2010 and 2009 respectively. Additionally, the company has indicated that annual spending levels through 2015 are likely to average \$3.5 billion as the company looks to increase production to roughly 2 million tonnes by 2016 (excluding El Abra). Although such expenditures are likely to require increased debt levels in the near term, absent agreement from the government to retain a level of profits and cash flow to support such expenditures, they remain necessary to strengthen the longer term viability of the company's mining assets.

Key strategic projects investment at the Andina division to increase capacity as well as expansions at El Teniente North Pilar, and RT Sulphides totaling roughly \$1.6 billion. In addition, early development has begun on the Ministro Hales projects, estimated cost of approximately \$2.3 billion. Start-up is anticipated for late 2013 with ultimate production levels of around 170,000 metric tonnes of copper and an important level of silver as a by-product. The company currently has no other material by-products than moly. A number of other projects, including Andina Phase II with an estimated cost of \$4.8 billion to increase copper production by 390,000 tonnes, remain in the feasibility stage.

As CODELCO's cash flow available for investment is limited to depreciation and other non cash add backs, further increases in debt are likely to support the capital investments over the next several years. However, the ability of the company to retain the roughly \$1 billion in proceeds from the sale of its interest in E-CL and a percentage of 2010 net profit mitigates the degree of direct financing that CODELCO will need to raise and demonstrates the importance of the development of these projects to the strategic growth of CODELCO over the medium to longer term.

### **LIMITED FREE CASH FLOW FOR DEBT REDUCTION**

CODELCO's free cash flow generation is limited because of the high dividend payout required to the Chilean Treasury and the relatively high level of capital expenditures to fund strategic growth initiatives. On a free cash flow to debt basis CODELCO maps in the Caa range under Moody's global mining methodology, and Moody's expects this to continue given the dividend payout requirements. However, we expect the company to manage its overall debt levels within the context of its resources and an acceptable leverage position. The importance of CODELCO to the Chilean economy and the requirement that the annual budget presented include interest and debt payment requirements are key elements mitigating the weak mapping in this important metric.

## LARGEST GLOBAL PRODUCER - LONG LIVED RESERVE BASE

With proven, probable and inferred reserves of approximately 124 million tons of fine copper - representing roughly 10% of reserves globally - CODELCO has about 70 years of productive capacity at current levels. The level of reserves is seen as an important determinant in a company's ongoing operating profile and ability to continue to perform. With the reserve position held and the various projects in process and under evaluation, CODELCO is expected to maintain and increase production going forward offsetting the impact of declining grades and relatively flat production levels, which have recently been experienced.

### Liquidity Profile

CODELCO's liquidity is supported by internally generated funds. It has no committed revolving credit facilities that would provide alternative liquidity.

### Rating Outlook

The stable reflects our expectation that CODELCO's performance will continue solid over the next 12 to 15 months on our expectation of strong copper prices. However, the outlook also anticipates that continued cost increases will mitigate the level of margin advancement and considers the significant investment requirements, which we estimate to be in the order of \$17 billion, which CODELCO has over the next number of years to maintain and increase its copper production levels. The stable outlook also incorporates our expectation that CODELCO will continue to take a balanced approach relative to the timing of investment commitments and the level of debt to be incurred.

### What Could Change the Rating - Up

Upside adjustment to the BCA is unlikely due to the company's ongoing reinvestment requirements and the expectation for increased leverage in a business that will continue to exhibit variability in copper supply and demand balances, copper price volatility and input cost challenges.

### What Could Change the Rating - Down

The BCA and CODELCO's senior unsecured foreign currency ratings could be negatively impacted should earnings contract for a prolonged period, causing a sustainable period of EBIT margins below 22%, interest coverage below 9.0x, or debt/EBITDA above 2.5x. In addition, ratings could be negatively impacted by increases in royalties, environmental compliance costs or other regulatory requirements or significant cash copper hedging losses.

### Other Considerations

#### CHINESE DEMAND A KEY DRIVER OF THE COPPER MARKETS

Accounting for roughly 39% of global copper demand, China remains a key driver in the behavior of and prices in the copper markets, notwithstanding efforts by the Chinese government to slow the rate of growth in its domestic markets. Although the level of demand in China has slowed somewhat, improving economic conditions in the rest of the world have contributed to ongoing strength in demand fundamentals for copper. Reflecting this pattern, CODELCO's sales to China decreased to 35% of metric tonnes of fine copper produced in the first quarter of 2011 while its sales to Europe, North America and the Rest of Asia increased. Despite this moderation, China remains a key destination for the company's copper sales and revenue generation.

However, given the tight supply/demand situation in the copper markets attributable to weather, strike and operational disruptions as well as the lack of incremental new production, we expect fundamentals and prices to remain favorable over the near term. Price movements are also expected to continue volatile in the short-term due to fund investment activity and concerns over sovereign debt issues. In addition, the rebuilding requirements in Japan, following the devastating earthquake and Tsunami, will also support robust copper demand. However, given the substantive pipeline of development projects planned across the industry in the next several years, we expect these fundamentals to shift and copper prices to moderate.

Mapping to Rating Methodology Grid

CODELCO's ownership by the Chilean State and the required 100% payout of net income, together with the export, royalty and income taxes paid results in the company's financial profile not being directly applicable to Moody's rating methodology for the global mining industry. However, its performance in certain key rating factors (based upon the three years through December 30, 2010 performance) is illustrative of the company's operating strength and world-class operating mines. The BCA tracks within indicated levels and we expect the foreign currency rating to track within the "A" rating category over the next twelve to eighteen months

## Rating Factors

### Corporación Nacional del Cobre de Chile

Mining Industry [1][2]	[3]Fiscal Year ending 12/31/2010	
	Measure	Score
<b>Factor 1: Reserves (8%)</b>		
a) Reserves (Years)	40	A
<b>Factor 2: Cost Efficiency &amp; Profitability (17%)</b>		
a) Mining EBIT Margin (3-year Average)	24.8%	Aa
b) Return on Average Tangible Assets (3-year Average)	21.4%	Aaa
<b>Factor 3: Financial Policies (17%)</b>		
a) Debt / Book Capitalization	55.3%	Ba
b) Debt / Mining EBITDA (3-Year Average)	1.14x	Aaa

[4]Moody's 12-18 month Forward View	
Measure	Score
40	A
28.0%	Aa
25.0%	Aaa
55.0%	Ba
1.30x	Aa

<b>Factor 4: Financial Strength (25%)</b>				
a) Mining EBIT Interest Coverage (3-Year Average)	15.86x	Aaa	15.00x	Aaa
b) (CFO - Dividends) / Debt (3-Year Average)	18.8%	Ba	10.0%	Ba
c) Free Cash Flow / Debt (3-Year Average)	-18.1%	Caa	-6.0%	Caa
<b>Factor 5: Business Diversity and Size (33%)</b>				
a) Business Diversity Score	2	Ba	2	Ba
b) Net Consolidated Sales (USD billions)	\$16.07	Aa	\$15.00	Aa
<b>Factor 6: "Other" Liabilities Adjustments</b>				
a) Other Liabilities / Book Equity	0.0%	Aaa	0.0%	Aaa
<b>Rating:</b>				
a) Indicated Rating from Grid		A3		A3
b) Actual Rating Assigned		A1		

[1] All ratios are calculated using Moody's Standard Adjustments. [2] As of 12/31/2010 (LTM); Source: Moody's Financial Metrics [3] Measures for LTM period are 3 year averages for all factors except reserves, business diversity, and revenues. [4] Moody's Forward View represents our 12-18 month rating horizon, not a 3 year average.



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