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# Analysis

CHILE  
Americas

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## Corporacion Nacional del Cobre de Chile (CODELCO)

### Rating Considerations

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#### CREDIT STRENGTHS

- Largest copper producer globally with significant molybdenum byproduct production
- Multiple mine operating profile, mining, smelting and refining operations
- Competitive cost position
- Long-lived reserve base
- Solid earnings and cash flow generation ability

#### CREDIT CHALLENGES

- Funding strategic growth objectives while managing degree of increase in debt levels
- Maintaining cost competitive position in rising input cost environment
- Currency exposures of dollar based revenue base and peso based cost base

### Rating Rationale

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The Aa3 senior unsecured foreign currency ratings of Corporacion Nacional del Cobre de Chile (CODELCO), 100% owned by the Chilean government, reflect the application of Moody's rating methodology for government-related issuers (GRI's). In accordance with this rating methodology, (CODELCO's ratings, reflect the combination of the following inputs:

- Base line credit assessment of 2 (on a scale of 1 to 6, where 1 represents low credit risk)
- A1 local currency rating of the Chilean government
- Medium dependence
- High support



The baseline credit assessment of 2 reflects CODELCO's position as the world's largest copper producer and a significant molybdenum producer, its good debt protection measures through the copper price peaks and troughs, its competitive cost position and the longevity of its reserves. At the same time, the baseline credit assessment considers the company's vulnerability to copper price volatility, its potential aggressive capital spending program to 2006 and beyond and the company's increasing use of debt to fund its strategic investments.

The medium dependence considers the moderate correlation of default risk between the company and the Chilean government, the importance of copper to the Chilean economy and the fact that CODELCO accounts for approximately 10% of government total revenues. The high support reflects the importance of CODELCO to Chile given the company's position as a strategically important exporter and significant generator of US dollar based revenue.

## Credit Strengths

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### **LARGEST GLOBAL PRODUCER WITH SOLID RESERVE POSITION**

Inclusive of CODELCO's 49% interest in El Abra, the company's 2004 production levels of 1.84 million metric tons of copper represented approximately 16% of world production levels. With slightly lower production levels being experienced at Codelco Norte and El Abra, anticipated 2005 production levels of approximately 1.8 million metric tons will track modestly under the 2004 level. However, CODELCO will continue to evidence substantive year-on-year revenue growth reflective of strong copper prices. In addition to its copper holdings, CODELCO's ores contain important levels of molybdenum and at 2004's production level of 32.3 thousand metric tons, the company ranks number two globally. CODELCO's mining platform is supported by a substantive reserve position, which represents approximately 20% of global reserves. Most of its reserve base is located within or near adjacent mining complexes, which will allow for more cost efficient development compared with greenfield mines.

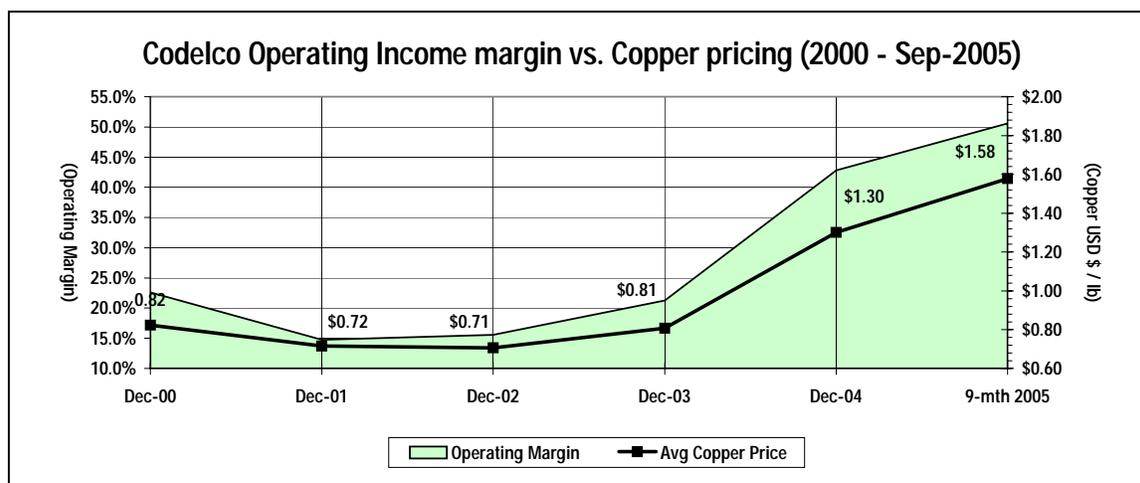
### **MULTIPLE MINE OPERATING PROFILE**

CODELCO's copper mining operations are conducted through five divisions: Codelco Norte, Salvador, Andina, El Teniente and the Ventanas Smelter and Refinery, which became a division of CODELCO in May 2005 upon its transfer from the National Mining Company (Enami). Codelco Norte, Andina and El Teniente are each substantive mining operations in their own right. With operations in copper mining, smelting and refining, the company's vertical integration provides for efficiency of operations while its multiple operating profile reduces the degree of operational risk.

### **COMPETITIVE COST POSITION - CHALLENGES CONTINUE**

CODELCO's operational size and focus on cost reductions over the last ten years, particularly as the company balanced its work force for more efficient operations has allowed the company to significantly reduce costs. Cash production costs have reduced from approximately \$0.44/lb in 2000 to \$0.32/lb in 2004 and year-to-date September 30, 2005 are tracking at approximately \$0.06/lb. The very favorable position in 2005 reflects the significant increase in molybdenum prices and the by-product credit the company takes to copper production costs and masks cost increases resulting from energy, labor and other input requirements. Moly prices in 2004 increased to \$16.41/lb from \$5.32/lb in 2003 and for the third quarter of 2005, averaged \$30.74. Much of this price increase reflects the growth in steel production and as moly supply increases and steel levels find greater equilibrium, Moody's would expect Moly prices to decrease. As a consequence, CODELCO's cash production costs are likely to increase and continued focus on cost management remains a critical factor.

## SUSTAINABLE EARNINGS PERFORMANCE



Despite operating in a commodity sector with inherent price volatility, CODELCO's operating earnings generation capacity remains solid as demonstrated by the chart above. This reflects the magnitude of the company's operations and favorable cost position achieved in recent years. The company's upside leverage to increased copper prices is clearly manifested in the 2004 and nine months to September 30, 2005 numbers. Spot LME copper prices have averaged \$1.52/lb for the ten months to October versus \$1.27/lb for the comparable 2004 period and Moody's expects prices to remain at healthy levels for the balance of 2005 and during 2006. As a consequence, at CODELCO's current production levels, earnings generation will continue substantive.

## Credit Challenges

### FUNDING AGGRESSIVE GROWTH INITIATIVES - NET INCOME PAID OUT IN FULL TO CHILEAN GOVERNMENT

CODELCO's business and development plan contains significant potential expansions and new mine development. Planned capital expenditures over the next several years aggregate approximately \$6.2 billion and would require fairly significant increases in debt levels during this time frame. In an effort to diversify funding sources and for strategic business alliances, CODELCO is forming a joint venture with China Minmetals Corporation (Minmetals) under which CODELCO will receive an upfront payment of approximately \$550 million, before investment in the joint venture and will provide 56,750 tons of copper annually, over a 15 year period, to Minmetals. Moody's essentially views this as comparable to a forward sale of copper.

### AVAILABILITY OF CASH FLOW FOR DEBT REDUCTION CONSTRAINED

Although CODELCO's earnings and operating cash flow generation is strong, the company pays substantial amounts in export and income taxes and pays out 100% of net earnings to the Chilean government. As a consequence, cash flow available for investment or debt repayment is limited to depreciation and other non-cash add backs. With depreciation and amortization limited to approximately \$550 million until the expansions come on line, additional debt requirements for strategic investment and refinancing could exceed \$500 million in each of the next several years.

As a state-owned mining company, CODELCO operates under Decree Law 1.350 and is required to submit its proposed annual budget to the Ministries of Mining and Finance for approval. As part of the annual budget, CODELCO must include a debt amortization budget, inclusive of interest and principal. In addition, CODELCO can propose to retain a portion of its earnings, although there is no assurance that such a request would be approved. Given the budget submission process, the importance of CODELCO within Chile and in the global mining environment and the company's strong operating cash generating ability, Moody's would expect funds to be available to CODELCO to meet its debt obligations.

## Related Research

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### **Industry Outlook:**

[Base Metals Industry Outlook 2005, December 2004 \(90546\)](#)

### **Rating Methodology:**

[Global Mining Industry, September 2005 \(94364\)](#)

### **Special Comments:**

[Rating Government-Related Issuers in Americas Corporate Finance, July 2005 \(93440\)](#)

[Rating Government-Related Issuers in Americas Corporate Finance - Addendum, July 2005 \(93441\)](#)

*To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.*

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