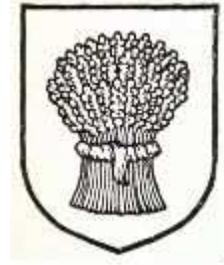


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# Hallgarten & Company

**Metal Review**

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## Musings on Chilean Copper: Taken for Granted

# Chilean Copper

Production stagnating despite the hype and high prices

## THE RESOURCE

As the saying used to go for coffee in Brazil many decades ago, “there is an awful lot of copper in Chile”. How much exactly? As usual, we are faced once again with a lack of a precise common figure from different sources. At least this time there is an excuse because it is a resource that it still being discovered, so any figure at any given time is bound to soon be out of date. The other complication is the maddening habit of the locals to quote wrong or out of date figures, when the latest correct ones are available. A perfect example of this behaviour is when it comes to population, where politicians, businessmen and journalists talk about “15 million Chileans”, when the population by now is 10 % or more above that figure (maybe they subconsciously exclude the indigenous population). This is a topical subject, because as I write, yet another (again!) OECD technical delegation is in town, this time to look specifically at public statistics. As usual they are accompanied by “consultants” who I am sure come from the proper universities and profess a suitable religion, which seems to be the overwhelming criteria for getting such assignments at international organisations. Who needs to know about Chile? We shall find out about the wine and seafood once we get there, mate!

Back to copper. The country has been the world’s largest producer since 1982, and with an estimated 360 million tons of refined-equivalent mineral reserves, possesses nearly 40 % of the world’s total. Output in 2008 was 5.33 million tons, which means that at current rates of production, reserves can last 70 years.

Despite constant announcements of a forthcoming “Great Leap Forward” in output, production has been worse than stagnant for the past 5 years. The 2008 figure was 1.6 % lower than that of 2004. Even though COCHILCO, the government agency in charge of overseeing the sector, has been forecasting a 3.7 % increase in output for 2009, the actual figures show a drop of 4.6 % in the first five months, when production totaled 2.11 million tons. Output had already fallen by 4.2 % in 2008.

Illustrating my point on statistical discord, we have copper trade figures to June, but production figures to May, with the breakdown by producer and customer published several weeks afterwards.

## THE PLAYERS

Despite its relative decline over time, the sector is still dominated by the state-owned CODELCO group. Though its reserves are about a sixth of the country’s total, and its production costs (currently U\$ 1.48 per lb.) the highest in the country, it still accounted for 27.5 % of output in 2008, up to 30.2 % in January-May 2009. Its own output figures differ slightly from those of COCHILCO, but what the heck.

Again taking the same 5 months of 2009, the other leading producers, who jointly accounted for 44 % of production, were all private. The largest of those was Escondida, of the BHP Billiton group, with some 19.5 %, followed by Collahuasi (owned by a consortium led by Anglo American), with a 9.8 % share.

The only majority Chilean-owned large mine is the Luksic’s Los Pelambres (6.5 %) of the total, where they have a 60 % stake with the rest held by Japanese interests. Anglo American has another operation, called “Sur”, which brings in another 5.1 %, with the fifth largest, El Abra, being in an interesting public-private partnership. Freeport has a majority 51 % stake with CODELCO the minority partner with 49 %. The mine accounted for 3.1 % of output in January-April this year.

As recently as 1985, CODELCO still accounted for 79 % of Chilean copper output. Its participation has since declined in both absolute and relative terms. In 1985, its output was 1.08 million tons, and it peaked at 1.73 millions in 2005, whereas new private mines were coming on stream.

## **THE TRADE**

Nearly 98 % of Chilean copper output is exported. The metal's share of exports varies substantially with the vagaries of the price, but under all circumstances has remained in first place among Chilean products sold abroad.

In 2008, despite the dip in the latter part of the year, copper exports still accounted for 50.3 % of the total. In the first half of 2009, with total exports dropping by 38.2 %, copper fared worse than average with a 50.5 % decline, and its share consequently diminished to 43.4 %. The fall in copper exports is in line with the price performance. The pound of copper in the first semester of 2009 averaged U\$ 1.84, compared to U\$ 3.68 in the same period last year, exactly cut by half. In a nervous market, it is now trading in a range of U\$ 2.20 to 2.30.

Taking again the more detailed statistics available to May, Asia remains the main buyer, with 58.1 % of the total, followed by Europe (22.4 %), and the Americas (16.3 %). Asian demand itself is dominated by three countries: China (31.1% of the total), Japan (11%) and South Korea (8.4%). The USA is the fourth largest buyer, with 6.9% of the total, and Brazil the fifth with 5.5 %.

Copper is exported in three different degrees of elaboration. Some 60% goes out in refined form, 33% as bulk and 7% as blister.

Chile obviously produces other mining products too, and though copper alone accounts for 89% of the sector's exports (January-May 2009 share), one rising star has been Molybdenum, which is sold in concentrate or oxide form, and often comes as a by-product of copper mining. The latter sells at some four times the price of copper.

In 2008, Molybdenum brought it U\$ 3.37 bn in exports, but with the price of the oxide form collapsing by over 72 % in the first half of 2009, this figure is bound to be much lower this year. Concentrate exports in the first five months (the only figure available) were down 89 % in January-May.

## **ECONOMIC CONTRIBUTION**

As was said earlier, the fiscal contribution of copper, which is greatly exaggerated, has been dealt with in detail in several previous papers. However, it might be opportune to look at the pressure from conservative political circles, always supported by the Greek (I think that should read "geek") chorus of economists, towards the privatization of CODELCO. Interestingly, even Pinochet and his cronies (several of whom will be back in the administrative saddle if Sebastian Piñera wins the presidency), never dared to touch its public status. His government by-passed the issue by lifting its monopoly, and allowing the development of private mines. Several legal experts consider that move as unconstitutional in terms of ownership of subsoil resources.

One can easily find things wrong with CODELCO. It is a big state elephant with too many employees, conflictive labour relations, low-yield deposits, cronyism, clientelism and corruption. Will the state be better off without it? Unlikely. Once again this past week, the government has rejected calls for its privatization, whole or part (some of the lighter militants would be satisfied with minority shares bought by pension funds etc.). The closest it has got to opening up has been to allow joint ventures, such as El Abra, with private groups.

There is currently new legislation under discussion, in order to make the company more of a corporate rather than a state agency animal. It will include more autonomy and the replacement of ex-officio minister-directors by outside board members (most certainly chosen according to a strict political quota which is followed in all public posts, even more thoroughly than the confessional divisions of the Lebanese parliament).

In its present status, CODELCO is milked as much as possible due to its special tax treatment. The best known of those is the 10 % of export sales accruing towards defence procurement. Again this week we are told that a reform plan will be sent to Congress "next month". We shall believe it when we read it, and I have discussed this matter profusely in my monthly defence reviews. In CODELCO's accounts, this is treated not as a tax but an expense, so it is "above the line".

CODELCO pays three other taxes. Two of those (the 5% royalty and the 17% corporation tax) are common to any mining operation (though contrary to the foreign-owned mining groups who use transfer pricing and inflated cost inter-company loans to reduce tax liabilities, it cannot play such games). However, on top of that it pays (together with the also state-owned Banco del Estado) an additional tax on earnings of 40 %. It is obvious that no private sector buyer will be subjected to such additional burdens, so any privatization once the sale price has been received, will mean a drop in government revenues. Valuations ranging from U\$ 38 to 66 bn have been branded about, but with the erratic behaviour of the metal price, they can only be seen as orders of magnitude.

According to labour statistics as of May 2009, the mining sector has a workforce of 105 thousand (including non-copper mining and quarries). This represents just 1.5 % of the national workforce. Of the total, 9.3 % were unemployed, a percentage slightly lower than the overall rate of 10.2% at the same date.

CODELCO's own sources put its workforce at 19,300 direct workers, and 38,800 sub-contracted workers, as of end 2008. The latter category has been the subject of controversy and caused labour disputes over the past year, and I have no idea if they are all included in the national total of mining workers.

The mining industry is obviously a major user of energy resources, and some projects in the North of Chile have it as a principal customer.

## **PROSPECTS**

As mentioned earlier, Chilean copper production has been stagnating since 2004, after a substantial increase in the previous decade, when it jumped 144 % from 2.22 million tons in 1994 to 5.41 million in 2004.

There is one theory as to producers slowing down their investments in order to create an artificial shortage, so as to push the price up. In fact, from a level of U\$ 0.807 in 2003, the price leaped to U\$ 1.30 in 2004 and averaged U\$ 2.36 in the 2005-8 period, almost exactly equal to the current price. I remind you that the three first governments of the Concertación (1990-2006) managed with a copper price of U\$ 1.08 on average. Ms. Bachelet has had nearly U\$ 3 (up to June 2009). Not that we have seen the difference in potholes and stray dogs in Chile's towns. If you look at it from the producer's point of view, it is much easier to do nothing and spend nothing, only to earn more money, with a market pulled by Chinese growth. Between 1998 and 2008, exports of Chilean copper to China increase nearly sevenfold (in volume).

Still, we are promised another Leap Forward, albeit a more modest one. According to COCHILCO's latest projections published in March 2009, the amount of planned investments in copper during the 2009-13 five year period is U\$ 30.3 bn, of which CODELCO will account for over 51 %. This is supposed to push production up by about 1 million tons (to 6.33 million) by 2015.

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At one stage, Argentina was expected to pose a major challenge to Chilean supremacy, if its hoped output was added to that of Peru, the world's third largest producers. However, Argentine plans have lagged very much behind initial expectations.

## Important disclosures

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