

The Aurubis Copper Mail informs you monthly about current trends on the copper market.

**In focus**



The mood at this year's Cesco (Chilean Center for Copper and Mining Studies) Week in Santiago de Chile was generally quite different from the mood in the spring of 2016. At that time, copper had started the year at prices partially below US\$ 4,400/t, production was running largely without disruptions and copper inventories in metal exchanges were increasing. China's economy was also slowing. At the end of April 2017, the price of copper was around US\$ 5,700/t and market sentiment was largely confident. It is notable that the price level has proven to be resilient even under challenging conditions.

**Economic situation**

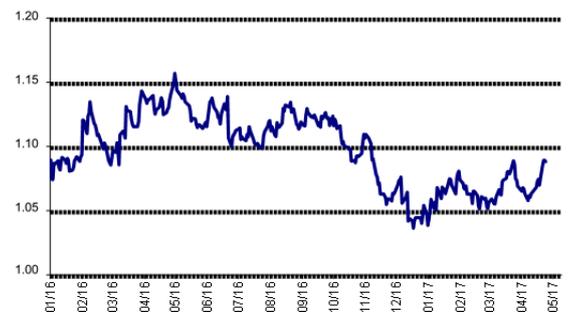


In March, the OECD (Organisation for Economic Co-operation and Development) submitted its growth forecast for the global economy, which foresees gains of 3.3 % in 2017 and 3.6 % in 2018. The IMF (International Monetary Fund) followed suit in April with growth forecasts of 3.5 % for the current year and 3.6 % for 2018. In its opinion, emerging and developing countries will perform better than the industrialized nations, whose economic growth is set at 2 % in both years. Both organizations note high risks, including divergent interest rate development and the resultant currency effects, an imbalance in the relationship between the actual economic outlook and financial market forecasts as well as, in particular, increasing protectionism.

**The euro stabilizes relative to the US dollar after the elections in France**



Average €/US\$ exchange rate



The IMF has put growth in the USA at 2.3 % for 2017 and at 2.5 % for 2018. In the eurozone, GDP growth of 1.7 % (2017) and 1.6 % (2018) is expected.

China's economy should, according to IMF estimates, grow by 6.6 % in 2017 and by 6.2 % in the following year. The first quarter of 2017 went surprisingly well. The GDP in China increased by 6.9 % over the corresponding quarter in the previous year and thus showed the highest growth rate in one and a half years. The country's industrial output expanded by 7.6 % in March and was thus well above consensus expectations of 6.3 %.

## Copper essentials

Price jumps in the copper market often arise more from recent events than long-term fundamental data. The conclusion of tariff disputes at the Escondida mine therefore resonated particularly in April. The resumption of production created pricing pressure. The situation in the Peruvian mining industry also did not give rise to any production bottlenecks. The price of copper therefore dipped periodically from US\$ 5,800/t to below US\$ 5,700/t. Conversely, analysts increasingly believe that there will not be any production surplus in the market for refined copper in 2017 and that instead supply and demand will generally be in balance or that there may be a slight shortage. The figures for January just released by the International Copper Study Group are not exactly a leading indicator, but they do show that, taking seasonal effects into account, the global market is quite balanced. Production especially at secondary and recycling smelters is said to have increased, while primary production showed few changes. Production increases in China and Mexico were offset by decreases above all in Chile but also in Japan and the USA. According to preliminary figures, there was only marginal growth in demand in January in absolute terms. This can certainly be attributed to seasonal effects but is also linked to the special situation in China, which is by far the global leader in demand for copper. Despite maintenance shutdowns at smelters, the country recently showed a high level of copper production, which was defined by expanding capacities and good availability of raw materials. According to data released by the Chinese National Bureau of Statistics, 764,000 t of refined copper were produced in March 2017, an increase of 8.5 % compared to March 2016. In the first quarter, the increase amounted to 7.3 % to 2.13 million t. Primarily for this reason, imports of 292,367 t of refined copper in March remained 36 % below the previous year's figure. Compared to a weak February marked by a number of holidays, however, there was a plus of 25 %. According to Macquarie and other sources, demand for copper is currently growing in China. This is also reflected in decreasing exchange inventories and rising cathode premiums. This increase in demand stems largely from the construction and energy supply industries. However, the rate of growth differs. While the situation in the Chinese construction industry is proving to be better than in the past, growth in the energy sector has slowed somewhat. In the first quarter, expenditures to expand the energy grid are said to have grown only by 2.1 % over the same period of the previous year. In the first quarter of 2016, growth had still amounted to approximately 41 %. Conversely, as was announced in a presentation by the brokerage Jinrui Futures, a subsidiary of Jiangxi Copper, only 26 % of the demand for copper wires is used for the Chinese energy grid. The rest is used in other areas. One of these areas is the expansion of the rail network to 150,000 km. The high-speed section is planned to be 12,300 km long and is expected to require 100,000 t (8.07 t per km) of copper.

### » Price trend

The copper price reacts to the relaxed situation at mines and declines

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The LME copper price weakened to a low of US\$ 5,600/t after starting at US\$ 5,817/t, but then went up again to around US\$ 5,700/t. The contango (spot price < forward price) was generally around US\$ 30/t. Cochilco has raised its average forecast for the 2017 copper price in mid-April from US\$ 2.40/lb (US\$ 5,291/t) to US\$ 2.60/lb (US\$ 5,732/t), meaning an upward adjustment of 8.3 %. For 2018, the organization also expects an average price of US\$ 2.60/lb.

### » Copper raw materials

In talks between Freeport McMoRan and the Indonesian government, an agreement has been reached regarding the resumption of exports of copper concentrates, which had been halted since mid-January. The press agency Reuters had reported that the government had authorized exports of 1.11 million t of copper concentrates until February 16, 2018, citing a statement by the Indonesian trade ministry. No information was released regarding progress in the fundamental negotiations about Freeport's commitment in Indonesia. Metal Bulletin had previously reported that Freeport was in the process of introducing specific steps for shipments. The discussion involves initial deliveries that would reach Asian buyers in May. How much concentrate is stored near ports and could come on the market in a short period of time is not known. The Grasberg mine is said to have mined more than 500,000 t of copper in 2016.

There were reports from Peru of damaged transport routes due to bad weather. A force majeure is also said to have been declared for individual deliveries in Toromocho, for example, though production was apparently not affected. The volumes of concentrate that were produced are said to have been placed in storage. The production disruption caused by the strike at Cerro Verde is interpreted differently by each negotiating party, but because foreign workers were used, the volume losses should have remained relatively low. The same situation had arisen at the Cuajone and Toquepala mines, which both belong to Southern Copper. The strike there began on April 10 and was concluded on April 22/23, when an agreement was reached.

After the European copper scrap market had nearly come to a halt in spot activities during February and March, momentum returned in April. Purchasing interest could be noted from individual processors, though it is said to have only been for small volumes. The supply of materials, however, continued to be good.

### » Production

According to the National Bureau of Statistics, China produced 764,000 t of copper in March and achieved growth of 7.3 % in the first quarter of 2017 compared to the previous year's period, with production for the first quarter totaling 2.13 million t. There had been maintenance shutdowns at larger smelters such as Tongling, Yunnan and Shangdong Fangyuan. The higher copper price and good availability of raw materials are said to have been key to the high production level. Concentrate imports totaled 1.63 million t in March 2017, compared to 1.37 million t in March 2016.

Of the maintenance shutdowns planned for this year, the one at Japan's Pan Pacific Copper is particularly noteworthy. It will affect the Saganoseki smelter and its related electrolysis. The anticipated shutdown period of 70 to 80 days is unusually long. It is slated to begin at the end of September and will enable an upgrade of the facilities. The volume losses will comprise about 60,000 t of copper.

### » Inventories

After the increase in the previous month, the development of inventory on the exchanges reverses itself



April 25, 2017	Europe	North America	Asia	Total
				
LME	29,750 t	57,500 t	174,225 t	261,475 t
COMEX / SHFE	---	140,592 t	240,191 t	380,783 t
Total Cu inventories at metal exchanges	29,750 t	198,092 t	414,416 t	642,258 t
Shanghai bonded warehouse (Mid-April 2017; C RU)			rd 620,000 t	rd 620,000 t

While there was considerable unease in March due to a sudden increase in copper exchange inventories, developments in April quieted moods again. Inventories decreased significantly at LME as well as SHFE. The decline in April was most significant at SHFE's warehouses, where it totaled approximately 67,000 t, leaving inventories at 240,191 t as of April 21. At LME the decline amounted to about 15,000 t to 264,850 t (April 24, 2017). Canceled warrants here amounted to 121,675 t. Stock removal was very widely dispersed across the Asian locations and the location in New Orleans. The copper volumes stored at SHFE and LME would theoretically cover only about eight days of global demand for refined copper.

### » Product markets

The following developments could be observed at select European end markets for copper:

Record sales were achieved in March in the European car market, with more than 1.8 million vehicles sold, according to data provided by the European manufacturer's association ACEA. A total of 3.9 million new cars were registered in the first quarter in this regional market, which represents growth of 8 % over the previous year. Considering that a mid-size car with a conventional engine contains an average of about 25 kg of copper, then almost 100,000 t of copper were used for these new vehicles. The largest potential for the future, however, lies in China. The German Association of the Automotive Industry has made a conservative estimate of sales growth there in 2017 totaling 5 %, an increase to 25 million vehicles. In terms of copper use, this amounts to processing of at least 625,000 t.

Production in the EU construction industry grew by 5 % in February 2017 over the corresponding amount in the previous year, according to Eurostat. It thus reached the highest level since the summer of 2010. Sweden and Germany are among the countries with a particularly significant surge.