

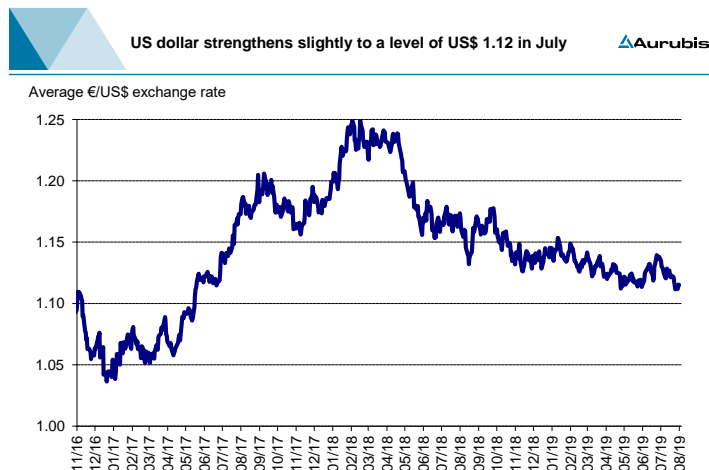
The Aurubis Copper Mail provides monthly information about current trends on the copper market.

In focus



The impacts of the ongoing trade conflict are evident in several different areas: concerned about China's economic development, market analysts revised their copper price estimates downward in the current Reuters poll. They now expect an average copper price of US\$ 6,173/t for 2019 (May poll: US\$ 6,505/t). The average for 2020 should then be US\$ 6,432/t (May poll: US\$ 6,810/t). Looking at the balance between supply and demand for refined copper, the participants expect a deficit of 178,000 t for 2019 and a deficit of 170,000 t for 2020. With a total market volume of nearly 24 million t, this is still a fairly balanced market.

Economic situation



The US and China met in July again for talks regarding the current trade conflict, as Reuters reported. Even though the US doesn't want to levy any new tariffs for the time being, there isn't a breakthrough in sight. The conflict is therefore still the big unknown when looking at the future development of the global economy. Macquarie thinks so, too, according to their latest economic forecast published in early July. The investment bank assumes that the US will grow by about 2.5 % (GDP) in 2019, while the Chinese and European economies should grow by 6.2 % and 1.1 %, respectively.

The trade agreement the EU entered into with the South American Mercosur region in early July is expected to significantly boost the trade of non-ferrous

metals and products between the two partners, according to a report from MBI NE-Metalle and information from Fastmarkets. This is due first and foremost to the discontinuation of nearly all tariffs on industrial goods, including metals and metal products. The Mercosur region includes Brazil, Argentina, Uruguay, and Paraguay. To put it into perspective: according to Eurostat, the EU imported € 32.7 million worth of copper from Brazil and € 6.5 million worth from Paraguay in 2018, as reported by MBI NE-Metalle. When it came to copper products, the EU delivered € 53.8 million worth to Brazil and € 6.4 million worth to Argentina. The two regions also actively trade lead, zinc, and tin.

The US dollar was quoted at US\$ 1.14 to the euro at the end of July.

Copper essentials

Reuters published its latest market analyst survey on the future copper price and market balance in July. According to the survey, the participants now expect an average copper price of US\$ 6,173/t for 2019. The average for 2020 should then be US\$ 6,432/t. Looking at the balance between supply and demand for refined copper, the participants expect a deficit of 178,000 t for 2019 and 170,000 t for 2020.

In July, the International Copper Study Group (ICSG) released its estimates for the period from January to April 2019. According to these numbers, *mine output* in the first four months of the year was at 6,544,000 t and thus slightly below the level of the previous year. Mine capacity utilization reached 80.1 % (previous year: 81.1 %).

Global output of *refined copper* from concentrates and recycling materials was at prior-year level during the period, at 7,845,000 t (previous year: 7,839,000 t). The utilization of global refining capacities declined from 86.4 % in 2018 to 84.0 % in 2019.

Visible global *demand for refined copper* rose during the period by roughly 1 % to 7,993,000 t (previous year: 7,909,000 t), mainly driven by higher demand from China.

This results in a slight deficit of 150,000 t for January to April (previous year: deficit of 64,000 t) for the global refined copper balance.

Reuters reported that the London Metal Exchange (LME) plans to reform its warehouse rules. The reason for the change is that the LME warehouse system is losing more and more relevance. Previously, the LME inventories provided a good indication of how the prices for each metal would develop, according to a quote from a BMO market analyst published by MBI NE-Metalle. However, the analyst continued, less and less metal was stored in the official LME warehouses in the years after 2008/09, in favor of storing it at non-registered locations. This led to lower LME inventories causing unjustified fluctuations in the futures prices. The suggested reforms will be discussed in the context of the consultation until September 12 of this year.

Furthermore, the brands listed on the LME have to report more about their influence on the environment in the future, according to a Reuters article. This is part of the metal exchange's initiative to make the value chain more transparent. Topics such as human rights and child labor are at the forefront. This development comes at a time when the LME is increasingly including metals like cobalt and lithium in its portfolio of products traded on the exchange. Anyone who wants to be listed on the LME in the future also has to prove the existence of a current ISO 14001 (environmental management system) certification.

According to Reuters, the South American country of Colombia has plans to expand its copper production significantly in the next several years to become a notable producer of the red metal. A spokesperson from the national mining agency explained that the country is in an attractive position near the so-called copper belt and has resources of nearly 3 million t of copper and another million tons of reserves near the northern and western coasts. She also stated that important court rulings in 2018 had paved the way for new projects and given investors more security in their investment decisions.

In addition to Colombia, Russia is also planning to expand its mining activities, as S&P Global Platts reported. The country wants to develop a new copper/gold project in 2020, supposedly located in the Chukotka province. Production is supposed to start in 2026 and then reach full capacity in 2028. The complex, called Baimskaya, should have an average annual output of 220-250,000 t of copper and 400,000 oz of gold (11 t). The copper concentrates produced are supposed to go to Asian customers in particular. The region is one of the top 10 undeveloped copper regions in the world. Geologists estimate the copper resources at about 9.5 million t.

» Price trend



In July, the copper price on the London Metal Exchange (LME cash settlement) was stable. It closed the month at around US\$ 6,000/t and was thus at the level of the prior month (end of June 2019: US\$ 5,972/t).

Commerzbank confirmed its 2019 forecast for copper and continues to anticipate an average of US\$ 6,250/t for the current year. For 2020 the bank predicts an average of US\$ 6,200/t.

In contrast, the Chilean Copper Commission, Cochilco, reduced its outlook for the current year to an average of US\$ 2.81/lb (about US\$ 6,193/t) from the previous forecast of US\$ 3.05/lb (US\$ 6,722/t). Cochilco then sees an average copper price of

US\$ 2.90/lb (about US\$ 6,392/t) for 2020. Cochilco explains the forecast tweak by referring to the weakening of the global economic environment and geopolitical tensions, as Reuters reported.

» Copper raw materials

Reuters reported that the global copper concentrate supply continued to be satisfactory in July. According to S&P Global Platts, spot TC/RCs for copper concentrates were around US\$ 60/t / 6 cents/lb Cu in early July. The information service reported that this was the result of stronger demand from Chinese smelters, with production bottlenecks at certain mines at short notice.

The lower level of spot TCs at the moment – which the Chinese Smelters Purchase Team (CSPT) also used as the basis for the buying floor it fixed for the third quarter – is increasingly difficult for Chinese smelters, which are more highly dependent on the spot market, as Reuters reported.

The news service quoted an official representative of the CSPT, who said that Chinese smelters would consider production cuts at the current TC/RC level. This was also supposedly part of the discussions at the last CSPT meeting, as smaller smelters in particular wouldn't be able to produce profitably at this TC level anymore. This could ultimately lead to lower global copper output since China and its smelter industry depend strongly on concentrate imports, according to S&P Global Platts. Furthermore, S&P Global Platts reported that copper producer Tongling pointed out that lower refining charges could negatively influence the commissioning of new smelter projects in China.

According to Reuters, in July the mine operator Antofagasta entered into a much-discussed contract with the two Chinese smelter operators Jiangxi and Tongling for the first half of 2020. Two sources quoted by Reuters stated that not much is known about the contract thus far. Both sources agreed that this very early contract didn't hold any benchmark character for 2020. The kick-off for the talks surrounding the treatment charge established each year (the so-called benchmark) for standard copper concentrates traditionally takes place at the LME Week in London in October.

There was more news about current and future mine projects in July.

According to a report from American Metal Market, BHP has increased its production outlook, planning an output of about 1.71 to 1.82 million t in 2020. As a comparison: in 2019 BHP wants to mine 1.62 to 1.70 million t. The main reason for the increase is the higher output expected from the Escondida mine.

As Macquarie reported, the first industrial-scale copper mine in Ecuador opened in mid-July. The Mirador copper mine in the Zamora-Chinchipec Province near the Peruvian border is supposed to have a nominal capacity of nearly 100,000 t of copper concentrate output per year. The mine lifetime is estimated at about 30 years.

According to Bloomberg, one of the largest copper projects – Tia Maria – received the permit for the construction phase from the Peruvian government. The project has an initial investment volume of approximately US\$ 1.4 billion. Mine operator Southern Copper plans to invest more than US\$ 10 billion to increase output to about 1.8 million t of copper until 2026.

There are plans to continue boosting copper production in the African country of Botswana as well, as MBI NE-Metalle reported. The US private equity firm Cupric Canyon Capital wants to mine more copper and silver from the Khoemacau mine there starting in 2021. Other copper projects are envisioned in Botswana apart from the Khoemacau project. There are currently just two mines there, with an annual output of around 34,000 t of copper. According to the operating company, the Khoemacau mine is supposed to contain around 100 million t of copper. The current plans foresee an output of 60,000 t of copper per year in the first stage until 2021, with an investment volume of approximately US\$ 391 million.

In July, China released a second tranche of import licenses for category 6 recycling materials, as Goldman Sachs reported based on details from the information service Shanghai Metal Market. Overall, China Solid Waste and Chemicals Management issued licenses for a volume of about 124,000 t of copper scrap imports. Only certain regions have gotten a chance until now, so the release of additional import quotas for other Chinese regions is expected in the coming months. Fastmarkets assumes that these will come in August and quotes a Chinese scrap trader who stated that most of the previous import licenses had been used up already.

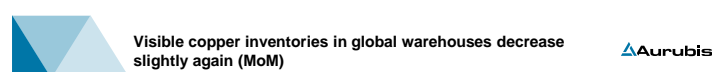
Meanwhile, S&P Global Platts calculated that, at 850,000 t, copper scrap imports in the first half of 2019 were 26 % lower than the previous year. This was due in particular to the import restrictions and the import ban on category 7 materials. S&P believes that this will contribute to China further expanding its domestic collection activities. China's Ministry of Ecology and Environment maintains its objective of banning imports of so-called solid waste at the end of 2020.

» Production




As Macquarie reported, Codelco once again delayed the ramp-up of its Chuquicamata smelter at the start of July. Currently, the investment bank assumes that the smelter will run normally in the course of the third quarter and comply with the higher environmental standards in Chile. The Chuquicamata smelter downtime also led to Chile providing about 16 % more concentrates to the global market from January to May than in the same period of 2018.

American Metal Market reported that spot copper premiums in the US came under some pressure at the lower end of the price corridor in July. The current level is between 7 and 8 cents/lb (previously between 7.25 and 8 cents/lb). Fastmarkets says this is due to the high supply of high-purity copper scrap in the US owing to the import restrictions on category 6 materials in China. The high-purity scrap competes with cathodes. Spot copper premiums were stable in China, in a range between US\$ 53 and 69/t in July, as Fastmarkets published. This is similar to the European market, where copper premiums remain between US\$ 45 and 55/t (Rotterdam CIF).

» Inventories



Inventories in the global warehouses increased again overall in July. They were at 478,900 t at the end of July, about 69,900 t higher than at the end of June (approximately 409,000 t).

July 30, 2019	Europe	North America	Asia	Total*
				
LME	107,250 t	38,050 t	145,200 t	290,500 t
COMEX / SHFE	---	39,253 t	149,189 t	188,442 t
Total Cu inventories at metal exchanges	107,250 t	77,303 t	294,389 t	478,942 t

*Differences possible due to rounding

» Copper products

The following developments were evident in selected European end markets:

As MBI NE-Metalle reported, German industrial activity continued to decrease in July. The Purchasing Managers' Index that IHS Markit compiled for the manufacturing sector fell to 43.1 points following 45.0 points in June. The PMI of the non-manufacturing sector decreased to 55.4 (55.8) points in the same period.

MBI NE-Metalle reported that the German Association of the Automotive Industry (VDA) anticipates a slight downturn on the global automotive market in 2019. This would impact China in particular, where the VDA expects a 14 % decrease in sales in the first half of 2019. According to the VDA, the trend on the European and US markets was 3 % and 2 % weaker, respectively, in the first half of 2019 compared to the previous year. The VDA still points to the ongoing trade conflict between the US and China as the biggest challenge.

Moreover, the VDA mentioned that in order to reach the European Union's climate goals by 2030, the expansion of charging infrastructure would have to be pushed forward in both public and private spaces. Today, there are 17,400 public charging stations, according to the VDA. To achieve the 2030 targets, however, the VDA said that about 1 million public charging stations would be necessary, as well as approximately 100,000 fast charging stations and several million private stations.