

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

In focus



The copper market received special attention in the month of September. For one thing, it was the first active business month after the end of the vacation period; for another, not much time remains until this year's LME week (October 30 - November 3), so that the first general indicators for the forthcoming negotiations for 2018 annual contracts may materialize. Although copper lost a little of its prior gains in September, this was generally not seen as a reversal; rather, as a consequence of profit taking. A sudden significant increase of LME inventories, as occurred again this year, was not a cause for further pressure on the copper price. On the other hand, this prevented a recovery. While nothing has been heard yet from the cathode market about the possible premium situation for the

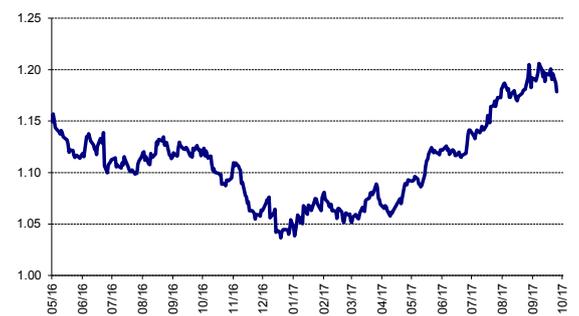
coming year, the Chinese Smelter Buying Team, with its higher TC/RC basis for the fourth quarter of 2017, provided a first reference point on the concentrate market.

Economic situation

US dollar remains weak and shows little inclination for greater movement

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Average €/US\$ exchange rate



The industrial sector in China continued to profit from robust domestic demand. The purchasing manager index, which was compiled by the statistics bureau and the logistics association, was correspondingly 3 digits higher in August, at 51.7 points. Values above the 50-point mark highlight an output increase in the manufacturing sector, in comparison with the previous month.

The industrial sector in the **eurozone** also gained momentum again in August. According to the Markit Institute, the purchasing manager index rose by 0.8 points to 57.4 in August. The approximately 3,000 participating companies thereby expect continued growth in the eurozone. The companies are profiting especially from rising domestic demand and strong overseas

trade, according to the institute. After economic growth of 0.6 % in the second quarter, analysts anticipate 0.5 % for the months of July - September.

Germany continues to have strong GDP growth. The four large economic research institutes are all forecasting growth of about 2 % for the federal republic (2016: 1.9 % growth). This should continue in 2018. The European Central Bank's monetary policy and international trade remain important reasons for this, according to the Leibniz Institute for Economic Research. The production figures for industry also corroborate this. In July, these again showed slight upward movement. The significant production increase for capital goods (+0.8 % compared to the previous month) and consumer goods (+0.7 % compared to the previous month) had a positive effect here.

After the exchange rate of the euro compared to the US dollar was particularly dynamic, it remained relatively steady in August. It fluctuated within a range between \$ 1.19 and \$ 1.20.

Copper essentials

After a turbulent August, in which the prices for nonferrous metals seemingly knew only one direction and copper meanwhile marked a new three-year high, the situation calmed down again noticeably in the course of September. The price for copper is currently indeed lower, but appears to be consolidating at this level. Exaggerations had previously repeatedly been reported; therefore, a correction was seen as overdue. In September, there was basically little situation-changing news.

With their copper market figures, the ICSG showed that a production deficit of 70,000 t resulted in June and thereby a deficit of 75,000 t occurred in the first half-year of 2017. In total, worldwide production of refined copper was at 1.96 million t in June, whereas the demand was 2.03 million t.

In China, imports of refined copper amounted to 254,762 t in August. This is indeed around 10 % less than in the previous month; however, 10 % more than in the same month of the previous year. The Golden Week, with the national holiday on October 2, is casting its shadow. Order activity is therefore expected to be more reserved. Incoming import quantities could raise the copper inventories in the bonded warehouses. The current premium level for cathode deliveries CIF Shanghai was most recently at approximately US\$ 52 - 65 /t, according to Metal Bulletin.

» Price trend

Copper price falls in the first half of September, followed by a consolidation phase

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After a high of US\$ 6,797 /t was reached in the previous month, the copper price decreased noticeably in the first half of September and fell below a level of US\$ 6,500 /t, a consequence of profit taking. In light of the preceding price increase, this was not unexpected. The price subsequently fluctuated mostly between US\$ 6,400 and 6,500 /t, without providing a clear sense of direction. Price pressure resulted from the significant inventory increase on the LME; however, a price slump did not result. On the other hand, the inventory development prevented a recovery to the preceding price level. The difference between the spot and three-month contracts rose from US\$ 22 /t on September 11, 2017 to approximately US\$ 45 /t in the second half of the month, with a peak value of US\$ 57 /t on September 26, 2017.

» Copper raw materials

Differences of opinion seemed to arise on the **concentrate market**, which happens almost every year. In September, the Chinese Smelter Purchase Team (CSPT), which unites the ten largest Chinese copper smelters, published its basis for concentrate purchases for the fourth quarter of 2017. As a sign of increasing market confidence and against the backdrop of good concentrate availability, the purchasing group raised the minimum TC/RC by about 10 % to US\$ 95 /t and 9.5 cents/lb. As a reminder: In fall 2016, a benchmark of US\$ 92.50 /t and 9.2 cents/lb was set for 2017. Chile's mining industry has a different opinion. It sees lower TC/RCs for 2018 and is prompting uncertainties at the Indonesian Grasberg mine and the Chilean Escondida mine, where talks regarding a collective agreement must continue.

The possible wage disputes expected for fall in the South American copper industry have not yet materialized. Codelco (Chile) was able to conclude a contract with the Radomiro Tomic mine trade union in mid-September. The agreement enters into force on October 1 and is valid for 35 months.

The Commodities Roundtable Forum organized by the North American Institute of Scrap **Recycling** Inc. (ISRI) offered a mixed picture, which was characterized by the discussion about current events, ranging from the consequences of the recent hurricanes in the USA to the current state of the announced import restrictions for scrap in China. In light of the extensive destruction left in the wake of the floods and hurricanes, the availability of scrap may increase in the short term in the affected areas of the USA. The topic of China, which we reported on in detail in the last issue of Copper Mail, was the subject of almost every conversation at the event. Speculations prevailed in this connection about the details of the import ban, regarding which the Chinese government has not yet made an official statement. With respect to the current assessment of the copper scrap market, opinions in Europe addressed the situation on the European market: The copper price increase led to a good flow of material with corresponding good supply in recent months. Consumers were therefore able to achieve high refining charges, acquired for later dates or withdrew temporarily from active trading as a result of the good supply. The copper price decline in the first half of September therefore did not significantly change the buying possibilities for the copper scrap consumers.

» Production

The Philippine province of Leyte was struck by a severe earthquake at the beginning of July 2017, following which Glencore's Pasar copper smelter was only able to produce at a low level. A planned downtime was then carried out between 12 - 26 September. Annually, the smelter produces 215,000 t of copper cathodes and processes 720,000 t of concentrate.

Codelco is planning a modernization program in the amount of US\$ 1.9 billion for its copper smelters, which should improve environmental protection. Approximately US\$ 107 million will be used for the modernization of the Ventanas copper smelter. A further US\$ 908 million will flow into the modernization of the smelter belonging to the Chuquicamata mine; for the further development of the smelter at the El Teniente mine, US\$ 557 million has been budgeted, and US\$ 328 million should cover the upgrade of the Salvador smelter.

Codelco continues to work on the conversion of the Chuquicamata mine from open-pit mining to underground mining. According to the company, more than 50 % of the process has meanwhile been completed. In the future, the copper producer plans to increase its output of "fine copper" to 366,000 t.

» Inventories

Strong buildup of LME copper inventories follows previous similar activities 

| September 25, 2017 | Europe | North America | Asia | Total |
|---|--|--|--|-----------|
| |  |  |  | |
| LME | 80,375 t | 31,375 t | 193,400 t | 305,150 t |
| COMEX / SHFE | --- | 175,864 t | 141,318 t | 317,182 t |
| Total Cu inventories at metal exchanges | 80,375 t | 207,239 t | 334,718 t | 622,332 t |
| Shanghai bonded warehouse (Mid-September 2017, CRU) | | | 510,000 t | 510,000 t |

In September, copper inventory development once again faced the phenomenon of sudden large deliveries in the LME warehouses. Initially, August's downward trend continued. After 220,875 t at the beginning of the month, a low of 208,425 t was reached on September 8. Within just four days, the inventory then increased by about 96,000 t to 304,350 t. Larger deposits were made once again in the Asian warehouse locations of Busan and Port Klang, as well as in Rotterdam. In the second half of the month, inventory movement at the LME was limited. A clear trend could not be determined. The volumes registered for delivery (cancelled warrants) were at approximately 70,000 t. At the SHFE, an opposing trend arose. Here, the copper inventories decreased from around 184,000 t

to 141,000 t. Volume development at the Shanghai bonded warehouse showed little change. The research company CRU estimated the inventory there at 510,000 t in mid-September, which is 10,000 t more than at the beginning of the month. The development at COMEX in New York was unspectacular. Here, there was an increase from 167,000 t to approximately 176,000 t.

» Product markets

Initially noteworthy is that production in the German industrial sector was accompanied by increased capacity utilization. In the second quarter, this was again at 86 % for the first time since 2008, reported the BDI. In the third quarter of 2017, a capacity of 86.7 % was reached in the manufacturing sector. Order volumes were exceptionally high during this period, with an average of 3.2 production months.

Car sales were mixed in the major markets. Europe and China showed growth, according to the Association of the Automotive Industry. Registrations in Europe rose in August by about 6 % in comparison with the previous year, above all in Italy and Spain. A gain of 4 % resulted for Europe for the first eight months of 2017. In China, car sales increased by 5 % in August; in the first eight months of 2017, by around 3 %.

According to the industry association VDMA, **mechanical engineering** in the EU showed a production increase of almost 4 % in the first seven months of 2017. The companies evaluated their future production expectations optimistically in August 2017.