Synthetic US Copper

Introduction

Copper Trading

Copper is the world’s third most widely used metal, after iron and aluminium, and is primarily used in highly cyclical industries such as construction and industrial machinery manufacturing. Profitable extraction of the metal depends on cost-efficient high-volume mining techniques, and supply is sensitive to the political situation particularly in those countries where copper mining is a government-controlled enterprise. Copper is an excellent conductor of heat and electricity which makes it invaluable for use in the construction and electrical goods industries. In the construction industry, it is used in the form of cables, wiring, plumbing, heating and ventilation and other building materials. It is also used extensively in the wiring and circuit boards of phones, computers and other electrical goods. It is used extensively as well as a component in metal alloys, most notably brass and bronze. Copper also has excellent anti-microbiological properties which makes it suitable for the control of bacteria. It is also used in the chemical industries for medical and agricultural disease control. Annual world production was 19.8 million tonnes in 2011. Copper futures contracts are traded on the Chicago Mercantile Exchange (CME) as well as other exchanges across the world and are delivered in every month of the year. Every metal futures traded on the CME conforms to strict specifications regarding quality, grade and contract size described below.

CME copper futures contract specifications

Product symbol: HG  
Contract size: 25’000 pounds  
Grade and quality: Grade 1 Electrolytic Copper Cathodes (full plate or cut)  
Price quotation: US Cents per pound  
Settlement type: Physical

Recent price history
At the beginning of July 2008, Copper peaked at a close of over USD 407. Then the global financial crisis (GFC) or global economic crisis began around July 2007 and destroyed demand for many durable goods. As a direct consequence of this global slowdown, copper prices declined very quickly in the following month by more than USD 280 to reach USD 125 in December 2008, almost 30% of the price reached 18 months earlier. In January 2009 copper rose again and broke through USD 460 in February 2011. Since the end of February 2011, copper prices dropped again, descending to below USD 320 in July 2013.

Which factors can affect copper prices?

The price history of copper shows that demand and supply can be impacted by various different factors such as:

- Politics
- Social factors
- Environmental factors (such as natural disasters)
- Macroeconomics
- Speculation
- Technological advancements (such as with alternative energies)
- Global economic conditions
- Emerging economies and markets
- New electrification wave

Due in part to its presence in numerous markets, copper price is subject to various external forces as well as other markets' conditions. Changes in the industries that use copper in their products can have a significant impact on the copper industry itself. The usage of copper may be
significantly impacted by global economic conditions and by emerging economies. Improving living conditions and expansion of infrastructure require electrification of houses, manufacturing facilities, and offices. Further copper is required in electrical powerplants, transformation and transport of the energy and for the extension of public transport. Due to the new electrification wave, improved comfort functions and hybrid powertrains require increased amounts of copper to be built into vehicles. Plugin hybrids are going to increase the demand for electric power from the grid. The use of solar panels on buildings increases copper usage in the building sector.

It is important to note that currency trading is also directly affected by copper prices. For example, the US dollar may cause the rise or fall of the price of copper, and vice-versa. Due to this fact, the US dollar is known as a commodity currency. Other commodity currencies are the NOK, CAD, AUD and NZD.

**Who uses the copper market?**

The copper marketplace comprises of a large array of participants, including:

- Commercial enterprises with a direct stake in the price of copper: the contract can be a valuable hedging instrument. As a safeguard against falling cash market prices, producers and traders can sell copper futures to lock in prices for future delivery, protecting the value of future copper sales.
- Other copper industry participants.
- Professional metal traders.
- Investors and speculators: with no intention of buying or selling actual physical commodities, are simply trying to make money by trading its value.

**What are the underlying risks of copper trading?**

The risk of loss in trading copper or other commodities can be substantial. You should, therefore, carefully consider whether such trading is suitable for you in light of your financial condition.

Copper trading is speculative and influenced by many factors

Copper trading can be very volatile and involves a high degree of risk. The low margin deposit required permits an extremely high degree of leverage. Accordingly, a relatively small price movement in a copper contract may result in immediate and substantial loss or gain to the trader.

Price movements are influenced by among other things; changing supply and demand relationships, economic events, trade, fiscal, political, monetary and exchange policies of governments, and emotions of the market place. Foreign policy of certain countries can have a big impact on copper prices, and investors can do very little about this aspect of copper trading.
Those diverse factors can cause drastic changes in the price of copper, therefore making copper trading extremely risky. War or civil unrest can decrease copper production, increasing demand and sending prices skyrocketing, however producing too much copper can lead to a drop in copper prices, resulting in a big loss for copper traders.

None of these factors can be controlled and no assurance can be given that the trading activity will result in profitable trades and not in substantial losses. COPPER TRADING IS SPECULATIVE AND INVOLVES A SUBSTANTIAL RISK OF LOSS AND MAY NOT BE SUITABLE FOR ALL INVESTORS

Demand for copper can be extremely difficult to predict

Analysts generally predict the demand for copper to go up, and therefore the price to increase.

Copper has many applications and the copper demand is worldwide. As this demand increases, prices should also be expected to rise. However, copper demand is a tricky thing to predict! As the price of copper increases, this places greater pressure on consumers’ consumption. For example, should copper prices increase at a time when the economy is worsening; this will more than certainly result in the drop in demand from consumers. Less demand means a decrease in copper price, with copper traders ultimately losing money.

Trade leverage

Depending on your experience level, trade leverage can be a powerful tool to help maximize returns, or alternatively it can cause significant loss. Due to its complexity, trade leverage must not be taken lightly and it is recommended that you refrain from trading until you have read and fully understood the mechanism described in the eForex contract, in the Account opening documentation and on Swissquote’s websites.

In addition, copper trading with leverage may not be suitable for all investors as it carries a high degree of risk. As you could lose your initial deposit, you should ensure that you fully understand all the risks. These risks are also intensively described in the eForex contract, in the Account opening documentation and on Swissquote’s websites.

Failure of Electronic Trading System

Electronic trading systems are susceptible to temporary breakdown. In the event of system or component failure, it is possible that (for a certain period of time), you may not be able to enter new orders, execute existing orders, modify, or cancel orders that were previously entered. In such circumstances, you shall directly contact a sales representative or the dealing desk in order to check and monitor your open positions.

Copper Trading
Swissquote aims to facilitate to its clients the access to online copper trading, as well as to provide an alternative to current solutions offered by other online brokerage platforms (namely futures).

We aim to propose an copper trading alternative with the same trading features that are currently applied to currencies, precious metals and energy on all of our eForex platforms such as;

- Real time trading
- Deep liquidity
- Low cost trading
- Leverage use
- Automatic closing out
- Automatic rollover of open positions
- No physical delivery

A copper transaction executed through Swissquote is made against USD (CUC/USD).

**What does Swissquote propose?**

Through its copper contract, Swissquote proposes a combination between:

- OTC trading (with no physical delivery); and
- Derivative products (which imply automatic management of expiration dates).

The copper transaction is a computation derived from the CME Copper Future contracts (hereafter “CME Copper Futures”) traded and quoted at the Chicago Mercantile Exchange (Symbol: HG).

CME Copper Futures are organized through a specific calendar and only standardized contract months are available in the marketplace (for example: January 2013, February 2013, March 2013, etc.). On the other hand, CME Copper Futures have the benefit of a relatively high liquidity.

**Price generation**

The copper contract is constructed through the combination of two CME Copper Futures contracts with different maturities.

Indeed, the copper contract price is based on the 1st Maturity Future (HG1) and adjusted by the Spread between the front contract (HG1) price and the next available Future (HG2) price; the spread itself adjusted by a Delta Factor and a Time Factor.

\[
\text{Swissquote’s Copper (CUC/USD)} = HG1 - \left[ \text{Spread} - \text{Delta Factor} \right] \times \text{Time Factor} \pm \text{SQ Markup}
\]

\[
\text{Spread} = HG2 - HG1 \quad (eq \ to. \ Price \ difference \ between \ 2^{nd} \ & \ 1^{st} \ Maturity \ Future \ contract)
\]
HG1: the 1st Maturity Future
HG2: the 2nd Maturity Future

Delta Factor = Price adjustment computed once a month to avoid a price gap at the Future contract switch.

Time Factor = ratio combining the remaining days before HG1 expiration and the total number of day between the last and the next expiration.

Leverage

During the week, you will enjoy a maximum leverage of 30:1. Actually, this leverage is only available between 11:00 pm CET on Sunday and 09:00 pm CET on Friday. On weekends (between 09:00 pm CET on Friday and 11:00 pm CET on Sunday), the maximum leverage is 15:1. Regardless of which platform you choose, a 30:1 leverage with a capital outlay of USD 1,000 will allow you to invest USD 30,000 in the market.

Automatic closing out

You are fully responsible for monitoring the activity on your account. However to ensure that your losses do not exceed your entire equity, Swissquote operates a system which ensures the automatic closing out of all open positions as soon as the margin threshold is breached, at the next available market price for the corresponding execution size. For additional information, please refer to the Forex contract, the Account opening documentation and Swissquote’s websites.

Rollover/overnight fee

It is not possible to physically deliver the aluminium traded on our platform. The aluminium contract is purely speculative by nature. To prevent the delivery, the open aluminium positions are automatically renewed for the following maturity date. To smooth out the price difference between the two Futures contracts (HG2 & HG1), which basically represent the monthly rollover cost, we would apply this difference on a daily basis, as a rollover fee. With such a fee actualized on a daily basis, the client does not suffer from the switch from one contract to another.

daily Rollover cost = ( ( [ HG2 – HG1 ] - Delta Factor ) / Y) ± SQ Markup

Y = total number of days between the last and the next expiration (HG1 & HG2).

This rollover mechanism is applied on daily basis and therefore has consequences on your account. An amount is credited or debited to your trading account and is related to the renewal of your position: this being the price difference between the next available CME Copper Future maturity (HG1) and the subsequent available CME Copper Future maturity (HG2). The rollover process takes place automatically between 11:00 p.m. and 11:15 p.m. The debit or credit is then booked to your account on the following day.
Practical examples of Overnight Rollover

Example 1

Date of transaction: 24 January 2011

Available CME Copper Futures contracts:

<table>
<thead>
<tr>
<th></th>
<th>Price</th>
<th>Roll date</th>
</tr>
</thead>
<tbody>
<tr>
<td>HG1 maturity</td>
<td>432</td>
<td>13.02.2011</td>
</tr>
<tr>
<td>HG2</td>
<td>433</td>
<td>-</td>
</tr>
</tbody>
</table>

Delta Factor = 0.5

Time factor = 0.57

Spread = 433 – 432 = 1

**CUC/USD Price** = 432 – ((1 - (0.5)) * 0.57) + mark-up = 431.715 + mark-up

Roll over fee: 0.0441 + mark-up

Example 2

Date of transaction: 30 March 2011

Available CME Copper Futures contracts:

<table>
<thead>
<tr>
<th></th>
<th>Price</th>
<th>Roll date</th>
</tr>
</thead>
<tbody>
<tr>
<td>HG1 maturity</td>
<td>421</td>
<td>10.04.2011</td>
</tr>
<tr>
<td>HG2</td>
<td>418</td>
<td>-</td>
</tr>
</tbody>
</table>

Delta Factor = 1.5

Time factor = 0.39

Spread = 418 – 421 = -3

**CUC/USD Price** = 421 – ((-3 - (1.5)) * 0.39) + mark-up = 422.755 + mark-up

Roll over fee: -0.0536 + mark-up.
Help

If you require help or further information, please do not hesitate to contact our FX sales team +41 44 825 87 77.

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