



Copper, gold and a false choice

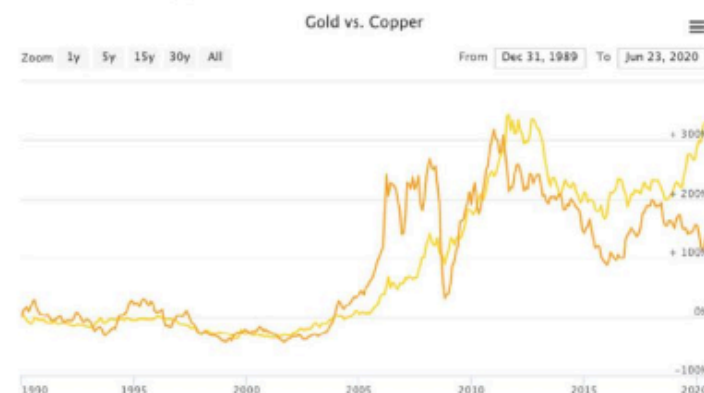
Natural resources investment advisor Matt Geiger considers recent changes in the copper-gold ratio

It's safe to say that copper and gold are the two most widely followed metals by today's investor. It's probably not a coincidence that these were also the first two metals to be discovered by humans some 6,000 years ago – helped by the fact that copper and gold are two of only a handful of metallic elements that can be found in nature in their native form. Each metal has been used both industrially and monetarily through human history, however nowadays Dr. Copper is indisputably the highest profile industrial metal while the barbaric relic remains firmly a store of value (and to some its own currency).

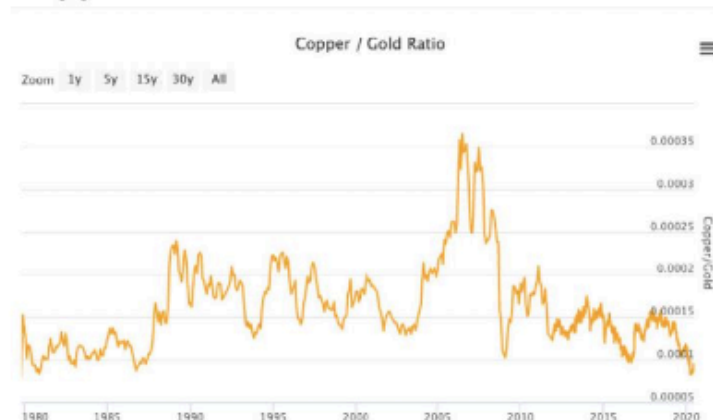
While the prices of gold and copper have been inversely correlated since the Trump-China trade battle began in spring 2018, a look at the longer term trajectory of the their prices suggests that (a) they are positively correlated more often than not and (b) copper generally displays more volatility than gold due to its unique sensitivity to the economic cycle. This has certainly been true over much of the past three decades as seen in the chart to the right.

The copper-to-gold ratio has gained prominence in recent years and is followed closely by investors. This is thanks in large part to investor Jeffrey Gundlach of DoubleLine Capital, who considers the ratio to be a 'remarkable' short-term predictor of interest rates. Based on recent history Gundlach does seem to be onto something - but I will admit that as a bottom up investor with a long-term time horizon, short term T-bill fluctuations are not usually top of mind.

Gold vs. Copper



Copper to Gold Ratio



SOURCE: COPPER TO GOLD RATIO. LONGTERMTRENDS.
[HTTPS://WWW.LONGTERMTRENDS.NET/COPPER-GOLD-RATIO/](https://www.longtermtrends.net/copper-gold-ratio/)

But the ratio does intrigue me for a more fundamental reason. As seen in the above

chart, the copper-to-gold ratio has only dropped this low two times in the past 40 years – in

Q4 1980 and Q3 1986. In other words, gold is more expensive relative to copper than at any time in the last 40 years.

This seems counterintuitive as we power forward into the 21st century. We're in the early stages of what some describe as the Fourth Industrial Revolution – the digitisation, automation, and electrification of anything and everything. Copper serves an irreplaceable role in this multi-decade transformation, which will likely be the most important commodity trend of our lifetime.

It is estimated that electricity's share of final energy consumption will double from 19% today to 40% by 2050 – with 80% of this electricity generated by renewables. To meet this demand, Richard Schodde from MinEx Consulting estimates that “over the next 26 years, the world is going to mine more copper than what has been mined in all of history.”



Matt Geiger

Mr. Geiger is managing partner at MJG Capital, a limited partnership specialising in natural resource investments. The partnership is long-only and holds a concentrated portfolio of resource equities. Investments include explorers, developers, producers and royalty companies focused on precious metals, energy metals, industrial metals and ag minerals. Matt is a graduate of the Wharton School at the University of Pennsylvania and previously founded a venture-backed technology company most recently valued at US\$150 million.

Meanwhile gold's role has diminished in terms of its importance to society. To be clear - from an investment perspective, I remain bullish on the near-term future of gold and gold equities. After all, 65% of our weighted portfolio is exposed to precious metal equities which should serve us well over the coming few years.

However, the point remains that gold is simply less consequential within the global financial system and in most of our lives than it was in 1971 when Nixon de-linked the US dollar from gold or in 1933 when FDR ordered the confiscation of physical gold from US citizens. And it certainly does not hold the same societal significance as it did during the first 85 years of American history when gold and silver coins were the only recognised form of legal tender.

It is possible that gold regains a more prominent role within

the global financial system whenever the US dollar cedes its enviable role as global reserve currency (it may not be in this lifetime but nothing lasts forever); however the rise of cryptocurrencies in recent years further diminishes the chance that gold will back any of our currencies any time soon.

Clearly over the longer term (decades not years), I do favour copper over gold. Some will agree, others will dissent vehemently. But the key takeaway is that in whichever camp you belong, why not position yourself intelligently as investor in both metals by backing competent, ethical management teams working on quality assets?

Because those bullish on gold should rationally also be bullish on copper, at least over the medium term. Going back to the aforementioned copper-gold ratio, the mean price relationship between the two metals was approximately



0.000160 over the past 40 years. This compares to today's ratio of 0.000094.

Put simply, this means that if gold stood still at US\$1,800 an ounce for the next five years while the copper-to-gold ratio reverts to its 40-year mean, we are looking at roughly \$4.50 copper once the process has run its course. This doesn't take into account the possibility that the mean reversion pendulum overshoots as is often the case, nor does it consider the possibility that gold prices also rise as the copper-to-gold ratio normalises.

We've seen the copper and gold prices diverge noticeably over the past two years but that doesn't have to continue. In fact, historically it doesn't. And you can easily see a world where a positive correlation between the two metals returns - think a few years of anemic private sector growth coupled with massive government infrastructure programmes funded by deficit

spending and money printing. This would be the sweet spot, at least from an investment perspective.

I'll conclude with a caveat because no thesis would be complete without one. It's of course unrealistic to expect the copper-to-gold ratio to revert to its mean overnight. The process will take conviction and years of patience. And there's also the very real possibility that we see the ratio take a final plunge in the coming six to nine months before the mean reversion process begins in earnest.

If the irrational exuberance evident in the broader market right now results in another March 2020-like panic, copper and copper equities will certainly not be spared. If this does occur, don't get shaken out - you will regret it.