

Market Note (05.06.2023): What's Going On With Copper?

I've been consumed with the copper market over the past few weeks. Besides oil and gas, It's basically all I think about now.

Copper is a trader's economic thermometer due to its tight correlation with global GDP growth, specifically in the construction and home-building industries. Think of it as the canary in the global economic coal mine. When prices are high, copper demand increases as the world builds more shit. When prices fall, everyone panics because nobody's buying copper or making more shit.

But is that signal still valid?

Multiple themes are jockeying to control the copper narrative in the short-to-medium term, and it's hard to tell who's winning. There are even times when the narratives completely contradict one another.

For example, I worry that China's real estate market is collapsing. Or if we're entering a more systemic global recession. Or if any of that matters if we're ~25% serious about the "[Great Electrification](#)" movement.

On the other hand, I see copper inventories at their lowest levels *ever*, big banks like Goldman, JPM, and Citi *upgrading* China's 2023 GDP growth forecasts, and *zero incremental supply* coming online anytime soon.

I don't know which narrative will win over the next few months. But what I do know is that something has changed in the copper market. It's not the canary that it used to be. In short, "Supply Shortage" is to copper what OPEC is to oil.

And that changes **everything**.

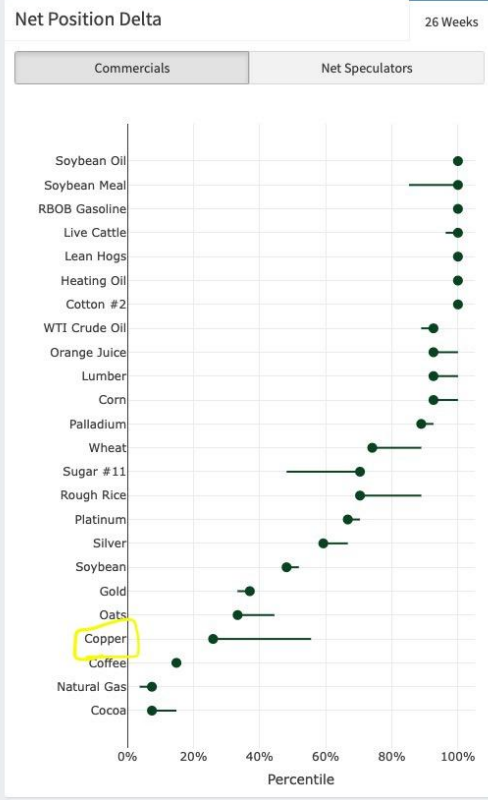
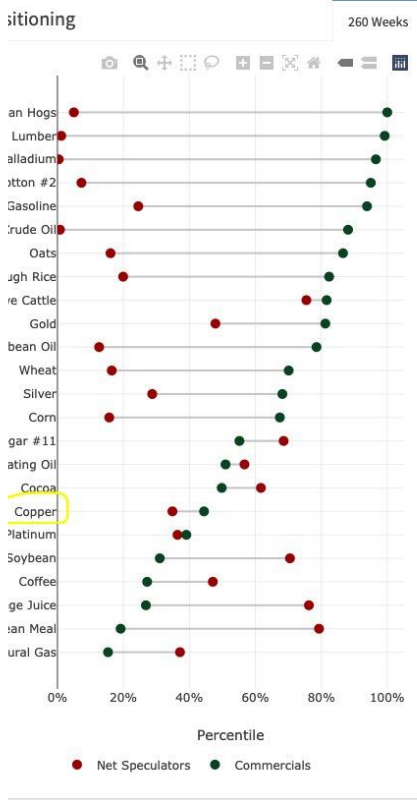
This *Market Note* will examine **current copper market sentiment and positioning**, outline **why the China Real Estate argument is just lazy investors fighting the last war**, and explain **how to best play the metals and mining super cycle**.

Let's get after it.

Sentiment & Positioning: A Whole Lotta Nothing

Commercials and Speculators are playing Switzerland while waiting for a dominant narrative.

Commercials and Specs are 44% and 35% long, respectively. So there's no real conviction besides Commercials reducing exposure by ~30% over the past 26 weeks. And we're still in a Market Neutral Regime (see below).



Name	Market Regime	Z-Score (20 Day)	Z-Score (50 Day)	Z-Score (90 Day)
Cocoa	Bull Quiet	0.94	1.67	2.04
Orange Juice	Bull Quiet	1.24	1.36	2.04
Silver	Bull Quiet	1.56	2.04	2.04
Feeder Cattle	Bull Quiet	1.95	2.55	3.04
Sugar #11	Bull Quiet	2.55	3.53	3.04
Gold	Bull Volatile	1.16	1.74	2.04
Live Cattle	Bull Volatile	2.30	2.46	2.04
Soybean Meal	Neutral	-0.63	-1.43	-0.04
Copper	Neutral	-0.22	-0.66	0.04
Soybean	Neutral	0.31	-0.53	-0.04
Coffee	Neutral	0.98	0.52	-0.04
Platinum	Neutral	1.33	1.07	0.04
RBOB Gasoline	Neutral	1.77	1.91	0.04
Oats	Bear Quiet	-1.10	-1.27	-0.04
Lean Hogs	Bear Quiet	-0.99	-1.13	-1.04
Rough Rice	Bear Quiet	-0.91	-1.16	-0.04
Lumber	Bear Quiet	-0.19	-0.54	-0.04
Corn	Bear Quiet	0.35	-0.57	-0.04
Palladium	Bear Quiet	1.00	-0.17	-1.04

Even analyzing the individual components of sentiment and positioning gets us a nothing burger (see below).



This begs the question of what we should look for in copper sentiment and positioning. Oddly enough, **small speculators**.

According to our HUD data, Small Speculators have the strongest market signal. Check out the below chart. Small Specs correctly timed the bottom in December 2014, April 2020, and most recently in, July 2022.



Like any indicator, take it with a bucket of salt. It's not a panacea. In fact, it's terrible at predicting market tops.

However, the chart shows Small Specs' positioning is currently overcrowded, around the 80th percentile. And copper prices don't bottom when Small Specs are 80% long. At least not since 2014.

Our base case is that copper prices will likely decline over the next few months due to crowded positioning and weak seasonality.

This is where you'll see the same regurgitated copper bear thesis of *"China drives demand, bro. Don't you know China's real estate is the only thing keeping copper alive?"* Or something like, *"The US is headed for a recession and copper is a proxy for GDP, don't you know that?"*

Those arguments are dangerous because they've been so *right* for so *long* that they're gospel.

But they're not gospel today. Investors that cling to this mantra are fighting the last war and will stand dramatically offside during the coming copper super cycle. Here's why.

Common Copper Bear Takes: China Recession & EV Disappointment

There are two common copper bear takes: **China's Recession** and an **EV Disappointment**.

Let's start with the China rebuttal.

China makes up ~50% of global copper demand. 30% comes from construction and real estate. So, yes, that's *a lot* of copper. But there are two main problems with the *"China"* argument.

First, it only focuses on China-specific demand inputs and gives zero weight to The Great Electrification initiative.

Second, the China argument ignores the supply side and its many problems, pointing to higher copper prices *regardless* of China's demand.

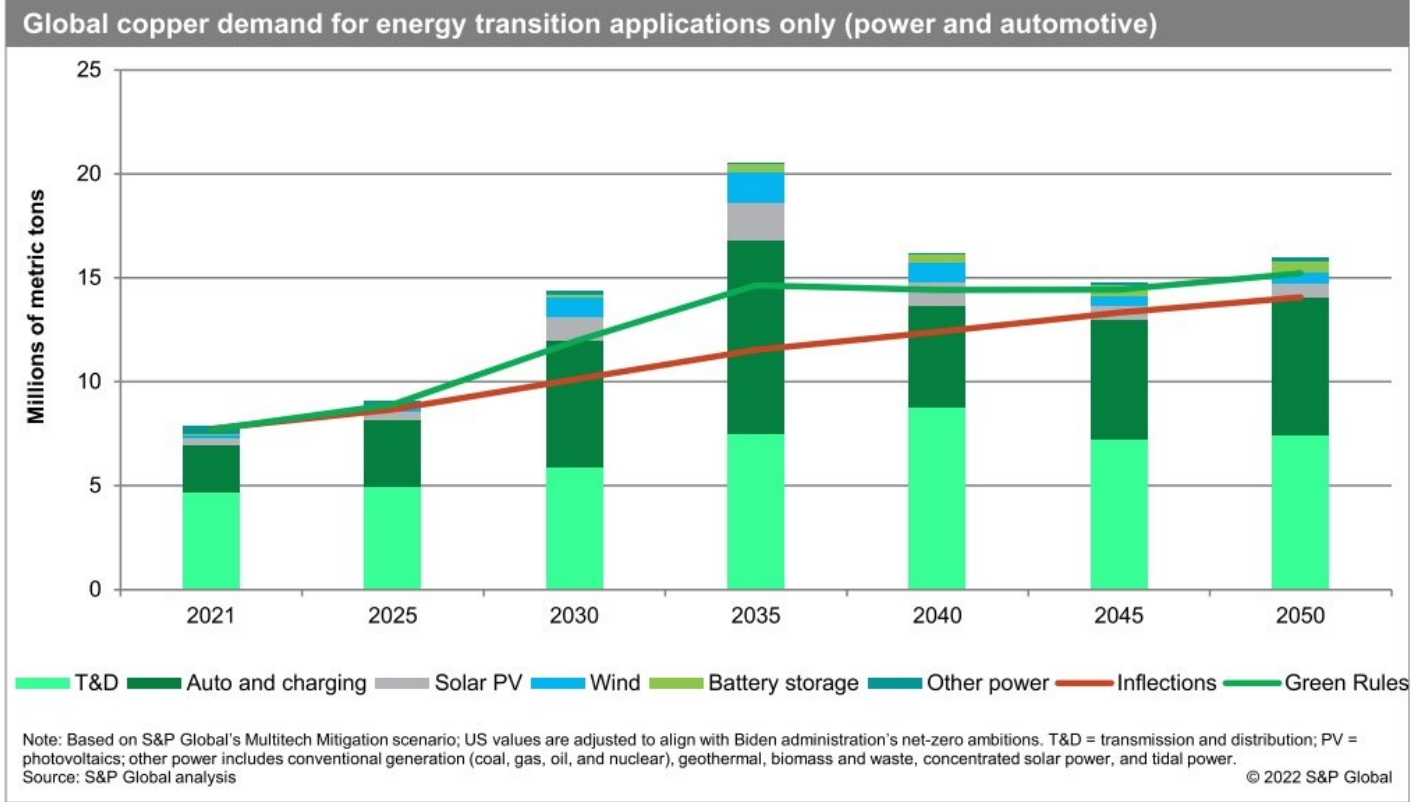
Anyone that says *"But China"* when discussing copper hasn't done the necessary work to understand the Supply Shortage Put and how vital The Great Electrification is to future copper demand.

This brings us to EVs.

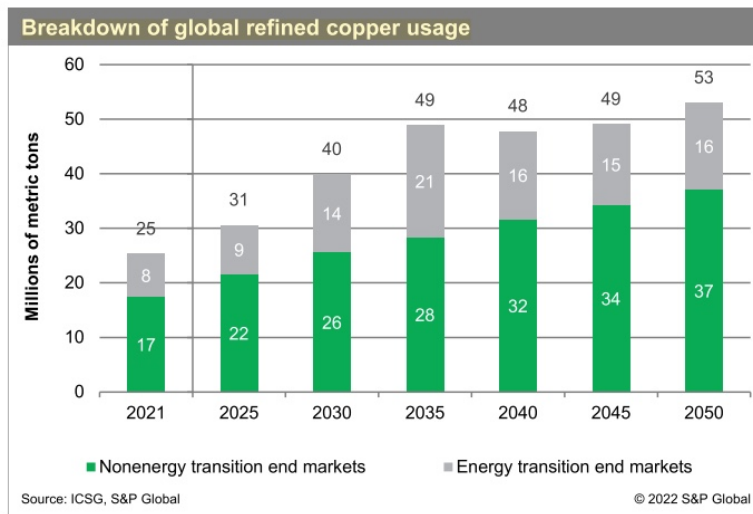
The Great Electrification Matters

Will we reach Net Zero by 2050? No. Will that stop global governments from trying their best to make it happen? Absolutely not.

According to S&P Global, The Great Electrification will add an incremental 14 *million metric tons* of copper demand and reach 20M+ metric tons by 2035 (see below).



Remember, that's 20M metric tons *in addition to* global non-green tech-related demand. We'll need nearly *50M metric tons* of copper by 2035, with almost *half* of that demand coming from green "EV" demand.



We're also starting to see the EV movement take hold in places like Australia, where [EV sales surpassed ICE cars for the first time ever](#).

That's why I'm bearish on the "But China" takes. Because they fail to incorporate the *fundamental* changes happening in countries hell-bent on jamming EVs down everyone's throats.

In other words, the "*Great Electrification Won't Replace China*" argument grows weaker by the day.

But the real excitement, and the main driver for higher copper prices in the future, lies on the supply side of the equation.

Let's break down our **Supply Shortage Put** theory.

The "Supply Shortage" Put: Supply Is To Copper What OPEC Is To Oil

I could write an entire *Market Note* on copper's supply side problems, but let's briefly discuss the three main issues:

1) Long lead times

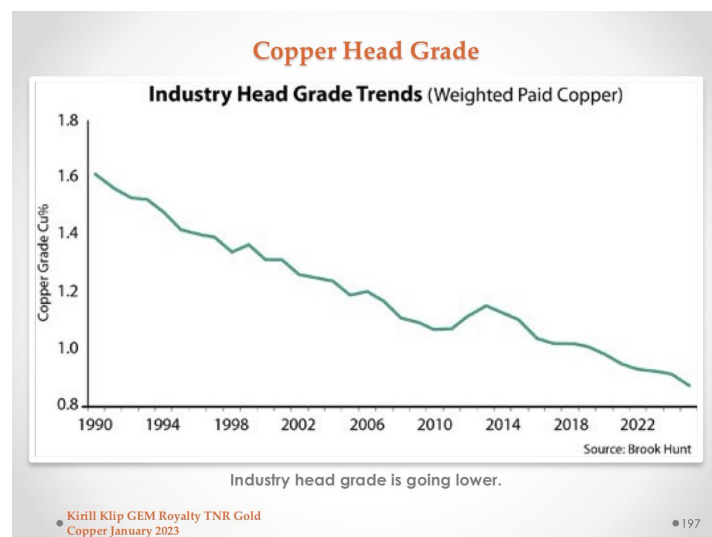
Copper mines can take up to 15-20 years from discovery to production. In other words, if we wanted to avoid a copper supply crisis, we would've spent the last ten years building new mines. Instead, we gave everyone free money to invest in the 15th dog walking app.

It will take *at least* a decade before any significant supply capacity comes online. That's assuming there aren't issues with permitting, weather, labor, or cost inflation ... Oh wait.

2) Lower copper grades

Governments could reduce permitting times and make it easier to build new copper mines. Fantastic. Except for the fact that all the easy copper has already been found.

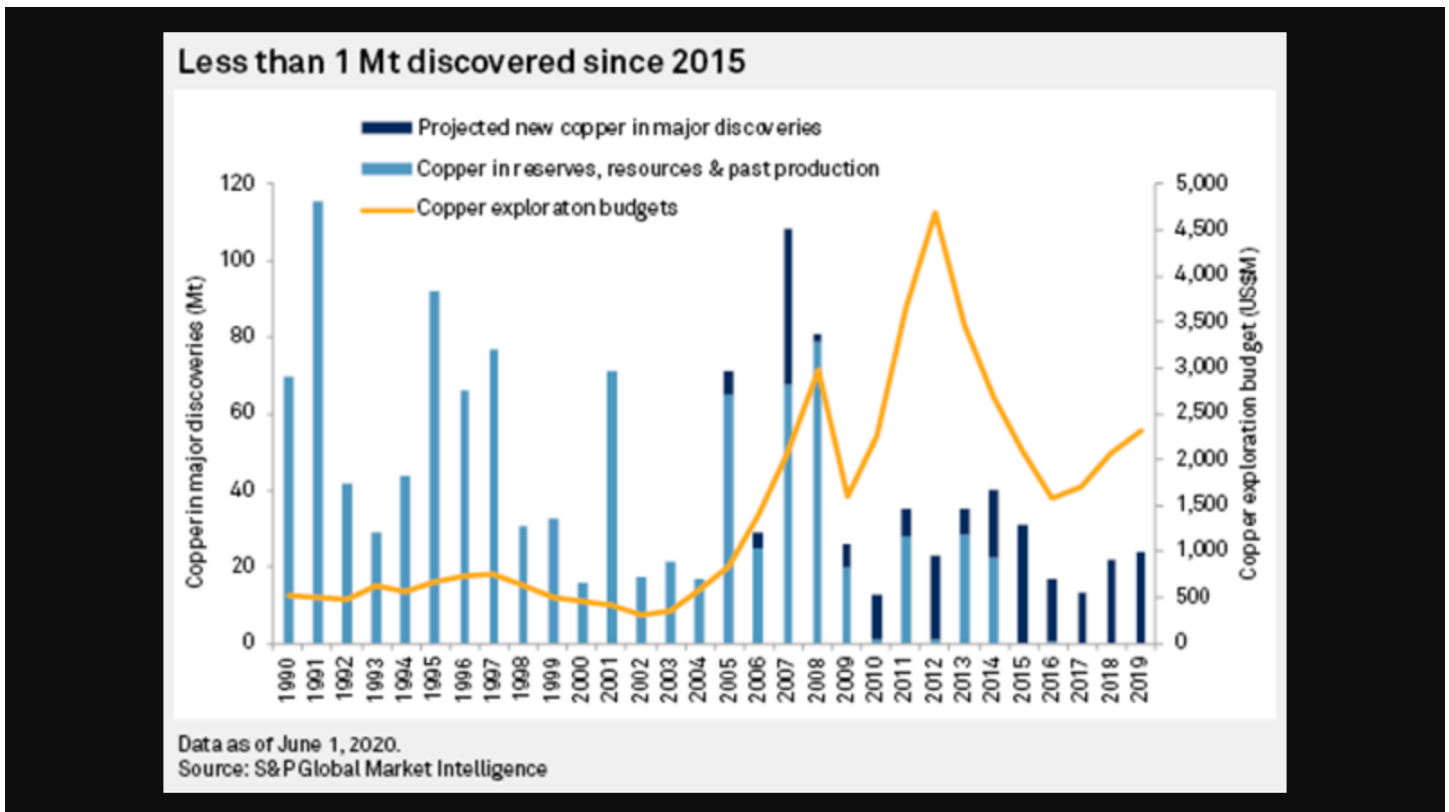
Copper grades are falling. In 1990, the average copper grade (i.e., the percentage of pure copper per ton of ore) was 1.6%. Today it's around 0.80% and heading lower.



Lower copper grades make extracting equivalent copper amounts more expensive and operationally challenging than ever before.

3) Fewer discoveries

If lead times and lower grades didn't discourage you enough, this will. We're making fewer copper discoveries than ever *despite* spending billions annually on exploration.



According to S&P Global (as of 2019), we've found <1 million tons of copper since 2015 despite investing ~\$15B in new discoveries.

However, even if we found a bunch of copper and somehow convinced Greta and her ESG minions to build the necessary infrastructure, we *still* wouldn't meet future demand. We'd need to do the impossible: **Spend \$500B in capex and maintain 95%+ utilization rates of the entire mining value chain.**

All of this sounds bad. But we need to contextualize it with the broader supply/demand picture to see how bad it is.

Mapping The Supply Put: Just How Bad Is The Deficit?

Our Copper Supply Put hinges on the magnitude of the metal's supply deficit. Greater deficits buoy long-term prices.

So far, the most significant copper deficit happened in 2020 and was ~2.5% of the market.

If demand and supply drivers stay where they are, **we could see deficits reach 15-20% of the market**, a 7-10x magnitude increase. That's how you get \$7-10/lb copper.

I want to give you one visualization that simplifies our Copper Supply Put scenario.

Think of the price of copper as water in a bathtub. There are two ways to affect the water level. You can turn the faucet and add water. Or you can lift the drain and remove the water.

The faucet is demand and includes two primary drivers: **The Great Electrification** and **Global GDP Growth**.

The drain is supply and comprises three primary drivers: **Long lead times**, **Lower Grades**, and **Fewer Discoveries**.

In a regular market, the faucet adds as much water as the drain disposes, stabilizing the water level (i.e., price).

Most investors see copper as a "there's not enough water coming out of the faucet" story. They don't realize that it's also becoming equally challenging (i.e., more difficult to drain water) to add new supply. So the underlying price level stays higher than it "should" as it approaches a "new normal."

Yes, a China recession will hurt copper demand. But other factors affect the water line that must be discussed. Anything less, and you're fighting the last war.

Here's how I'm thinking of playing this trade.

Invest In Businesses, Not Buried Treasure

I had a phone call this week with the CEO of a micro-cap mining company. It went so well that the company rose to #1 on my "Need To Research Next" list. Expect an *Equity Note* on this company soon.

This guy is super successful, built the company with his money from the ground up, and has an incredible corporate culture. I asked him what *he* would look for in a mining company if he were an investor.

He said, "*Well, you're thinking about it all wrong. You're not looking for mining companies. You're looking for businesses that happen to produce mining products.*"

That's a subtle yet significant difference.

Mining companies want to bury treasure. They want to drill until they're blue in the face so they can tell shareholders, *"Look at these intercepts, aren't they amazing??"*

Businesses that produce mining products want cash flow. They want to drill only when it's profitable. Use the cash flow to strengthen their balance sheet. And grow the business at the bottom of the cycle when their peers' assets trade for pennies on the dollar.

After explaining the difference to me, the CEO pauses, then says, *"Here's the thing, Brandon. The right way to do it takes a lot of time. It takes turning over as many rocks as you can. You can't screen for this shit because it's not about the numbers. It's the people, the geology, and the relationships that matter."*

Junior miners are our best bet if we want the highest torque leverage to commodity/precious metals prices.

Finding great junior mining plays will take time. It will take turning over tons of shitty jurisdictions, geological discoveries, and management teams.

The good news is we only need to find a handful of them. So where do we start? My initial guidelines are:

- **Mining-friendly jurisdictions**
- **Management with a history of past success (ideally a big exit/discovery)**
- **High insider ownership**
- **Little-to-no common stock dilution**
- **Good geology (high grades)**
- **Conservative drilling program**
- **Low All-In Sustainable Costs (ASICs)**

We're in the early innings of a metals and mining super cycle. In fact, metals and mining might be one of the *only places* in markets to find great ideas for the next decade. I've realized that and am equipping myself with the necessary skills to succeed in that reality.

I can't wait for you to join me on this journey.