CIO CONVERSATION SERIES

CARY STREET PARTNERS

**Episode 6**

# A CONVERSATION ON COMMODITIES— AN UNCOMMON YET EVERYDAY SUBJECT

**Tom Herrick:** Welcome to the CIO Conversation Series. I'm Tom Herrick, Cary Street Partners' Chief Investment Officer. On this episode, we set our sights on an asset class that has far reaching presence in our everyday lives. We're talking about commodities, raw materials that make the world move. They help power our smart machines, house, feed and clothe us on a daily basis and more.

**Brad Klein:** There's clearly lots of opportunity for the asset class going forward, irrespective of all the press that we've gotten recently.

**Tom Herrick:** My guest today is Bradford Klein, the co-founder of Core Commodity Management, a Connecticut based firm with over five billion dollars under management, and that has been a trusted partner and adviser to Cary Street Partners. Brad's got a venerable track record in the commodities business spanning nearly four decades as an investor and risk manager. In fact, back in the late 1990s, he actually helped develop the platform that's now the industry benchmark, which now known as the Bloomberg Commodity Index. Bottom line, you'd be hard pressed to find a more informed perspective on this subject than Brad's. Our conversation will focus mainly on commodity markets today and where they're heading. It's impossible to overlook the impact and importance of the past year after global shutdowns caused by the pandemic sent the market bottoming out last summer and the rapid growth that has ensued more recently. We'll get into that timeline, the turbulence in the trends, a conversation on commodities. Bradford Klein, thanks for being here.

**Brad Klein:** Thanks, Tom. Thanks for having me. And please call me Brad.

**Tom Herrick:** Got it. Will do. Thanks, Brad. So, we're recording this the third week of July during a summer heat wave and a commodity I most want to invest in is air conditioning and cold beer. But seriously, Brad, 2020 was a rough year all around, but commodities took it on the chin, along with other asset classes. On the other hand, 2021 has been a year in which you've already seen spikes in commodities, particularly such things as lumber. And we've seen some recently dramatic short-term price drops as well. Perhaps you could provide us a reset where the markets are right now.

**Brad Klein:** Sure Tom. We think about commodities on a broad sector basis. In thinking about your question, I'm not sure if you're inferring that commodities haven't really moved or that they're overpriced. But let me put in perspective. If you look at commodities as measured by the Bloomberg Commodity Index, they're trading at less than 40% of the last ten-year trading range. And in terms of individual sectors, industrial metals are about 65% of their range. The grain markets are about 40% of the range. But energy is only trading approximately in the bottom, less than the bottom third of its range. I feel there's clearly lots of opportunity for the asset class going forward, irrespective of all the press that we've gotten recently.

**Tom Herrick:** We've come out of the trough over the last six to 12 months. That's been sort of that short term picture. I would call that, you know, sort of the cyclical, i.e., tied to the economy, the reopening, whatever, versus that longer term secular picture, that independent long-term trend you still feel has a lot of room to travel potentially.

**Brad Klein:** Yes. So look, I think it's a pretty simple business, right? I take a look at inflation. I take a look at the money supply, not just in the United States, but globally. I look at the tight inventories that we're currently in and we've been drawing down really for the last ten years. And then I look at the demand boom, which has occurred for a number of reasons. But, certainly the pandemic exacerbated this. To me, when I listen to Chair Powell, it's painfully obvious that the Fed wants to see inflation run significantly above the 2% target for some time. It's also obvious to me that the Fed is going to be behind the curve. In fact, they've definitively told us that they're not going to act until inflation is running significantly above their target. The issue is that Chair Powell is convinced he can put the genie back in the bottle. History has shown us that's not so easy. If you listen to some of the people on Wall Street, you know, Larry Fink, Secretary Mnuchin and even Chair Powell as recently as last week said he's not sure how long inflation is going to last. You know, the labor shortage is real, the supply chain issues are real, shipping back-ups are real. So, the fact is no one really knows Tom. What we do know is the supply of money. You know, over the last 10 years, global money supply has gone from 48 trillion to almost 100 trillion dollar equivalents, and that's going to continue. And Chair Powell again last week confirmed they're not yet prepared to take the foot off the gas.

**Tom Herrick:** Yeah, and you're preaching to the choir on the inflation and money supply with me, at least as far as that goes. Maybe we could address that demand side a little bit, because I think that's where things get really interesting. Could be a potential game changer when you talk about all the infrastructure and climate adoption policies and things like that, this gigantic transition we're going to see in transportation, for instance. How does that play into the certain commodities markets?

**Brad Klein:** That's a good question. We feel that there's a game changer in the industrial metals complex, especially when looking at the adoption of EVs, which, by the way, is happening even faster than the world expected. And with the new administration, we stand a good chance for a massive increase in demand from the infrastructure. But my concern, frankly, is how are we going to find the supply to meet the demand? And to be honest, I don't really know where it's going to come from. You know, brownfield copper mines take three to four years to fully develop and greenfield mines take an average of eight years. And that's all happening with BHP, which is one of the largest miners, estimates that the declining ore grades will remove around two million tons of copper per year by 2030. That, by the way, is about 10 percent of today's total mine production. As EVs become more popular – and I'm sure down in Virginia, you see it as well as I see it up here in New York, EVs use about four times more copper than that of internal combustion engines. So, you're getting this green copper demand from EVs and renewables will rise from about a million tons a year to six million tons by 2030. Overall, copper demand apparently is projected to grow by about a million tons per year. Nickel demand is projected to grow by 40% over the next five years. Aluminum demand is set to grow by 20% as companies build out solar infrastructure. But it takes three years to build new aluminum smelters. It takes five plus years for new lithium operation to produce batteries grade material. And you mentioned the infrastructure. I don't know if it's going to be, you know, 500 billion or a trillion or 1.3 trillion. That's above my pay grade. But for every billion dollars of infrastructure, there needs to be or there is about 50,000 metric tons of new steel demand. And if you think about that, you know, in the trillions, it's mind blowing. It really is. And I don't know where it's going to come from.

**Tom Herrick:** Yeah, so you're painting a picture of deficits and materials relative to demand, at least in the short run. And you're painting a picture just to characterize it or summarize it, of enormous demand supply that can increase, but not quickly. What's the total size of tradable metals that out there? You characterize a lot of this in terms of metals and, you know, a lot of the LME, the London Metals Exchange, versus was there a supply demand dynamic that you can draw a data point to there?

**Brad Klein:** Sure. So, if you took 100% of the inventory on the LME and computed the notional value, which is you take the price at which it's trading and multiply it by the amount of stocks or inventory on the LME, that's less than $8.5 billion. I'm trying to think about an equity, which is, you know, under $10 billion in market cap. So, the point is and by the way, half of that is in nickel. There's just not a lot of inventory out there that's listed on the LME. It's been a pretty rough decade for commodities. I would tell you that producers have been living essentially hand-to-mouth because they have not been able to make very much money producing the materials they produce and coming out of COVID that lack of inventory is essentially being smacked right in the mouth by this explosion of demand. And you see that in the energy world where, you know, crude oil, WTI has gone from $16 to recently as high as $75. When oil was under $20, we couldn't get any of our clients or very few of them to add to positions, and now that it's over $70, everybody now thinks it's going to $100. So, yeah,

**Tom Herrick:** Classic behavioral activity.

**Brad Klein:** Very typical, exactly.

**Tom Herrick:** Just to back up a second on that LME. You reference like half of that total is nickel. What else is on the LME? I would assume coppers there as well as nickel. What about things like rare earths, which we hear in the news, like lithium? Is that included in that metric as well?

**Brad Klein:** They're just listing a new rare earth lithium contract. But right now there's liquidity issues with that. But you should think about it broad based of copper, nickel, zinc, lead, tin. And obviously, as rare earth materials or metals become more important, I would imagine they will continue listing new contracts there.

**Tom Herrick:** You hear in the news that conversation around rare earths and how important are going to be in EV adoption, for instance, in battery technology. What about the sourcing issues? Where are those mines? Where does that come from? What part of the world is it stable?

**Brad Klein:** Primarily South America when it comes to lithium. And like I said, it takes five plus years for a new lithium operation to produce battery grade material. You know, the EV world is, as I said, moving faster than people thought. You know, essentially every car company out there is going to be producing an EV, and battery technology is moving very, very quickly. I would expect pretty shortly to see EVs that have more than 400 miles of range, which in my view, is sort of the Holy Grail. Very few people ever drive more than 400 miles without stopping for a period of time. It's going to happen. And the real question is building out the infrastructure, the grid infrastructure, which again, takes steel and aluminum and all of the other materials.

**Tom Herrick:** So, yeah, just a charger infrastructure. I mean, that's an electrical infrastructure. Again, going back to your copper and everything else reference earlier.

**Brad Klein:** And by the way, that needs to be powered by something, which is why when you look at the natural gas market, you know, natural gas was trading under two dollars per MMBTU last year. In the pandemic, it's almost doubled now to almost four dollars per MMBTU. It's clean, I would expect over time, less coal, more natural gas to help power the electric grid.

**Tom Herrick:** Let's pivot a tiny bit back to dirty energy. You reference oil earlier. How that has swung so dramatically over the last year. It seems to me as an outsider that you have this swing factor in the oil market being the fracking boom that has occurred in amazing technology that was brought to the market, I don't know, a decade or so ago with a lot of supplies. That's still a swing factor. Those producers seem very eager any time, you know, oil bumped up at all in the last decade to increase production dramatically. Is that still happening? And how could that dynamic change perhaps?

**Brad Klein:** The short answer is that it may be or that it could be the swing factor. It has been the swing factor of production. I personally think there's a possible asymmetric risk payoff for your listeners sake. The global oil balance sheet is approximately 100 million barrels per day supply and demand. Each year that goes up typically by about 2%, one and a half 2%. Historically, when we either become over or undersupplied, we get significant moves off of that, let's call it balance. But it doesn't take a lot to sort of throw the oil market into a bit of a tizzy. On the way down, starting in 2014, oil was about $105 - $110 a barrel. We were only oversupplied by about two and a half to three million barrels a day. And in June of this year, as oil was continuing its ascent, we were in about a 2.4 million barrel deficit per day. But think about it this way, so the US produces today 11.3 million barrels a day out of the 11.3, almost eight, actually, the number is 7.9 million is shale.

**Tom Herrick:** Wow. I didn't even realize that.

**Brad Klein:** If the U.S. were to follow France, Bulgaria, Scotland, Germany, who have all banned fracking. I'm pretty sure the oil price would go to recent highs pretty quick. And like you said, you know, like there's this big ESG investing push and the overall global focus on the environment. You know, I believe it's possible that the powers that will come to a realization that it might not be smart to be blasting the Earth with water and chemicals to find more oil that's just faster, frankly, than traditional methods. There was a story out the other day that Ohio recently had 77 minor earthquakes in a one-month time period, and they attributed that to fracking so that in all the bad, potentially bad things in fracking fluid like arsenic and mercury and hydrochloric acid and formaldehyde, the world is waking up and becoming woke to environmental investing, and fracking certainly is not environmental investing.

**Tom Herrick:** It sounds like there's certainly some potential vulnerability there, if nothing else. You painted a great picture for us and for our listeners on that demand around metals going forward. Do you see that in other things? Just as you know, I think of billions of people literally move into the middle class around the world, you know, demanding other commodities outside the metals that are also have somewhat of a fixed element to them in terms of supply. Are there other examples of that outside the metals complex?

**Brad Klein:** There are, as you pointed out, the world is becoming wealthier. And if you just take India and China, you know, that's about, what, 2.7 billion people, they are becoming wealthier. More of them are reaching into the middle class and upper class, and when they do that, they consume what we refer to as more luxury commodities – more chocolate, more meat, more coffee, more sugar. To put it in perspective, Starbucks has opened one new store in China for the last five years every 15 hours. It's pretty mind blowing when you think about it. They've now decided to mark its fastest expansion in India. They're going to open 40 new stores in 2021 in India. You know what everybody views the Chinese and the Indian population is more of a tea drinking society. But I lived in London in the late 90s and I saw how that transformation happened. And now if you're on the High Street in London, you'll see Pret a Manger, Cozi and a Starbucks literally fighting on every corner. But it's not simple to just grow more coffee trees. You know, you need arable land and you need the right growing conditions, and China in the last decade has doubled its consumption of chocolate. So now we've got to find more cocoa plants and on and on and on. In your opening, you said it correctly. These are things which we consume – everything that we invest in is being consumed. And the question is, frankly, where is it going to come from?

**Tom Herrick:** Fascinating. Let's pivot a little bit because I'd like to make sure we have some conversation about commodities as an asset class. Where I want to go with this is we see in the marketplace a conundrum right now where typically people own stocks and bonds, typically people own a large portion of a portfolio in bonds. And that's been the tailwind of tailwinds for almost my entire career. We had a 40-year bull market in bonds. If you go from 1980 to the end of last year, it's amazing. Historic drop in rates driving bond markets relentlessly, consistent returns, yield, all those things, all of which is challenged going forward, maybe ending, maybe not ending permanently, but definitely challenged in a harder space to make money in for sure. Where do commodities fit in as a piece of the solution there and in terms of asset allocation, in your opinion?

**Brad Klein:** Right, so first of all, I agree 100% with you. I think that the 40-year bond bull market has ended. What you didn't add is we're actually faced with negative real yields, which very few of your listeners, I believe, have ever had to navigate. It's been very rare that cash actually burns when it's not being invested. And how people deal with that is going to be interesting going forward. I would say on an absolute basis if you took commodities as measured by the Goldman Sachs Commodity Index. Going back to 1970, they've had an annualized rate of return of about 10%, that's between 1970 and 2007, which is about almost exactly equal to the S&P. Going back to sort of the spending element, which I touched on earlier, it's pretty obvious to me that inflation will be a part of our lives for an extended period of time. That's my personal opinion. The commodities are the most highly correlated asset class to inflation, historically about .74 correlation to expected and unexpected inflation. That's more correlated than stocks, bonds, TIPS, rates, emerging markets, etc.. So we believe that as investors are faced with, what am I going to do with my bond portfolio? Which I really don't see how it's possible when you look at the 10 year rate one day touching 1.13% for the yield of those portfolios, forgetting about the corpus and if it's going up or down, but the yield to have to be producing anything close to what it has done over the last 40 years. Whereas if you have a portfolio of real assets which include commodities, we think you stand a good chance of sort of helping replace what the bond market will be taking out of people's portfolios.

**Tom Herrick:** You bring up the point of negative real rates, which our audiences' benefit is, you know, what the rate is minus inflation. If you have more inflation, that negative real rate could expand, I would argue. Would you agree with that? And, you know, which makes this whole conundrum even more dramatic.

**Brad Klein:** Yeah, because if you listen to what the Fed has been saying, right, so we're not going to as recently as last week, by the way, they're not going to raise rates quickly. I do believe rates will go up some time 1Q 2022, perhaps. But inflation, they want to run hot. They're telling. First of all, you correctly said they needed to run hot. They wanted to run hot. So you basically have the playbook. They're going to keep interest rates low, even the market's probably going to keep interest rates low and you're going to see inflation run hot. And that means negative real rates of return, and then investors have to decide, you know, how do they attack that? Or combat that.

**Tom Herrick:** I come back to this under owned asset class of commodities, not something that is being commonly incorporated for decades. So it's not a new way to invest, but it is definitely outside the memory pattern of a lot of investors. The last thing I want to talk about on this subject is because you've talked a lot about the Fed and I agree with a lot of these points, this transitory versus persistent inflation conversation. I suspect we share a similar perspective on this because I'm not sure what transitory is. Everything's transitory in certain respects. But do you see, I see persist, you know, some level of inflation persisting again due to this Fed policy. Are we seeing any dramatic signs of transitory versus persistent?

**Brad Klein:** I think that when I look at wage inflation is a huge issue. Now, part of that is, you know, people are getting paid to sit at home and that's about to end. But part of it also is the pandemic has given individuals a different, let's say, sense of purpose, maybe. Where if they were working 80 hours a week in fast food restaurants, maybe they want to spend more time at home with their kids and family and frankly, work less. I have people who I'm close to who run food companies and they can't get people to drive trucks. In fact, they're offering a $5,000 dollar bonus if you're there for a year just to drive trucks. And, hourly wages for truck drivers and for people who work in McDonald's aren't going to come down. I mean, I've never seen somebody say, okay, you're going to go from $15 an hour to $22 an hour and then a year from now say, actually, we're going to bring you back down to $15 an hour. I don't really see that happening. What I do see is a huge issue is getting people to work. The restaurant business can't find servers, as I said, the trucking business can't find truckers. So, I don't see how any of that is transitory.

**Tom Herrick:** On the trucking side is a further anecdote. I read there's a very large percentage in the oil industry, gasoline, to get certified as a truck driver to move flammable fluids is a higher certification. And I think a quarter of the trucks are just not on the road because there's not enough drivers for them, which plays into this as well.

**Brad Klein:** And by the way, the food inflation people aren't talking about, you know, lobsters gone from 83 cents a pound to a dollar fifty a pound wholesale. And, the crab price is up three times. Some of that will come down, I guess. But right now, people really aren't taking that into consideration. The shelter inflation out there, the rent and home owning inflation out there is going to take time, I guess. We might also have witness. I mean, you're in Richmond, but, you know, the suburbs of New York and New Jersey have seen this move from people leaving New York City, frankly, partially because of the pandemic and partially because of a perceived safety issue. So now we have suburbs which have had 20, 30, 40 percent increase in home ownership costs. So how does that work its way through the system? Not easily is the answer.

**Tom Herrick:** Brad, thanks for sharing all your experiences and insights today. I think this is a real timely conversation because I think we're in the midst of a real game changer in this asset class. It was great speaking with you.

**Brad Klein:** Tom, thank you very much for the opportunity to speak to you and your listeners.

**Tom Herrick:** That was Brad Klein on the uncommon yet everyday subject of commodities. Thanks again to Brad and to all our friends at Core Commodity Management for making this happen, and thank you for joining us on the show.

We'll be back next month with more thought leadership as we strive to maintain Cary Street Partners higher standard on the airwaves. On deck, we've got a truly rich topic delving into currencies and capital markets with David Cowen, the CEO of the Museum of American Finance. Stay tuned for that next episode. In the meantime, for more information, please visit our website at CaryStreetPartners.com. Subscribe, share the show and send us your feedback, too. We'd love to hear your thoughts. Thanks again for listening. I'm Tom Herrick, talk to you next time.