Leigh Goehring: Global Food Crisis Update

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Erik: Joining me now is Goehring & Rozencwajg co-founder Leigh Goehring. Leigh, it's great to get you back on the show. For any new listeners who didn't catch your last interview, I want to start by just setting the context for everyone. We had you and your partner Adam Rozencwajg on the show last year. Adam predicted that there is going to be an energy crisis in coming years. You predicted that there's going to be a food inflation and food price crisis in coming years. At the time, our feeling was we thought Adam's story was the one that was more imminent more likely to happen right away. We thought the food story was likely to play out in a longer timeframe. Seems like it's going the opposite way that the energy story hasn't happened yet. But boy, food inflation in the last six months has been really significant. What's driving it and why are things happening out of order?

Leigh: Erik, and thanks for having me back again. And I do remember talking extensively about global agricultural markets with you. Not much has changed from the last time you and I talked. I talked about what were the factors that were going to push the world into a global agricultural global food crisis. And what's interesting since then, a lot of that has happened. And you know, just to step back a little bit, you know, what were those factors that we believed were going to produce maybe one but potentially multiple food crises, agricultural crises as we progress through this decade. And one was the fact that is that over the last 20 years, we've seen a significant ratcheting up of the demand for global grain. And the underlying fundamental reason behind that is that never before have so many people been in that notch of disposable income, which basically goes from about $500 to $1,000 per capita GDP then goes through their expansion cycle and eventually reach 5-6-$7,000 per capita GDP. Never have there been so many people that have been going through that period in their economic cycle. And one of the things when you when you go through that increase in per capita GDP, you want to change your dietary preferences. You basically want to switch from, you know, subsisting primarily on starch, which would be wheat and rice primarily to enjoying a more protein animal protein-based diet. And I talked in our last interview that we had gone back and studied every emerging market economy since the late 1950s. And how they had gone through this transition. And we postulated that, that this was the reason why global grain consumption between 1980 and 2000 basically grew at about 1.3% per year, which is in line with population growth. And then all of a sudden, from 2000 to 2020 ratcheted up to over 2% per year. That's a big increase.

And, you know, we also said that, that those trends are going to continue as we go through this decade. And if you go back and just look at the, the USDA, the report is the world agricultural supply demand, a report that they put out once a month. You'll see that since 2018 to today, global grain consumption has grown an additional 6% just those last four years. So the thing is the underlying strong global grain demand trends are continuing. The other side of the potential agricultural crisis that was going to occur was changing weather patterns. And obviously, we're hearing a lot about how adverse weather conditions are affecting huge parts of the world. And it's being, you know, almost universally credited to global warming in the Related global warming climate change. But, you know, we take a little bit of a different view on that, we believe that we have just started the first part of a global cooling cycle. I know this is very, very contrarian. And you know, it's not something that a lot of people follow closely. But you know you know, you can call me crazy, you can call me out on the fringe. But I'm a big believer that there is a very loose, loose relationship between sunspot cycles and weather patterns. And one of the most interesting things is that in the last 20 years, we have been in a very pronounced declining sunspot cycle. And what's so interesting about that is, declining sunspot cycles have often been associated with periods of global cooling. And in periods of global cooling, I should point out weather patterns become much more disruptive to global grain producing regions. And that's exactly what we've seen in the last four or five years.

And I think this is just going to continue as we go through this decades. So, you still have very, very strong global grain demand. And that's brought about by the big increases in per capita GDP that's happening in multiple parts of the world, primarily in all the emerging markets. And this global grain boom is bumping up against very, very adverse weather patterns. And it's going to produce. It's produced the first leg of this crisis and as we go on and talk in this podcast, it's going to produce other crises as we go through this decade.

Erik: Leigh, I want to focus specifically on whether this is over or just starting, because when we had you on a year ago, you were predicting that there would be a bunch of food inflation coming in the future. Well, we have had a lot of food inflation since that interview. I guess a person could make the argument. Well, that must mean what Leigh was talking about is all over and done with by now, is that the case or is it more the case that what you were talking about hasn't even started yet?

Leigh: No. In fact, I think if you look at the... If you were to try to use the analogy of a baseball game to describe this decade of global agricultural crises in a nine-inning game, I think that we're only in inning two or three. So we have the rest of the game to play out and a lot of it is going to have to do with weather-related problems. And you know, we've seen it already. We've had as this decade has started, we've had multiple weather problems. We had a pretty severe drought in Europe. Last year, we had very adverse weather conditions here in the United States, which caused a very large reduction in total corn acres harvested and a big reduction in estimated corn yields. We had an extremely hot and dry summer in early spring in India last year, which really impacted their wheat and rice crops. So the thing is, these weather patterns are already emerged. But I think we're only starting this weather problem phenomenon which is going to grip this decade.

Erik: Now one of the most common expressions that you hear on the weather side of this is El Niño. But hang on a second El Niño is a measure of ocean temperature out in the middle of the ocean, what's the temperature of the water at the surface. What does that actually have to do with the price of grains? Why is there this connection?

Leigh: Well, it's interesting what the El Niño phenomenon is, it's oscillation that takes place in the Pacific Ocean, where it… during the El Niño phase, what you do is you get a very warm upwelling of water warm water on the west coast of South America. And that is called know, that's the El Niño phenomenon. Conversely, there is the La Niña phenomenon. And the La Niña phenomenon is when you have cold water that presses up against the west coast of South America. Now these El Niño - La Niña go in cycles. And what drives the switching from the La Niña to the El Niño to the El Niño back to the La Niña. We don't know no one really has a very good idea other than this phenomenon usually happens with differing regularity. But one of the interesting things is that we've been in a relatively strong La Niña for the last four years with classic La Niña effects in the sense that we've had good La Niña which traditionally produce very adequate rainfall Southeast Asia, India, Australia, and will produce much drier conditions in South America and North America. And West Africa will also have waster than normal precipitation trends. Now when you switch from an La Niña to El Niño that all reverses. Southeast Asia, India, Australia will become much drier and be much more prone to drought. West Africa will become much more prone to drought. And North America and South America will become more prone to more precipitation. And those that doesn't mean that this happens every time. But those are the very very general trends that grip the agricultural world when we when we switch from flooding to El Niño and then back again.

Erik: Now you've actually written about Dustbowl conditions returning at some point, what's that about?

Leigh: Yeah, this is very interesting. And again, maybe some of your listeners will brand me as a nut or two out on the fringe. But I it is there's some interesting literature written about this is that within the sunspot cycle, there's a there's a cycle called the Gleissberg cycle and Gleissberg existed all the way back in the middle of the last, not the 20th century, the 19th century. And what he noticed is that every eight solar cycles and every cycle is 11 years long, is that there's this modulation that takes place in their amplitude. And one of the interesting things is the last occurrence of the Gleissberg cycle happened right in the middle 1930s. And there's a lot of people that believe that the Gleissberg cycle had a lot to do with the incredible drought that gripped the Midwest part of the of the United States for literally five to six years and produced the great Dust Bowl. And for you know, for those that like to study this, you know, the 88 year cycle would put, if the Dust Bowl really happened during 1934 and 35, that would put the Gleissberg cycle and its impact on the weather into 2023-2024 which is where we are right now. So what's interesting about this is that if you look at, like if anyone's curious, you can go on the website, just punch or browser and punch in US Drought Monitor, and you will get US drought conditions in the US. And if you punch that up today, you will look at how extremely dry the central part and the eastern part of the United States is. So is this the beginning of the Gleissberg effect on North American weather?

Now, here's something else that you like I said, there's a lot of weather phenomenon that's going to occur, that's going to wind up hurting crop yields on a global basis. But another strange effect is that like I said, we're transitioning now from La Niña to El Niño which traditionally would mean that we should expect more precipitation in the North American continent. However, this La Niña to El Niño transition is happening. There is another climatological effect taking place. And that's called the negative Pacific Decadal Oscillation. Historically, would you slide from La Niña into El Niño, where the Pacific Decadal Oscillation is negative, that's produced drought conditions in North America. And the last great episode of that happened in 2012, which was a big drought year in North America, where I should point out remember, corn yields fell 20% below normal in the US, and grain price corn prices spiked to their all time highs. So the thing is, are we beginning to see a combination of these effects to grip North America. The fact that we're going from La Niña to El Niño, with a negative Pacific Decadal Oscillation with a Gleissberg overlay on top of the whole thing. Who knows, I mean, maybe this is going to produce really severe drought conditions in North America, this growing season. And what's so interesting is that, like I said, if anyone's interested go punch out US Drought Monitor. And it will show you the very, very strong levels of dryness. Your drought conditions that are gripping large parts of the United States today. So the thing is that this is just another series of weather events that seem to be creeping up that could potentially cause the next great agricultural, global agricultural crisis.

Erik: Leigh, I want to make sure that I understand the drivers of this because before we were talking about a demand driven scenario, where there's going to be more people in emerging market economies that are able to afford proteins and not just grains. So, people who used to eat rice are going to start eating meat. And that's going to demand a whole lot of grains. And just for anyone who's not seeing that exponential connection there. Every bit of meat was fed by eating grains. So when you eat meat as a human, you're eating a whole lot of rice. It's all of the rice that the animal ate, it adds up. That was one explanation. Now we're talking about a weather situation, which is much more of a supply side disruption, which I would hope would be somewhat temporary. Is it both of these things at once? In other words, do we have a problem if it turns out the weather's okay. Do we still have a problem with the supply-demand imbalance around grains or is this mostly weather driven? How do I balance this in my mind as to how much of it is weather and how much of it isn't?

Leigh: Well, that's why in some ways, that's why I have great confidence of talking about this decade will be one of rolling agricultural crisis, because it's both. As I mentioned earlier in the podcast Erik that since 2019, global grain consumption has grown by 6% in just basically three years and the thing is, is that you've got this very, very strong underlying demand for grain based upon people switching over to a protein-based diet. And that strong demand is colliding bumping up against a situation where supply of grain is going to become much more uncertain. And, you know, what are the reasons why from 2000 to 2020, is that we had big surges in grain prices. And there ware some problems I mentioned before the drought of 2012. And there were other demand responses, like the change from going E5 to E10 to ethanol content back in 2004-5-6 which added a huge amount of demand for grain. Weather conditions were very, very good during that most that time period, and global grain production was able to meet all that big ratcheting up in demand. That ratcheting up in demand is still taking place today and now it's bumping up against supply problems. So that is both demand and supply, basically bumping up against each other, which means we're going to have these big, huge price spikes in grain markets as we as we traveled through this decade.

Erik: Tell me more about those price spikes and what's going to drive them. Are there some grains that are much more sensitive to weather and other factors? Is there a way for us to know which markets are going to be most heavily affected?

Leigh: They're all going to be affected. But it's so funny you mentioned food inflation. One of the interesting areas where we're going to potentially see a lot of food inflation is in both the cocoa markets, which obviously Coco's used to make chocolate, and sugar, and coffee, which you know, we sort of forget, you know, what we think of coffee, we think of Brazil. But it's funny, I was just checking on this, it turns out that Vietnam, is the world's second largest coffee producer. Indonesia is the fourth largest coffee producer. And India is the seventh largest coffee producer. And all those countries are going to be countries that are going to be affected by the El Niño, potential drought conditions. Remember I said Southeast Asia, that's where drought usually begins to form during an El Niño. Now, the thing is like cocoa, obviously, that primarily that's mostly from West Africa. But the funny thing is West Africa in an El Niño situation also suffers a high probability for drought as well. So there's going to be those commodities or those Soft Commodities are going to potentially experience price spikes. But you know, if we do have, if we do have a drought conditions exist, emerge here in the United States this summer, then it would be corn and soybeans. They would definitely be the commodities that would be primarily affected and would undergo severe upward price pressure.

Just to show you how sensitive the corn market would be, you know, that the USDA has come out with its projections for the 2023-2024 growing season. And that corn crop is now in the ground and growing and they believe that, you know that basically we're going to harvest, you know, 4 or 5 million acres more corn this year within a record deal of almost 182 bushels per acre. Now, those are very very optimistic numbers, given how dry it's already been. But if we were to go back to the harvest levels that we had last year, because we actually reduced the corn harvest by about 5 million acres because of extra dry conditions, and the yield fell all the way down from about 182 all the way down to 173. And that brought what they call the corn carry out inventory, which is that's the corn in inventory. Before the next year corn crops grows in 2024. That brought it down not to record lows but very low. If those numbers that I just put forward drop 5 million of corn acres, and we go back to like a 175 yield. Then all of a sudden, we go down to just corn carryout levels that are our near record lows. It would wind up producing huge upward pressure on price. So you know, the global agricultural crisis and the upward price pressure on grains is going to manage itself in a lot of different agricultural commodities.

Erik: Let's come back to cocoa for a minute because that's a commodity that right now is kind of through the roof on prices. And I'm not sure what the driver is I mean, okay we got a pandemic and you know, there's been compromised supply chains but most of that is behind us.

Cocoa is not semiconductors from Taiwan that are, you know, essentially needed to make missile parts. It's a luxury, you would think that this would be a commodity that we wouldn't be experiencing a shortage with but we seem to be... why is that?

Leigh: Yeah again but it's a perfect commodity to explain the phenomenon, Erik that we talked about. You said it's luxury, good. It is, in the sense that you're most people, poor people in the world can't afford chocolate. But the thing is, if you're a Chinese consumer and a decade ago, your per capita GDP was $500 annually. And now that per capita GDP is $5,000. You've sort of developed a sweet tooth for Cocoa, for chocolate. And so that's the type of upside demand pressure that we're seeing. And the second is that, you know, West Africa like I mentioned, if we're switching from a La Niña to an El Niño, one of the areas is going to be a high susceptibility to drought is going to be West Africa, the prime cocoa growing region of the world. And I think so this could be a poster child, for strong demand colliding with a supply problem is weather related.

Erik: I want to come back to the timing of all of this, and how much of it is really happening already, and how much is still to come. Because a lot of people are looking at the food price inflation that's already occurred and said okay, we've got a crisis in our hands. This is really big. This is the big one. It sounds to me, like what you're saying is the crisis hasn't even started yet.

Leigh: And so far, I think that's right. And I think that it's going to be, you know, the crisis that has existed for the world in the US and Europe, in the high income countries, we've been annoyed by food inflation. It's something that we've had to deal with. we find it very, very annoying. And for various income levels, it's definitely put a crimp on disposable income, and what you have, but there's very large parts of the world that are where people are suffering severe caloric deficits in places like some places in Southeast Asia, some places throughout Africa. And so you know, the crisis of pure hunger is gripping areas that are far from our field of vision. However, you know, my gut feel as if we're headed to this much more severe problem. Then all of a sudden, it will first food inflation will probably get a lot worse. And it'll be driven by things that trends that have already emerged, but have stopped getting press attention. You know, when, right after the Russia invaded Ukraine, we had our first bout of what's called food nationalism that the world hasn't seen since the 1970s. And what I talked about food nationalism, what is that? It's when say, for example, if you're India and you're a big wheat, a big wheat consumer, and a big wheat exporter, in order to protect your population from the high price of wheat, which remember wheat prices spike big after the Ukrainian invasion, that what do you is ban exports. And that way you try to you basically try to bring down domestic prices. But by banning exports, for example, we always forget, you know, India is a huge participant on global wheat export markets. Off the top my head, they represent close to 10% of global wheat exports, which is very similar to Ukraine. And what's interesting is that when you ban those exports, you tighten up the food chain in other places of the world. So food nationalism, and we had multiple aspects of it. I mean, Indonesia banned the export of palm oil, India banned wheat, rice, and sugar in the drought period that had last year. And so food nationals will be thrown on top of the standard supply-demand balances that are there. It's government's step in to try to protect their indigenous populations and shield them from super high prices. So all this lies in front of us.

And you know, it's funny as somebody who grew up in the 70s, I vividly remember that, you know, there were periods where at one point, there was a meat shortage in America where you know, especially after Nixon did that big surprise export of wheat to Russia, there was panic in the global grain markets for weeks. There was huge upward pressure and price. Ultimately, resulting in a shortage of meat in supermarkets at the point in the mid-70s. So you know, could we begin to see that as well? I mean, we are seeing it now. You know, for example there's a coffee shortage taking place. And you know, there's a lot of talk that supermarkets that many grades of coffee are now unavailable. So we should expect to see things like this emerge in the next crisis. Erik to answer your question on timing. Obviously, predicting weather patterns is very, very difficult to do. And, you know, I consider myself an amateur meteorologist. So I know how hard it is. But I think the thing is, you just have to watch it. Like I said, we have near drought conditions across large swaths of the United States today. And we'll just have to follow weather patterns. If for example, you know that they switched to a dry-hot pattern, which now seems to be gripping Texas. If that begins to migrate northward up into Central part of the United States then a lot of what I just said, could very well be happening. So it's one of those things we're just going to have to monitor. But I think that between now and year-end, we could see one of these events that I'm talking about, begin to actually grip various agricultural markets.

Erik: Let's talk about the Ukraine conflict and how it changes the global landscape of commodity trading. Because it seems to me that this is not going to end anytime soon. I don't think this conflict is really just about Ukraine and Russia. I think it's the beginning of a much larger trend, a conflict of the superpowers where we're going to see more and more geopolitical tension in the world. If I'm right about that, it seems to me that you have what really is a very global commodity market today. We trade things pretty openly with just about everybody. If that closes back down to what we had in the Cold War, where the east and the west don't trade with each other. What are the implications of that? And what are the potential knock on effects look like?

Leigh: Russia's invasion of Ukraine is still severely affecting global grain markets. Here are some statistics, you know, obviously, Ukraine is a huge wheat exporter. You know, at their peak in their 2020 to 2021 growing season, Ukraine exported about 33 million tons of wheat, which represented about 10% of the entire global wheat export market. This year, the USDA is estimating that they will only export 17 million tonnes of wheat into the 2023-2024 agricultural year, that's down 50%. That is a lot. And corn is basically the same way. You know, basically Ukraine's corn exports peaked at about 30 million tonnes at the end of last decade. And this year, the USDA estimates they'll be about at 19 million tonnes. They are down almost 40% from their peak. And Ukraine corn exports represent 5% of global corn export market. So the Ukraine situation as far as their ability to export began emergency issue last year, and it's going to continue to be an issue going forward into 2023-2024. And you're right, you know, we become a world where, obviously because of globalization, global grain markets have become completely globalized, which is something very different than we had back in the 1970s. And so the thing is that will food become a huge source of geopolitical conflict going forward? Where could it emerge? It's questions I really don't know, but the switch from a uni-polar to a multipolar world. And the fragmentation of globalization is definitely going to have a a negative impact on global agricultural markets which means higher prices.

Erik: Let's shift gears now and translate this discussion into how it actually relates to trades we can place in the market. If you hold these views and I would summarize your view is to say that, really, for the rest of this decade, we're likely to have a series of agricultural crises, and it's hard to tell exactly when they're going to happen and what the details are going to be, but there's going to be plenty of them coming. What do you do? Do you just hold a basket of agricultural commodities with kind of a buy and hold and roll them every month and and call it good or do you try to time in and out of the market with what you think is going to happen next as you follow the weather patterns? How do you actually trade markets to reflect these views?

Leigh: Well I think I think it's the last podcast that you and I talked about this Erik. I think I mentioned that one of my favorite ways to play it was with the fertilizer stocks. You know, obviously, Russia's invasion of Ukraine has severely disrupted the movement of fertilizers, because you remember, Russia is one of the world's largest potash producers and exporters, and it's also an extremely large phosphate exporter. And so the thing is that many of those fertilizer prices had huge price spikes in 2022, literally almost tripling in between the beginning part of 2022 to the summer 2022. Those fertilizer prices have given back a large part of those gains. That was obviously brought about by panic buying. However, fertilizer prices are still about 50-60% higher than they were back into the end of 2018, 2019, 2020 and fertilizer equities have pulled back significantly as well. And I think that one should buy, you know, buy a portfolio of various fertilizer, high quality fertilizer producers. You know, I usually don't recommend stocks on programs like this. But you know, stocks like Mosaic, MOS, Nutrient-NTR, these stocks have pulled back 40-50% from their highs, and now what I believe is high levels of value. And I think that, you know, when grain prices go up, fertilizer prices go up, and the earnings of these companies will go up. And I feel that the pullbacks here have given potential agricultural investors another great buying opportunity.

Erik: And I should mention for anyone who missed your last interview, that the fertilizer story ties into natural gas prices and everything else. So if you haven't heard that whole analysis of why fertilizer prices are probably headed higher, you want to check Lee's interview from last year here on MacroVoices. Leigh, ell us a little bit more about aside from fertilizer, where you think this is this is headed and what the timeframe is, it sounds like you think the rest of the decade is the timeframe for higher agricultural prices. If I think about the way these commodities that the food chain, if you will. The meats are all eating the grains. So I suppose there's a leverage factor, that the price of beef is going to go up exponentially with the price of whatever grain the beef is eating. If I'm wanting to invest in these things, do you invest in the grains themselves because that's really where the tension is or do you invest in the things that eat the grains because there's leverage there.

Leigh: Well, it's interesting, the whole cattle cycle is very, very different than the grain cycle. In the sense usually what happens is that there are many times they're inversely correlated. For example, when you have a big, huge spike in grain prices, what happens is that feedlots all of a sudden are now experiencing a negative margin. They are selling to cattle at today's prices, and their input costs are grain prices have gone up a lot. What does that cause feedlots and ranchers to do is they sell their cattle because they just can't afford to hold them. So, you'll often get a situation where as, as you get this big, huge bull market and grain, you'll get a bear market in cattle, because there's a huge liquidation that takes place. Now, on a longer-term basis, those cattle herds will have to be rebuilt. So that produces the next bull market in cattle prices. So I don't recommend anyone to play the life cattle market, it's too complicated. And its got a lot of variables, which are in many ways to the average investor very counterintuitive and things like that. So I would say, you know, don't become unless you really want to live life on the edge. Don't speculate in cattle futures. But you know, they will be between I have a great belief that by the end of this decade, cattle prices will be a lot higher than they are now just like grain prices will be higher, fertilizer prices will be higher, and cropland will be higher.

Erik: It sounds like you prefer plays on fertilizer as opposed to direct plays on the commodities themselves, any particular reason?

Leigh: Well somebody I should point out that I own a relatively large farm and we raise cattle. And you know, it's funny if you if you watch the movie, Yellowstone, there's a lot of obviously, other elements going on in there. But it does talk about the tremendous amount of work and difficulties that go into managing a farm. It requires a certain type of personality, it requires a certain skill set, it requires a you know, I'm almost going to say a level of fortitude, because there's so much against you. You know, the weather is against you. The government's are against you. The big food companies are against you. And it's a hard way to make a living. However, you know, if you want to invest in farmland. Now, it turns out there's a couple publicly traded farmland REITs that trade on the New York Stock Exchange. So if anyone's interested in owning farmland on a relatively easy way to do it, they could be potential investments for you. But the fertilizers are easy. They pay dividends, as opposed to going out and becoming a, you know, investing in cattle futures or you know, going out and buying farm land directly. Which I don't, unless you have you really want to get drawn into this area. I don't recommend anyone to really do that.

Erik: Leigh, we've been talking specifically about grains and about the food inflation that we both expect to come but your company actually does a lot of commodity research, not just grains. So let's expand the conversation now to commodities more broadly. We've been talking about the grain investments is that your favorite investment right now or are there other commodity plays that you find interesting and if so, what are they?

Leigh: Interesting question Erik. There are and people ask me, what are you bullish on short term? And because we always have a tendency to fall back and we say, well on a long term basis, I am bullish in this. But here are two commodities that I'm very bullish on short term. One is U.S. natural gas. You know, we're a big believer that because of the underlying changes that are taking place in the supply dynamic here in the United States, that the US natural gas market is on the verge of swing from what I call structural surplus to structural deficit. And one of the big ramifications of swinging from structural surplus to structural deficit is that US natural gas prices are going to converge with international gas prices. So today, US gas prices are $2.60-$2.70. International gas prices, European natural gas price is basically almost $13. And so in the strip is even higher the strip is well over 20. So the thing is, is that once that we go from structural surplus to structural deficit, we can in the mechanism to take advantage of that arbitrage is in place, which is the US LNG export business, which we're expanding. We're going to add another six BCF of export capacity in 2024. Ten we will see a convergence in the price. So gas prices going from $2.50 or $2.60 up to $13. That could happen within the next six months. So that would be my number one commodity that I believe has the best short term potential.

The other commodities again, it's a funny commodity because most people don't follow, it is uranium. And I believe that uranium is been in a bull market, but since we really don't, it's not a listed market that we follow. There's not a lot of talk about it on CNBC and things like that. But uranium prices have really started the year basically at $48-$49 and they're basically up to $56-$57 today, so they've they're moving nicely. And on a short term basis, there's going to be a phenomena that happens in the uranium market and mind you, individual investors can participate in the spot uranium price. There is a vehicle out there the Sprott Uranium Trust. It follows the spot uranium prices if you want to. If you would like to participate in that bull market, you know, call your broker, he can buy that for you. It trades in Toronto but the Sprott Uranium Trust. It's a closed-end trust, it trades at discounts and premiums to its net asset value. Since the beginning part of the year, it's been at a discount, and that prevents them from issuing new shares and going out and buying uranium in the spot market. However, that that discount has been narrowing. And I think my gut feel is that we're going to swing from the Sprott Uranium Trust trading at a discount to it will begin to trade at a premium. When it trades at a premium. It's going to issue new shares and it's going to go into the spot market to buy spot uranium. At the same time the utilities are beginning to really get worried about being able to cover their uranium needs between now in the next seven to eight years. So I believe that we could see a a chaotic uranium market develop in the next six months as the Sprott Uranium Trust competes with actual commercial uranium buyers that primarily utilities to fulfill their needs. So that's a commodity that I am very, very bullish on on a short term basis. And there's like I said, there's a way for investors retail investors to play it.

Erik: And of course, that ticker symbol is U.UN for the Sprott Physical Uranium Trust. Leigh, I can't thank you enough for a terrific interview. But before I let you go, tell us a little bit more about what you do at Goehring and Rozencwajg. Specifically, a lot of people think you guys are in institutional commodity research firm because you write a lot of excellent reports. That's not actually your core business, is it?

Leigh: No, we are an SEC-registered firm. We manage a mutual fund, the Goehring and Rozencwajg resources fund which is GRGRHIX. It's available. It's open to everyone, I think, a minimal investment in the retail class is only $3,000. So you can invest with us using that vehicle. And we manage a bunch of institutional accounts as well. Like you said Erik. We're well known for our research. It's part of our investment process. You know, when Adam and I, I've been writing research on global commodity markets now for 25 years. And most of the places that I worked at, it was not put in the public domain. When Adam and I established Goehring and Rozencwajg back in the first quarter of 2016. We said let's put our research into the public domain, it's really good stuff. It's traditionally always found a huge level of investor interest. And we've done that and it's exploded. It's everywhere. And it's a lot of really, really good research. But one of the things that our investors should know is that research is the basis for our investment. And we're 100% research driven. And, you know, we're not trend followers, we're willing to get involved in, you know, commodity markets that have gone through severe bear markets, where everyone is bearish and all the securities that are in that area, that commodity market is selling in incredibly distressed prices. No buyers were willing to get involved in those type of areas. And that's because of our research. We have great confidence that our research is able to pick out trends that most investors miss. And so when we combine the research, which is in the public domain, everyone can read it, but it's the basis for our investment process.

Erik: The research is free at gorozen.com And while you're there, be sure to check out information on the fund offerings as well. Patrick Ceresna, Nick Galarnyk, and I will be back as MacroVoices continues right here at macrovoices.com