PLEASE NOTE: This transcript has been auto-generated and has not been fully proofed by ISEOF. If you have any questions please reach out to us at info@thegreatsimplification.com.

[00:00:00] **Jeffrey Currie:** The period of globalization has ended. You need to build multiple supply chains, redundancy, new manufacturing systems, and all of that. Why aren't people putting money into it? They won't. It wasn't the great returns in the '70s that got people to put money in the space. It was shortages. It was lines.

[00:00:19] People don't buy these stories until you run out. That's gonna hit middle class America and change their lifestyles like they've never seen before, and you have the abundance illusion that the Western governments are pursuing that make it more difficult. I think it'll take the actual shortage to get people to move, and then we get the capital move, and it's a different ballgame

[00:00:43] **Nate Hagens:** Today I'm joined by energy commodity analyst Jeff Currie for a deep look at the relationship between financial and physical energy and commodity markets, and how that informs the energy supply that will be available to us in the coming months, years and beyond. Jeff Currie is the Chief Strategy Officer at Altus Partners.

[00:01:03] Previously, Jeff served as Chief Strategy Officer of Energy Pathways at The Carlyle Group, where he currently serves as senior advisor to the firm. Jeff is also the former Global Head of Commodities Research at Goldman Sachs, where he helped to build their commodities business. During his nearly three decades at the firm, he became one of the leading commodity market strategists on Wall Street, known for advising clients through the commodity supercycle of the 2000s, the shale supply shock of the 2010s, and most recently, the twin shocks of the pandemic and the Russia-Ukraine war.

[00:01:38] Despite getting our graduate degrees from the same city and starting on Wall Street in the same year, and both having an energy systems perspective, this was our very first conversation. We talked about the magnitude of impact the Iran Hormuz situation will have on the West and on the world that is still mostly being discounted and ignored in financial markets.

[00:01:59] We talked about the importance of diesel to our economy and how close we are to physical product shortages. We talked about debt and the decline and fragmentation of globalization, and an inevitable shift towards state capitalism to coordinate the needed infrastructure investment. I expect Jeff will be back on TGS.

[00:02:21] This was a great initial conversation. If you are enjoying this podcast, I invite you to subscribe to our Substack newsletter, where my team and I share written content related to The Great Simplification. You can find the link to subscribe in the show description. With that, please welcome Jeff Currie.

[00:02:39] Jeff Currie, welcome to the program.

[00:02:42] **Jeffrey Currie:** Pleasure to be here, Nate. So I'm looking forward to the discussion.

[00:02:45] **Nate Hagens:** We have a lot to talk about. Um, you have spent three decades at Goldman Sachs as one of the leading commodity strategists on Wall Street, um, advising clients through the supercycle of the 2000s, mmm, the shale supply shock of the 2010s, the pandemic, the Russia-Ukraine war, and now mid-2026, and I will timestamp this, uh, Thursday, July 23rd recording.

[00:03:12] From your seat at Carlyle, you're watching the Iran war, the disruption of the Strait of Hormuz this morning, and the Ansar Allah attacks against a Saudi tanker. I have a lot of questions for you, but before we get into the details From a wide boundary angle, how do you read this moment in the history of energy?

[00:03:31] And is this another cycle or is it something structurally different?

[00:03:35] **Jeffrey Currie:** I mean, there's a cycle going on, and I, I'm not gonna talk about that. We'll spend most of the time to-talking about the cycle. But I think just from an initial knee-jerk reaction, it's like, okay, macro community, you, you weren't worried about the Straits of Hormuz.

[00:03:50] So what did we do? We shut the, um, you know, the, the Red Sea. We have shut the Black Sea. We've taken out half of the refinery capacity out of Russia. So if that wasn't good enough for you, is this one good enough for you? And you still see the market struggling to hold a hundred dollars a barrel at this point in time.

[00:04:08] If you would've given me that scenario two years ago, I'd say, you know, global recession and, and we're in deep, deep trouble. And by the way, the product prices are telling you're in deep, deep trouble. But, you know, I like to say crude is the noise, products are the signal, but their people are not looking at them.

[00:04:25] But, and when you look at crude, the reason why everyone is convinced that Trump will taco Um, the problem I have with a taco is what is he gonna try-- what can he pull out of the hat to taco with? He had the MOU before he could pull out of the hat to taco with. And at this point right now, the terms of any taco would be far worse than the previous one.

[00:04:51] Um, and you know, I view that he's now being driven by his li- I don't wanna get in his mind. That's not where I ever like to go. Um, but I, I find it really difficult to believe that it could be an easy taco, and also the magnitude of this disruption, I mean, is like, it's like you couldn't dream this up.

[00:05:12] And, um, I... the market just is again shrugging it off just like it has the entire time.

[00:05:18] **Nate Hagens:** Well, this is why I've been so looking forward to, uh, talking with you because you're one of the few, uh, people from back in the day. By the way, I, I told a bunch of my remaining Wall Street friends that you were coming on the show, and they were like, "Oh my God, he's the king of-

[00:05:35] of commodities, and he's, he's often early, but he's always right." So I'm just wondering, what is it that you're always gonna be right about and possibly early right now?

[00:05:46] **Jeffrey Currie:** By the way, I'm gonna disagree with that. Commodities are the best performing asset class this decade. You know, you're up over 200%. Crypto on average is 157.

[00:05:57] I just wrote an op-ed, so I got these on the tip of my tongue. We called the bullish super cycle in October of 2020, um, in commodities. That's when we made the call. From that point forward, um, since October of 2020, um, commodities bar any other asset's the best performing one. And the reason why the bottlenecks may have changed over that time period, but the tr- trend in commodity returns has not.

[00:06:26] Um, you know, so it was oil earlier this year and it's diesel today. 'Cause remember, diesel products are up 81% year to date. The index is up like 34. You know, the second best performing equity group is the, are the, um, are the, the, the energy equities. I think the reason why people believe that is that they look at the price level itself and not the returns generated.

[00:06:52] And what is different about this cycle than in the 2000s is the returns were generated with the price going up like this. This time it's the front end of that curve. You're rolling the front end of that curve and generating significant returns. So even before this recent rally in crude, when we were sitting at $75 a barrel or whatever, I think it got a 60 handle on it.

[00:07:17] When we're at $60 oil, the investment returns for being long oil, even though it was lower than when the war started, um, during the war were 40%, because you're capturing those spikes going up and down and up and down over that time period. And the point that I made is I don't care, and we'll, we'll talk about...

[00:07:37] And this is something I really wanna get is, you know, returns from commodities can come from either the shape of the curve or they come from the price appreciation itself. Think of it, it's either from the dividend or from the di- the, the roll yield is what we call it, or it comes from the, the, the price.

[00:07:55] The bottom line, it generated massive returns for anybody who actually held them. And before oil it was gold, before copper, before nickel, before silver. Keep going down the list. Coffee, cocoa, livestock, you know, oil during the, um, the, the Russia-Ukraine. And I think that that's what's being missed, and there's too much of a focus on the price level.

[00:08:17] By the way, I was super wrong in the 2000s because the price level went up. By the way, the returns were terrible 'cause you had a contango in the front end. So what happened is the back end drove up the curve. You're rolling that front end and just destroying any return potential Um, I don't know what it is, but the bottom line, the returns from holding hard assets have been absolutely phenomenal this decade.

[00:08:43] **Nate Hagens:** So you and I started on Wall Street. I went to Salomon Brothers, you went to Goldman Sachs the exact same year. I managed money for billionaires back then. That was my job, and one of them started trading oil futures. And so as a good broker, I learned the ins and outs and the special qualities of oil, and I realized a barrel of oil can do five years of human labor, and oh my gosh, this stuff is depleting, uh, and it's made from fossils over millions of years.

[00:09:12] And so I started to view the world from an energy lens, thinking I was a year or two ahead of the pack. And here we are thirty years later, and I don't think Wall Street still understands that oil, diesel, uh, jet fuel, and the like are the hemoglobin, uh, in our global system. And they look at things that can just, "Oh, we'll print money and it'll be fine," or, "We'll guarantee this."

[00:09:39] And I don't think there is a plan here. I think we're bombing without any coherent plan. And you're right, there, there isn't a plan. So to me, I've felt strongly since February that, um, we kinda hit an, uh, uh, our, our aircraft carrier hit an iceberg and the bottom, uh, compartments are filling with water, but the grocery stores are still full and the gas stations are still full.

[00:10:06] So bring us up to speed on why we've been so complacent about this, and I think some of it is a financial lens with... and not an energy and material lens, and some of it is we've been drawing down storage both in the US and China and elsewhere. Where do we stand today, on the oil, uh, storage price situation?

[00:10:27] **Jeffrey Currie:** I think that, in products, you're already there. We are at critical levels. If we look at the three-two-one crack spread, which gives you a three weight to gasoline, a two weight to diesel, and a one weight to crude oil, um, think about it's the value of the products versus crude oil. It's sixty dollars a barrel. That's the highest level in the three decades I've been doing this.

[00:10:52] I've never seen it this high, and no one has. Which is telling you at $100 a barrel, um, the products are at 160. Um, and so when we think about what happened to get us to this extreme shortage in, in products, it has to do with we've knocked out refineries in, in the Gulf, in the, the Arab Gulf, and we did not send out products when we had the ability to send it out.

[00:11:20] We sent out crude. You should've been sending out products, but you can't send out the products because the ships are flammable. They blow up. You bomb a crude tanker, as you saw in the videos earlier today with that Saudi tanker, yeah, it catches fire, but it's not a bomb. The product ones are. And then China, everybody goes, "Oh, it helped out Trump and kept prices down."

[00:11:40] Well, they cut refinery refined product exports, and they cut refinery runs. They drew down their product stocks. And so when we look at what China's actions did, it made products tighter. It backed up some of the crude, but it made the products tighter. Then we had Ukraine striking 1,300 kilometers into Russia, taking out nearly half of the refining capacity.

[00:12:04] Um, and now they're importing jet fuel from Japan and diesel from India. They're supposed to be the largest product and crude exporter in the world, and they're importing. Um, and also people go, "Oh, it's just bullish products." No. When you think about those refineries, these are Soviet era, era refineries.

[00:12:23] There's one pipe of crude going in. You shut the refinery down, you're shutting in the crude. So we've lost the crude as well. Um, and that... And then w- so we think about the US that had the SBR And basically it was trying to turn product in as fast as they can to send to Europe, and we're now getting to the point the draws out of the SPRs are in that three to five million barrel range, so per week.

[00:12:46] So it-- we're in a very different environment on products than we are on crude. We may have a few... Now, if we take out the Red Sea, and by the way, the Ukrainians were also taking out the Red Sea or the Black Sea. So Ukrainians taking out Black Sea, the, um, um, the Houthis taking out the Red Sea, Iran taking out the Strait of Hormuz.

[00:13:09] Um, so we now, and also we have China back to increasing refinery runs to export products because at $60 a barrel, it's a no-brainer. Um, we're now gonna shift that shortage into the barrel of crude as opposed to just the product. So, you know, we may have a few, you know, let's call it 30 to, you know, 60 days of excess pr- um, oil, given the magnitudes of these disruptions, but it won't take time before that crude situation evolves into something bigger on like along on the product side.

[00:13:42] So your, your point about it's like the, the Titanic, you know, we're f- the iceberg has broken it, we're filling it, and everybody is sitting, you know, and going, "Oh, nothing to worry about, nothing to worry about." And also we look at Western governments, they just reinforce that, and that's part of the reason why the macro community just won't buy this thing here.

[00:14:01] They're not doing it. They, I think they may... When they do this thing, uh, it's gonna take an express elevator straight up. Now I, you know, I think as I said it previously, the conditional probability going to 150 once you get over to 100 is pretty high, unlike it was before. Because to your point, the shelves are empty and fast.

[00:14:20] There's not a lot out there, and I think at this time, people will look at the probability of a taco being much more difficult. Because the one thing he could always taco with, he always could pull the rabbit out of the hat, go, "Hey, here's the MOU. They actually can supply us with crude." They're not gonna supply him with crude this time around.

[00:14:38] **Nate Hagens:** I think this is gonna be, uh, akin to Napoleon's Waterloo in retrospect, because there, there is no... Every week that goes by, Iran has more leverage in the situation. I just don't see a good outcome, uh, here, and I think this is gonna reverberate forever. Uh, I mean, even if the war ended today and we went back to full peace, which is highly unlikely, what about the, um, the damaged wells in the Middle East, um, that have water fill and other things that they're gonna have to restart?

[00:15:13] What about the negotiated contracts that are gonna go to the East instead of the West on a lot of these products? Um, what about the instability in the Middle East? Um, what if, uh, Saudi, uh, y- you know, and the US attack Yemen and, and that conflagration starts? Uh, any thoughts on all that?

[00:15:32] **Jeffrey Currie:** Add in Russia shutting in the wells.

[00:15:34] There, the water cuts are bigger, older. Um, th- their ability to restart these things, and, like, from my understanding is those, the Ukrainians hit those CDUs just bang on. It's gonna take a year and a half to rebuild these. You shut down that CDU, you're shutting in the production, and roughly 35% of that can be redirected.

[00:15:53] So everything you just said applies to the Middle East as well as Russia, the two largest oil suppliers on the planet Earth. That's why it's just, it... And everybody got bearish after that MOU. I'm going, "What planet are you guys living on? Look at the, the, the crack spread, $60 a barrel. You were already there."

[00:16:13] Um, so, you know, I'm, I am, you know, I, I, I'm beyond myself of the, the, the, the complacency.

[00:16:20] **Nate Hagens:** Seriously, um, I mean, you and I know this stuff quite deeply, and if six months ago, in January of 2026, someone had told us this scenario, it would've been close to an Armageddon scenario. I've been using Hormuz as a graphical example in my presentations on energy as the lifeblood of civilization for over a decade, and here we are.

[00:16:43] And yeah, oil's up 5% today to 80 dollars. I mean, it's it, it's, the complacency is bizarre, uh , which is why it's comforting to talk to someone from Wall Street like yourself that understands what's going on under the hood. So, let me ask you this. You've described, uh, the drawing down of strategic petroleum reserves as, um, liquidating a buffer that's built up over decades in order to suppress the very price signal that would trigger the necessary investment response to what the market needs.

[00:17:16] Can you play that forward, forward for us, uh, Jeff? What, what actually happens when those buffers are gone and the signal finally comes through? What are the mechanisms? What actually happens?

[00:17:27] **Jeffrey Currie:** The reason why we have futures markets is so that they can try to buffer us from high-risk environments, in that you would have entities, you know, going out, like airlines, buying, and it would bid it up slowly, and buying oil to hedge out the risk of something really bad happening.

[00:17:49] In fact, what we find in doing studies is that markets that have futures markets and ones that don't, the futures ones anticipate events. They're driving down, they see the pothole, they drive around it, and then they, uh, they don't run into it. The ones who don't end up with huge spikes. And the example we give are onions futures.

[00:18:07] They were a target of Gerald Ford, the ex- you know, the, the president back in... And he was a, a, I think he was a representative or a senator at, from Michigan, actually your neck of the woods, back in, in, I think, the '60s, and he banned onion futures. So we showed what he did. It created an environment in which you can't avoid the pothole, and the onions would go straight up and become spiky.

[00:18:32] And I think the issue here is that we're taking out that price signal and that is gradual. So another one I like to give is Newcastle Coal, which is more in our career, if you remember, uh, do you remember what happened in Newcastle Coal right before oil, and, like, it was in late '08? It sat there and did nothing through that whole super cycle 'cause it couldn't price anything in.

[00:18:54] It hit the pothole and just went straight up. Absolutely explosive. Um, so there's no anticipation.

[00:19:01] **Nate Hagens:** Let me ask you this though. Um, obviously there's a long f- forward futures strip for both natural gas and oil futures, but my understanding is that 98% of the liquidity is in the first six months, and if an investor or a big business wanted to hedge and buy a lot of oil futures 18 months out, there's no liquidity there.

[00:19:26] So, uh, the only way to buy large quantities of oil in the future is to buy an oil company maybe. What are your thoughts on that?

[00:19:33] **Jeffrey Currie:** Hundred percent, and that was a direct result of Dodd-Frank. Um, it takes out... So the ability to manage this. In fact, I... You just reminded me, I wrote this op-ed that was published this morning in City AM.

[00:19:45] They call... I called it the physical capital paradox. Best returning asset class and nobody owns it. And I think it's, it-- Let's go over a few reasons why, and a- as you just said, it dawned on me it was Dodd-Frank. I didn't include it in the list, but one of the... One I talked about in there was as a share, it shrank so much because of the sustainability issues earlier this decade.

[00:20:08] Uh, you look at energy, it's running around, you know, just shy of 4% of the S&P, um, basic materials. Put them together, you're under six. It's a third of the long run average. But let's just take the 3% for energy. Let's say energy doubles in value, 100% return. Um, at 3%, that's a 6% return to the portfolio manager.

[00:20:33] Take tech, 53%. So let's just round it at 50. Um, to equal the return that you would get in, in energy at the 6%, it only has to go up 12. Um, so you, uh, so you can see, uh, uh... Actually, I got it backwards. 100% at 3% is a 3% return. 50% of a 6% return is, um, 3%. So you can see the bar for, for, um, tech is pretty low. And you wonder why nobody-- and why everybody's complacent.

[00:21:10] They don't want this happening because they're so under-invested, their returns will get demolished like they did in 2022, and they seem to have forgotten that. And I think that that's one of the big issues. But on the... Going back to your point about, you know, the Dodd-Frank, Dodd-Frank, there's no capability to manage that risk.

[00:21:31] You know what I mean? The old days that you and I grew up in Wall Street, where these... They were running huge, um, positions in taking, um, proprietary risk. Um, in fact, the joke that somebody said to banks, to me, "You go out for lunch, your, your quote on copper is no good by the time you come back." Um, in the old days, they would come in and...

[00:21:52] Because it was, execution was, was the primary focus of these banks, not price. And because it's become pricey, they can't take that risk out there. There's nobody taking the risk. Therefore, the ability for people to extend, um, you know, whether it's credit or anything out into those further dates are not there.

[00:22:12] Because remember when I said I was wrong in the 2000s because the curve went up on the back end? To your point, people had the liquidity out there. They would buy it, and this time around they're not.

[00:22:22] **Nate Hagens:** So you're, um, foreseeing some potholes ahead.

[00:22:26] **Jeffrey Currie:** Huge potholes. Massive potholes. You know, I, again, I'm gonna go...

[00:22:31] People say I, you know, I, I'm wrong, and by the way, I hear that all the time, so I, I don't take it offensive. But We are already at, we got to $5,500 gold and we are at, what, 4,200 this morning. We're at, you know, $160 diesel. We are at 100, like $101 a barrel Brent. We are at their $ 14,000 a ton copper. The list goes on.

[00:22:55] We've already hit some pretty major potholes, but the ones coming up are gonna be massively larger than the ones... In fact, the way I said it previously, we're only in the foothills of the Himalayas at this point. And by the way, the other thing too is like, what made that very different in the 2000s is that point you're making.

[00:23:13] We're buying the back end, so it was much smoother. Because there's nothing on the back end, it's like spike after spike after spike, and it doesn't feel like a trendy market, so people don't buy into it. But this time around, I think the upside in these spikes when we just hit the potholes and go in and come back out is going to be really significant.

[00:23:33] **Nate Hagens:** So this is our first conversation, uh, ever, even after being in Chicago at the same time in 1992. Um, so I don't think you know a lot about my work. Um, the viewers of this channel are systems, uh, literate and understand energy and commodities and materials as fundamental to our way of life, and we're concerned about not investments and returns per se, but how is society and civilization going to function ahead where we're papering over some of these, uh, commodity and energy shortfalls, um, and, uh, other, other things with debt and with credit and, and such.

[00:24:18] But we live in a biophysical world. So what, what do you foresee... I mean, we're talking about diesel and s- some of the 3-2-1 product shortfalls from Hormuz. But map on what you've said so far with a super cycle and some sort of a structural change in the world, what's the next decade gonna look like?

[00:24:40] **Jeffrey Currie:** You're gonna rotate between the thematics of scarcity and debasement.

[00:24:46] Um- Yeah ... and I think those are the two big themes that are going to... And you got gold as your headline on the debasement, and I would put oil and copper as your headline. Uh, actually it's throwing an ag like corn or soybeans as the proxies for scarcity, um, going forward. And I don't see how, at this point, how we avoid it.

[00:25:08] The underinvestment, you know, it takes 20 odd years to bring on a copper mine. Um, you know, and the oil, we haven't built refineries. One thing I struggle with, am I more bullish products or bu- bullish oil? You haven't invested in either one of them. And people go, "Oh, look at all the Brazilian and Guyana productions coming on."

[00:25:28] Guys, that Brazilian and Guyana production was investment from the previous cycle They're in the, in the... I've actually, Goldman publishes these top projects, um, of all the big projects that, that are, are produced. The last version was the first one ever that didn't have any major new projects. 'Cause remember, sustainability, we were done investing in oil, um, just going back.

[00:25:53] So, um, the underlying environment of scarcity, and it goes across the board because nobody ever thought we needed any of this stuff. And you can also look at the AI build-out. It's building all of this demand for metal, for energy, um, and for, you know, turbines, for, um, transformers, which are all metal.

[00:26:18] Yet, nobody's invested in the raw materials used for all the build-out. So we have the biggest supply sh- demand shock we've ever seen in commodities of eight... This year, 800 billion, s- 50, more than 50% of it goes directly into commodities, but no investment in commodities.

[00:26:35] **Nate Hagens:** Yeah, AI is gonna make this stuff worse, although, although some people think we're headed to the tech singularity, we won't need all this, uh, energy and materials, uh, anymore, which is kind of ridiculous.

[00:26:47] I think you, you just wrote a piece, um, something titled like The Abundance, uh, Illusion or something.

[00:26:53] **Jeffrey Currie:** Abundance Illusion, yeah.

[00:26:55] **Nate Hagens:** What's that about?

[00:26:56] **Jeffrey Currie:** Basically, we go back to Carter and Carter made a fatal mistake. He admitted the scarcity. And, um, he, and he had two speeches. One was in February of s- 1977, and the other one was in April of 1977.

[00:27:15] And the first one in 1977, it was the famous sweaters- sweater speech. He comes in with this tan cardigan and goes, "Brr," and you could see the thermostat in the background, kinda like this one. Um, and the response was panic set in. He goes, "We need to reduce, we need to conserve, we need to do the right thing here."

[00:27:35] Okay. That didn't-- Well, prices of commodities went up more, people got scared. The-- Then he goes out and he says... He coined the term energy transition in the f- April one. He goes, "We need to invest in non-fossil fuels for security reasons." And so he was the one who brought out solar, wind, nuclear, and by the way, at this point, the French were already gun-gung ho.

[00:28:00] Nixon got it all g- up and started with Project Independence, but he gave the name energy transition, and we need to do it for security reasons. He called it the moral equivalent of war. What does that stand for? M-E-O-W. Mistake right there. Meow is what they said, and they dismissed him. So what was the takeaway for the Western leaders?

[00:28:23] Never admit the scarcity, 'cause he got killed. Second takeaway, the Chinese understood you need to invest in energy transition for security. Because they did not take the energy transition seriously, and I'm not saying this in a way that's diminishing environmentalists, but the environmentalists were never ones that could take one of these policies and push it through, and we're still struggling.

[00:28:50] And so when it dropped into the hands of the environmentalists, it took on a political, um, let's call it, you know... It became, um, you know, hot, uh, hot potato politically. But I think the key issue is what did the Americans and the Europeans learn now? It's this idea of abundance illusion. George Bush Senior was the first one who actually ran into a war with the Gulf War in 1991, Gulf War I with Iraq, and he used the SPR and he talked down the market.

[00:29:24] He did exactly what Trump did. That's the abundance illusion. And by the way, you're just playing a game. Can I keep this thing together until that supply comes back? Bush, Bush Senior did it, um, Clinton did it, Bush Junior did it, Obama did it, Biden did it, and Trump did it. Every single one of them has done it.

[00:29:45] So what Trump is doing, Trump did not have to do it in Trump 1.0, but he had to do it in Trump 2.0. Um, so that's the abundance illusion, if you're making a big bet you can avoid this, the real scarcity and never having to admit the scarcity because they all know how bad it ended for, um, Carter. But before I s- continue, I just wanna make another point about China.

[00:30:08] China heeded Carter's voice on energy transition. It didn't become the world's leading expert in nuclear generation capacity technologies, in solar, wind, batteries, lithium, the list goes on. It heeded that advice and invested in it. It had nothing to do with the environment, but everything for energy security, and it just demonstrated to the world it can roll with the punch.

[00:30:33] And I-- So I think when that... There's two aspects. The abundance illus-illusion was the wrong answer, though that's the route the West went because it's a political, "I gotta get reelected," and you never admit the scarcity, while the Chinese, which are, you know, an authoritative, um, dictator type of environment, um, made all the right decisions, and unfortunately, they're in a relatively good place right now.

[00:30:58] **Nate Hagens:** I wanna double-click on, on China and, uh, electrification in a second, but, but, uh, regarding the abundance illusion, every once in a while, Trump drops a truth bomb that he probably is not supposed to say. But a few weeks ago, he said, "If we hadn't done the MOU, we would've... had massive shortages, and we were this close to running out of diesel."

[00:31:21] I mean, he did say something to that effect, and, and then it was kind of brushed over. Any thoughts on that?

[00:31:27] **Jeffrey Currie:** You notice he's been remarkably quiet this last week. Um, I think, you know, because he's trapped. I mean, uh, by the way, there's a-- If anybody's looking for somebody who's got the best read on this, Robert Pape, Professor Robert Pape- Yeah

[00:31:42] at the University of Chicago. He's phenomenal at this. It's the escalation trap. You know, MAGA wants him to finish the job. Um, you know, they don't like the, you know, the, this, this situation that they're in. Because remember, he or he made fun of Obama for giving them $1.7 billion- I know ... and he's now gonna give them $324 billion.

[00:32:01] **Nate Hagens:** Yeah.

[00:32:01] **Jeffrey Currie:** By, by the way, that number just got larger.

[00:32:03] **Nate Hagens:** And by the way, the rest of the world doesn't like us because their products and their energy is a lot more expensive, um, uh, for other reasons as well. So I, I actually, um, again, uh, you don't know my work and I know yours, um, I liken society to a superorganism, an economic superorganism that has a metabolism, and that we self-organize as small businesses, corporations, nation-states to maximize profits, and those profits are based on energy and materials.

[00:32:36] And I think the Strait of Hormuz situation has splintered the superorganism, and over time, uh, there's gonna be an East and a West, and the supply chains and the global system is going to bifurcate, uh, to some degree. Uh, it's already happening, uh, right now. Um, I- let me ask you what your thoughts are on that, and then I'll get back to China and, and the jewels.

[00:33:02] **Jeffrey Currie:** I'm gonna, I'm gonna use a, a story or, of... Actually, Robert Pape just pub- I think he's publishing this this week in Foreign Affairs, where he talks about... Actually, it applies to the abundance illusion, that in 1991, when, um, George Bush Senior did the first abundance illusion where he went into Iraq one, um, two things occurred.

[00:33:27] The Soviet Union fell almost, almost to that day. At the same time, he went to a war with 10,000 body bags and used 147. The victory was just astounding. The world was in shock and awe, real shock and awe, of the power of the United States. It became the global hegemon in that globalization, that hegemon money environment, it flourished.

[00:33:51] Um, that was that, that was when it all took off. Set the stage for China and everything. At the other end of the bookend is what we're going through right now, the opposite. Went in there with a, with a big swagger and coming out with a, in a, in a situation that is not as strong. And, and, and this was happening before this ep- you know, this war, but at the same time, China is rising.

[00:34:16] So before the Soviet Union collapses, the US dominant victory. Here, China's asserting its authority to the world really aggressively, by the way, and the US had a very poor performance in, uh, in the Middle East. Uh, actually, the other thing we haven't talked about, they're... At this point, they're burning through missiles.

[00:34:36] They shouldn't be using missiles anymore. The missiles should have been retired a long time ago, and they should be using F-15s and F-35s dropping gravity bombs. You cannot fight, um, $40,000 drones with million-dollar Patriot missiles. Um, and the radar systems are taking them out. This is getting dangerous. My under-- I'm not a, I'm not a statistician in, in military things, but my understanding, talking to people that do, if we've drained those missiles to such a point we're in a very dangerous situation.

[00:35:06] Um, so I'm a big believer that, you know, the period of globalization has ended. We're looking at an East, a West, a China bloc, a US bloc. I don't know if it'll be a US bloc when it's all said and done, but there'll be another bloc. Um, and when we think about, uh, what that requires, and if we go back to the c- core thesis that we put forward for being bullish commodities, de-globalization and the war on free trade, when we launched that, the second super cycle thesis in 2025, was at the core.

[00:35:39] 'Cause you need to build multiple supply chains, redundancy, um, new manufacturing systems and all of that. And so this is really at the core of our bullish call on commodities.

[00:35:50] **Nate Hagens:** Every one of the questions I have for you has so many, uh, rabbit holes that it could take an hour and I, uh, I, I... But, let me ask you this.

[00:36:00] So if there is a, a splinter in the world alliances and there's a, an East bloc and a US North American bloc or whatever, on the one hand, that would be incredibly bullish for commodities, uh, because it's not one, uh, cheapest place to deliver global system anymore, and there's gonna be some sort of a Liebig's law of the limiter on some commodities somewhere.

[00:36:28] But on the other hand, it's incredibly deflationary because the dollar, the petrodollar, the global credit system, this if we run out of money, we just vote another increase in the debt ceiling. Credit also has a huge role in commodity pricing, and we just assume that if we run out of stuff, we're gonna print more money as a sovereign.

[00:36:51] Uh, but the global economic system has been, you know, a Wile E. Coyote, uh, climbing higher and higher. So how do you see the relationship between Obviously, commodities are getting less quality, further away, more demand, scarcer, therefore the price is gonna go up. But our affordability and access to them is also dependent on credit.

[00:37:16] Uh, what are, what are your thoughts there?

[00:37:18] **Jeffrey Currie:** You know, it, it-- there's two answers to this. I wanna talk about what it does to commodities as a liquidity, um, provider, but also let's talk about the end use demand. Um, clearly when we look at the group that consumes the larger share of commodities, and this was the second big theme, it's called redistribution, the only way you deal with this is you gotta give money to the lower incomes.

[00:37:41] They don't have credit. The credit is for the middle to higher income groups. And in fact, when you look at the, the quintiles, the bottom two quintiles have zero, zero credit, and they live paycheck to paycheck. So you hit them with a... with fiscal transfers. Um, and by the way, the US is in a very, very serious situation right now because the UK economy is just getting more extreme and more extreme.

[00:38:07] And, when you hit them with the fiscal transfers, it is very inflationary. We saw that with Biden. You know, he gave them the $2,000 checks or whatever it was, and boom, the price of commodities exploded. And this is one thing I realized at this point, contrary to what anybody will tell you, and the macro guys still argue with me on it, inflation is caused by low income people, and it's bad for high income people.

[00:38:33] Even though 2022 proved that out, the high income guys lose their wealth. It gets taken from them, from the fiscal transfer, and then the inflationary pressures that the fiscal transfer creates end up hitting the high income guys' wealth. And by the way, everywhere, whether it's Venezuela... And, and the thing that I, that I realized, you, you cut interest rates for 20 years, inflation never materialized.

[00:39:00] You do fiscal transfers, and you're off to the races. And I don't care, every single environment of inflation since we created fiat currencies has occurred via that mechanism. Socialist governments providing big fiscal transfers. Uh, whether it was in Italy in the '80s or Latin America in the '80s, Brazil, um, in the early 2000, just the list goes on.

[00:39:23] It's over and over with the exact same formula. And, and think about this too, is the pr- if the price of a commodity goes up, it has to be a low income player because Take about a, some high income guy. He's gonna consume the same amount of corn regardless of where he is in the cycle. The only guy who will increase his demand for corn is going to be the low income guy when you give him the fiscal transfer.

[00:39:50] So that's-- So when I think about, you know, on, on this thing and everybody goes, "Oh, that's not true. You know, the low income guys are made worse off by inflation." No, they aren't. They got the refrigerator in 2022. They got whatever they spent their 2,000 bucks on. They got it. Yeah, after the fact it was bad, but the high income guys paid for it and then they got hit real- by then- it was a 27% drawdown in the S&P.

[00:40:15] So, um, but what did, what did the US do? Print more money to get out of it. Um, and so that's point one. If we think about point two, the liquidity, if you ask me why commodities have not gone up, is they don't have any liquidity. It's too hard to get credit to trade. This goes back to your point about, you know, the back end having no liquidity.

[00:40:38] The back end has no liquidity 'cause Dodd-Frank shut them down. Um, you know, you know, it created an environment in which open interest in a lot of these markets has gone down. So when we think about that price level Your physical consumption, those end use things can drive up the front end, but the liquidity that creates that price level that clears is a function of the availability of credit, which while there's a lot of credit for things like AI build-outs right now, there's not a lot of credit for anything else in the global economy.

[00:41:09] **Nate Hagens:** So thank you for that answer. You looked at within the country, uh, part of my question. I was more thinking about the US itself, uh, with international creditors and the over-leveraged international financial system where currencies are, uh, in a race to the bottom against each other. But the real currency that we're measuring them against is net energy, uh, or the high quality energy available after we've spent the cost on energy and mining, et cetera.

[00:41:39] And if that system is disrupted, that would be the mother of all deflation, at least temporarily, then followed by hyperinflation because global supply chains would be disrupted. Do you have any view on that broader macro, uh, perspective?

[00:41:54] **Jeffrey Currie:** You mean-- Uh, actually take me through it again so I understand why...

[00:41:57] How do you get deflationary pressures?

[00:41:59] **Nate Hagens:** We need money to pay for things, and sometimes affordability declines faster than the depletion of the commodity, and then we get deflation. So I'm just saying that right now Japan and China and others own US debt. We're spending so much on the military and, um, helping the bottom two quintiles, and we're printing more and more money.

[00:42:27] Um, you can print money, but you can't print energy. You can only extract it faster. So at some point, interest rates will go up to a point that we won't be able to borrow as much. Uh, we won't have access as a country. And, uh, I don't even think it's gonna happen in the US first. I think it'll happen in Europe first.

[00:42:48] Um, France and Germany, they're gonna have huge import bills because of, um, natural gas and, and other things. And eventually we cannot borrow more, uh, because we lose our credit worthiness. Um, so I think that becomes deflationary, uh, the much the same way that, uh, 1929 was.

[00:43:09] **Jeffrey Currie:** Let's talk about the exorbitant privilege, um, because that's really what drives that access to credit for the United States.

[00:43:17] And let's talk about the grand bargain that sits behind it, which is Bretton Woods in circa 1945. It was, you know, the agreement that the Americans had with not only the Allies, um, but also with, um, the, the, the, the Axis powers. And it was a deal in which, um, they created the World Bank and IMF, and the World Bank was put in place.

[00:43:48] We're gonna give you money to reconstruct. We're not going to occupy you. In exchange for that money, we expect you to use the US dollar, funnel it through, um, New York, and, uh, we will use our big, massive navy to protect global sea lanes. And still to this day, if China imports copper from Chile into Shanghai, the United States is the one that protects the Pacific, protects those global sea lanes, and that has a high cost to it, and that's part of what Trump is complaining about.

[00:44:25] Remember when he wanted to put a 20% tax on oil going through the, um, Straits of Hormuz? "Oh, he's, he's nuts." No, it's really expensive to fly all those planes and protect all of that. He wanted to get paid for it. Whether or not he did it correctly or anything, that's another question, but it's really expensive.

[00:44:44] So when the United States came out of the Second World War, it was like 95% of global industrial production. It had it all. It made sense then, but we're 80 years later, and we're still doing it. So that's the setup. That's called the Grand Bargain. Now let's apply that to the strength of the dollar in the United States.

[00:45:03] Because the U.S. is that protectorate of global sea lanes, free trade, and globalization and everything, it gets that exorbitant privilege, and all that money flowing in, chasing AI and the rest of it, allows Americans to consume at a level that's never been achieved in the history of mankind, and that all comes through credit.

[00:45:23] That credit is going to dry up if that exorbitant privilege gets broken, which is why it's so important for Trump to go in there and free the Straits of Hormuz. Because if he doesn't, he loses that exorbitant privilege, 'cause isn't the Grand Bargain, "I will protect global sea lanes for all people if they trade and use the U.S.

[00:45:44] dollar"? So here we are. Now we have three sea lanes blocked. We have the Red Sea, Straits of Hormuz, and the Black Sea all blocked. So where is the global protectorate to open up those sea lanes? By the way, I made the point in a piece we did called The New Martiel Plan, and that's M-A-R-T-I-E-L Martiel Plan, um, where it didn't matter who was the president.

[00:46:09] Once interest rates went higher, it was too expensive to maintain that system. And so when we think about that ability to have that credit, I think we really gotta watch what's going in the Straits of Hormuz. Trump, if he doesn't... Which is part of the reason I think he went back. He goes, he knows he'll break the Grand Bargain if he doesn't free open that set sea lane, but the Iranians also knew it.

[00:46:32] So the importance of this for the United States is, let's do Robert Pape's point, it's the two bookends of globalization. But if he cannot protect all of those allies and everything like that, he broke the Grand Bargain in that last 80 years. We're moving into a different world. Now let's go back where people start pulling their capital out of the United States 'cause they don't trust them anymore.

[00:46:55] That's gonna hit middle class America and change their lifestyles like they've never seen before.

[00:46:59] **Nate Hagens:** I expect that's reasonably likely. Um, I, I wanna talk to you about different commodities, uh, i- in addition to oil, uh, and also get back to China. But since we're on this, on the grand bargain, uh, I mean, you're an energy and commodity expert, not a geopolitical expert per se, but paint a-- me a picture, what is the best case, worst case, and most likely case of this situation m- in the Middle East, but you, you mentioned three places, um, y- you know, resolving in the next year?

[00:47:34] **Jeffrey Currie:** The situation here is, uh, that I don't think is widely said is this is BRICS versus G7, even though the Europeans don't know- Yeah ... they're involved.

[00:47:44] **Nate Hagens:** Yeah.

[00:47:44] **Jeffrey Currie:** And if you're BRICS, you're going, "Hey, for the last 400 years, you guys have treated us like dirt." And, um, you know, and by the way, I, I don't wanna get into who's right, who's wrong, the politics, but you know, you ask guys who are like CIA experts and stuff, they're gonna tell you all Putin wanted was respect.

[00:48:03] **Nate Hagens:** Yeah.

[00:48:04] **Jeffrey Currie:** Um, by the way, the Iranians were never really gonna... They had 47 years to build an atomic bomb. All they wanted was respect. I'm just telling what, uh, is... I don't wanna offend anybody here. I'm just repeating what any intelligent person will tell me. The Chinese wanted respect. You know, what the British did to them, the Americans, they're upset Um, and from my understanding, those 30 days when that strait was open, there were no oil tankers going back inside there.

[00:48:33] Those things were container ships with military hardware. The, the, the, the, the Iranians, they're, they're, they're playing a different ball game. It's like I, I look at this, I go, you take China. China controls the world's, um, critical minerals. Why? Because Americans, Europeans, and by the way, I learned this from the Soviets.

[00:48:50] The Soviets told me, "Yeah, even the Soviet Union didn't want this stuff in their backyard 'cause it's polluting, it's toxic, it's terrible. Let the Chinese do it. The Chinese will do anything." That's what the Russians told me. And so, uh, the bottom line, Americans, they buy all this stuff from China, and China's producing this stuff, making their environment toxic, and they don't care.

[00:49:12] And by the way, it was like that whole period with sustainability. Nobody changed their behavior. They just dished it all off to China. Let China create the emissions. We feel good about ourselves, but we keep buying stuff. Um, and so when we look at the situation, they can produce, they process everything 'cause the Americans won't, the Europeans won't.

[00:49:34] Um, the, those-- the s- the Russians did it to a lesser extent, but this was-- these decisions were made between the '70s and all the way up into the 2000s. Now there's none of it. Okay, so you look at the Chinese, they control the world's critical minerals. Uh, now, who are the two biggest backers of Iran? Russia and China.

[00:49:54] And we know that by looking at, um, the, the, the, the equipment and the intelligence and everything they're getting on this. And now what do the Chinese control? The world's molecules. So they control the world's atoms, they control the world's molecules, and also the strait, um, Taiwan to get them into

Taiwan, um, then they control the world's chips Uh, so I, I look at the situation, um, it-- this is not just what's going on in Iran.

[00:50:22] It's, by the way, you have Ukraine striking deep into Russia. I don't wanna get into military things about, you know, are we in the Third World War or whatever. I'm looking at this thing. We have got fronts over- all over the world at this point. You were making the point that, you know, even some of the people in the intelligence community are backing away.

[00:50:42] We didn't tell them to go do this.

[00:50:43] **Nate Hagens:** Well, my understanding is they told them not to do it. Um-

[00:50:45] **Jeffrey Currie:** Yeah, that's my understanding too, but-

[00:50:47] **Nate Hagens:** Yeah. And what's the worst case?

[00:50:49] **Jeffrey Currie:** Worst case is, um, one of these actors, meaning either, um, you know, Putin or the, even the US, um, uses some, you know, some of the, the types of weapons we don't want them to use.

[00:51:03] Um, and because everybody's gonna be pushed into a corner. And, um, but I think let's, let's, let's, let's take out the nuclear, the nuclear bomb option. Let's go to what I think is the worst case scenario, and I think this could happen very shortly, uh, 'cause Putin's in a really precarious situation right now.

[00:51:24] You-- I don't know if you've seen any of those reports about, uh, uh, in that... Let's say he just goes, "I'm done. Let's just shut the world off with, uh, you know, all the critical minerals and everything." Remember, they are the world's largest, um, you know, commodity when you look at all the things. The US is the largest energy source, but it doesn't have metals.

[00:51:41] Russia has both metals and energy. China has metals, but no energy. So those are your three largest commodity producers. Two of them are Russia and China, so, you know, their ability to choke off stuff to the West, which just shut down, um, big industrial processes. So your, your, your, your worst case scenario is not too far away, and I think it's, um, you know...

[00:52:05] I wouldn't say it's, it's a n- it's a non-trivial probability one of them does something like that.

[00:52:11] **Nate Hagens:** I agree. Uh, let, let me bring in another commodity that, uh, again, this is, uh, July 23rd. Um, my understanding is that Ukraine, which really means the US and, and England, uh, are, are targeting Russian food supplies and wild berry and other things.

[00:52:31] Um, my understanding is that Ukraine and Russia together account for 20% of global grain, and the Odessa ports are now effectively shut in. Irrespective of the fertilizer, which is a 2027 story, uh, I think, what about the imminent, uh, impact on grain if, let's just say, half of that comes from Odessa, so 10% of global grain is shut in?

[00:52:56] Uh, I mean, what are we seeing on the food side of things?

[00:53:00] **Jeffrey Currie:** Um, you forgot the El Niño. Throw that in there, too.

[00:53:03] **Nate Hagens:** Okay, yeah. Throw that in, too. My gosh.

[00:53:07] **Jeffrey Currie:** I was in the Mediterranean yesterday, and it was 46 degrees. Um, I, in fact, sent my daughter back to London. Um, and the reality is that, um, this was every climate forecaster was telling you this El Niño is serious.

[00:53:25] Now you put that on top- Yeah ... what kind of damage it ends up doing to, um, to the, to the crops this summer, and the harvest is, you know, late

September, October. Um, we'll know, you know, you're going into, you know, your hottest period is around the middle of August. We're going into those hottest periods, and if it's 46 degrees where I was yesterday, um, you know, you can only imagine how hot, you know, those of you listening that are in places like, like Dallas, Texas, you've, you cannot...

[00:53:51] You, you've dealt with 46, but there's very few people out there who actually deal with 46. So we're, we're moving into some really hot weather. The, um, and so you combine that with what's going on in the Black Sea, which, you know, at this point they're, they're hitting them hard, whether if it's the, you know, the, the, it's the whole port.

[00:54:09] It's whether it's oil, grains, or whatever it may be, so you're losing that, then you have the fertilizer shock for next time around. You know, I, I, that's the reason why I own the indices, just own, I own the whole, the whole kit and caboodle across all the commodities. It's not just an oil story, it's an age story.

[00:54:26] It's a metal story. Um, so, you know, the upside on agriculture, I think, is significant. Then the other thing too is: When you're in an environment in which you have a strong dollar, which the dollar has been strong over that whole time period, incentivizes all those Latin American countries to grow acreage as fast as they can and export as much as they can.

[00:54:49] That thing's run its course, too. By the way, the agriculture markets, they're moving, so it's not like they're, they're being complacent about this. They took a step back after that MOU, but they've gone right back up when you look at the broader agriculture indices.

[00:55:02] **Nate Hagens:** A lot of things we're talking about are the nominal first order effect of some sort of energy, uh, scarcity, that prices go up.

[00:55:10] Prices like diesel, the crack spread is effectively pricing as if oil was $160 a barrel. But what would be the, uh, second, third order effect if there is persistent diesel scarcity? What would that do to food and freight and the productive economy beyond what shows up nominally in the financial prices?

[00:55:33] **Jeffrey Currie:** Let's go up with, you know, the why every president after Carter, um, I guess after Carter... Actually, Reagan didn't do it, but, um, you know, from George Bush Senior onwards did the abundance illusion. 'Cause what Carter created was hoarding. That's this next round of this. And if I go, "What did I get wrong in March?"

[00:55:56] One of my biggest fears of this thing was hoarding, 'cause we were seeing it in metals because they were fearful that the Chinese were gonna cut it. Um, and that's part of the reason why silver went up as much as it did, was hoarding, but actually by the Chinese. Um, so I would argue that if this thing gets to the point people don't believe the administration has control over it, hoarding, I think, could set in.

[00:56:22] And there's a high level of confidence about Americans' energy dominance. It's not like... It exports because it imports a lot. Yeah. Let's just look at, you know, the numbers. It's not like- On the oil side. On the oil side. Gas, it's, it's, it's relatively long. But by the way, transportation fuels and gas are not the same thing.

[00:56:41] They're not even... The, you know, the fungibility is very, very low. Um, and from an oil perspective, the United States is not that long. In fact, if it didn't have Canada, it would be short, um, particularly on the black oil side. So, um, the hoarding effect, um, could become more serious.

[00:56:59] **Nate Hagens:** And are you talking hoarding within countries like the US or globally, internationally between countries?

[00:57:07] **Jeffrey Currie:** I think it would be interna- You know, SPRs are between countries, and individuals are in countries. Um, I think the next response out of the US would be to ban exports of products.

[00:57:20] **Nate Hagens:** Yeah. I think that's coming

[00:57:23] **Jeffrey Currie:** And that's another form of hoarding

[00:57:25] **Nate Hagens:** So we've talked a- about the US, um, which is where you and I live, uh, and we'll, we'll come back to that.

[00:57:31] But other countries are also, uh, in the crosshairs here. W- what about Europe, um, who doesn't have, uh, the energy abundance of the United States? Um, they also don't have their own sovereign, per se, to print money because it's a union of different countries. Um, how does Europe look ahead with this, uh, um, energy kerfuffle in the Middle East and beyond?

[00:57:57] **Jeffrey Currie:** I'm bullish on Europe, and i- i- let, let's just go over ev- you know, what, what did the EU achieve? The EU was put in place to avoid any entity having a power over the other one, and it was all about consumer protection. The US and China are about producer protection. The US and China are in debt up to their eyeballs.

[00:58:21] Take the UK out 'cause it's somewhere in between. Um, yeah, when we look at the German-speaking Northern Europeans, m- you know, put Europe as a... They're 81% GDP, uh, debt to GDP ratio. The United States is at one twenty-five, China's near- nearly 300. So Europe is not, you know, on a debt to GDP ratio is not bad. Income equality...

[00:58:44] And by the way, I live in Europe. I don't live in the United States, I live in Europe.

[00:58:46] **Nate Hagens:** Oh, okay.

[00:58:47] **Jeffrey Currie:** Let's go back to the jet- debt to GDP ratio. And then the other factor that's really important about Europe is they have much greater income equality, and then they have consumer surplus, they protect it. So their starting base is a very good one, and they have a rule of law, which also capital likes.

[00:59:05] Now let's talk about the... So that's their setup, and they don't have War Kit 1.0. War Kit 1.0 has just proven it doesn't do much. Between Russia had 1.0 and War Kit 2.0, I say War Kit 1.0, that's artificial muscle. That was the oil-based war kit. Um, War Kit 2.0 is artificial intelligence. That's drones, um, and AI.

[00:59:35] And so when we look at War Kit 2.0, um, it's very, very significant. And so if I'm Europe, I now have, I'm gonna be spending 5% of my GDP on a new war kit. Um, and now let's go... You know, we look at what Europe has on the energy side? Massive amounts of actually Eur- the French have the nuclear capacity, the Germans have the renewables.

[01:00:01] And it goes, uh, probably all you guys are telling me, "Oh, renewables don't work." I agree, renewables don't work unless you have batteries. Now, what did we learn in Iran and we learned in, um, in Ukraine? The big refuelers, the planes, the boats, they're a tar- they're just a sitting target for drones. They're just too easy to take out.

[01:00:22] Remember I was talking about you can't take those petroleum ships through the, through the, uh, through the strait? Um, now you imagine a plane flying around with jet fuel or diesel or something like that with drones. Drones can take out B1 bombers, 400,000 drones versus the B1 bombers. The B1 bombers are done.

[01:00:41] Uh, and so when we think about Europe, what did we learn from this war? It's battery technology. You have to have battery technology. And what is Europe missing? Battery technology. And so at this point, uh, the race is on. And I-- people like, uh, the, in the environmentalist community, they go, "Oh, I can't believe that, the defense guys are getting all the budget."

[01:01:06] And I turn to the environmentalists, I go, "Who created all your technologies? Defense." Yeah. They don't ever get y- the, you know, f- what is that saying? Necessity is the great innovator. The mother of all inventions. In-invention. And we're at that point. You-- it's the first one who can get battery technologies. You don't need those big refuelers.

[01:01:23] You want small batteries you can conceal from the drones, so the race is on for batteries. And if Europe can get the batteries, and also let's go back to AI, which of the three big companies, Nvidia, ASML, or TSMC is the most dominant one? Well, who has the biggest moat? ASML has it. That's the Europeans.

[01:01:45] Um, and so even in the AI race, the one with the dominant, biggest moat and powerful company are the Europeans. If they can get battery technology to fuel all of those renewables, because I agree with anybody who's being dismissive of the Europeans with those, those, those renewables. Um, but if they have battery technology to go with it, boy, they're in a different, different ballgame.

[01:02:09] **Nate Hagens:** You've brought this up a couple times on electrification and batteries, and you, uh, I believe wrote a big paper recently called "The New Joule Order."

[01:02:20] **Jeffrey Currie:** Yep.

[01:02:21] **Nate Hagens:** Uh, and your framework for our era, um, uh, if I paraphrase, is that a secur-security p-premium on energy has replaced the green premium, um, and that electrification is the purchase of, um, optionality, and that China is way decades ahead of, of the West.

[01:02:40] And you said that if Europe has batteries to pair with their renewables, um, that's a game changer. But I, I wanna press a little bit on the core premise, because at the point of consumption, you argue that a joule is a joule, and we both understand how important energy is to our economies, but joules differ in quality and in density and in storability and transportability and, you know, aviation and shipping and steel and cement and fertilizer all depend on specific hydrocarbons, um, as a fuel and as a feedstock So how do you account in your framework, uh, for a reasonably large share, I believe around 20% of the global energy use is electricity right now, um, a reasonably large share of the economy that might not be able to be electrified and therefore, um, all of the renewables produce electricity and the stuff coming out of Iran is, is liquid hydrocarbons.

[01:03:43] So there's a quality differential.

[01:03:45] **Jeffrey Currie:** And, and, and I agree with that, but here's the difference, let's say you get to 80% electrification. That's what you're talking about there.

[01:03:55] **Nate Hagens:** Well, no, I'm-- We're, right now we're at 20%.

[01:03:57] **Jeffrey Currie:** Right, we're at

[01:03:57] **Nate Hagens:** 20.

[01:03:58] **Jeffrey Currie:** You think we can get to 80%? But you can get to 80 if you just leave the stuff like cement and, and, um, you know, jet and those things.

[01:04:06] They're not that big. The core of this is still transportation fuels, um, and then gas going into turbines and things of that nature, and coal. Remember, coal is still the dominant hydrocarbon here. Now the point being is coal, gas, and oil have a marginal cost of consumption Renewables, batteries, and nuclear power have zero.

[01:04:34] And if I'm China, and if I can-- and the AI race is really an energy race, and I can dominate all my electricity being produced at zero marginal cost, it's game over for the rest of the world. Because remember, the stuff you put up front is sunk cost. Somebody else paid for it. The guys in the future don't have to pay it 'cause the guys in the past paid it.

[01:04:58] And so when we look at, like, you know, you listen to, uh, uh, and there's probably people on the listeners who will tell me, "But Jeff, the, the, the gas fire generation capacity is so much cheaper than the renewables of the battery." Yeah. Well, maybe it's by a factor of seven. I don't know. Does China care? No.

[01:05:17] They're gonna keep going because they know once they have it, they may spend tons of money getting there, the marginal cost is zero, versus the marginal cost to do that coal fire generation capacity in the US is, what, $3 an MMBTU? It's a big difference. And so, and then everybody's consuming their, their data's ba- their data centers, their a- their, their LLM models and the rest of it, and their robots are being driven by, um, by zero marginal cost.

[01:05:47] This is like when the Americans built the railroads between the East and the West, you know, the Pacific and the Atlantic. It was game over for the rest of the world.

[01:05:55] **Nate Hagens:** So can you envision a future scenario, given all the constraints we've already discussed, where the peak demand thesis on oil is actually somewhat true, that we don't need liquid fuels 10 or 20 years from now because of these other things?

[01:06:14] **Jeffrey Currie:** Absolutely, where China's going. And the... And if you look at the, you know, the, you know, could we end up with a world where we have the, the, the petro states and the electron states, and that's your separation, like the old East-West? Yeah, I think we could end up that way. Actually, watching Ukraine and watching Iran in the last six months, I've come to the conclusion you gotta ditch the petro state.

[01:06:39] You gotta... Artificial muscle was what oil was. It was an artificial muscle. Your artificial intelligence is just like, uh, from my understanding, just in the last couple of weeks, you got these drones, these drones sitting on these fiber optic cables. I guess there's fiber optic cable coming out and around all over the place.

[01:06:58] You're not gonna win the war where you have a million dollar Patriot missile used to take out a $40,000 drone that can turn s- and by the way, the reason why they have it on the fiber optics is because in Russia, they were having to shut down the banks and everything to get the Wi- Wi-Fi off because the, the U- the Ukrainian drones would use the signals off of the Wi-Fi to keep going.

[01:07:20] And so when you hear these things, they just shut down the internet, and then the drones come in, and you're getting swarmed. And so the ability to have artificial muscle, you know, something that could smash it all up, that, it's just, that technology is, is, is no longer, it's, you know... Actually, here's a stat for you: It, what horsepower, think about that's what artificial muscle was, horsepower.

[01:07:44] The constraint on automating stuff was never that. The constraint was cog- cogni- cognition. And so we only automated or, you know, 20%. There's another 80% left to do now that we can, we've unleashed the constraint from horsepower to cognition. So now the things we're gonna mechanize and do all this stuff, and that's batteries, that's, that's electricity.

[01:08:07] And so if you would've asked me that question, Nate, six months ago, I would've had a very different answer. But just in the last four weeks, watching what Ukraine is doing and watching what the Iranians are doing, which is really Russia's learning from the Ukrainians, who then bring it into Iran and use it against the Americans.

[01:08:26] Um, so, uh, so I think the, it's just, it's just I, I, uh, uh, I just different ballgame and I, and I, and I, and I can't even process how quickly it's changing right now.

[01:08:37] **Nate Hagens:** How do you stay on top of all this? Obviously you have a lot of contacts and you check in, but it's a whole encyclopedia of topics that are converging here.

[01:08:46] **Jeffrey Currie:** My wife complains I'm on the phone too much. Um, yeah, I literally, I, it's, it is, the one, the one advantage of sitting at Goldman for three decades was being able to talk to people. Yeah. And it's, it's just sitting there and talking to people who are sitting in there in Doha, like on Sunday, telling me about, "Oh, yeah, I just had one that came from 3D computers fall through a ceiling," one of these drones that the Iranians were, you know...

[01:09:12] And he's looking at the thing going, "Okay, yeah, it's got this and that on it," and everything like that. But it's, it's, it's, that information flow is just, it's becoming faster and faster.

[01:09:22] **Nate Hagens:** But to get to the cognitive, uh, helpers, um, we're still going to need artificial muscle from fossil carbon, uh, to build the data centers at the scale that is required to keep up with China.

[01:09:40] Uh, and that itself is going to be a huge, uh, demand for commodities, as I think you mentioned earlier. Uh, how's that gonna play out?

[01:09:48] **Jeffrey Currie:** Oh, I think we- we're gonna run into real shortages as they try... Now, here's the point I'm making. Of that 800 billion, all of it's gonna go into the price of copper. I'm being exaggerative here, is that, you know, as they continue to put more and more pull, and you already see it happening.

[01:10:04] Human beings are reno- renewable resources.

[01:10:07] **Nate Hagens:** Yeah. I say that

[01:10:08] **Jeffrey Currie:** too. Copper and energy are not. And we're gonna burn it, we're gonna try to turn re- change humans into a non-renewable resource base. I just don't see-- Just the simple math says it's gonna be more expensive, so they better be doing some really important tasks, um, that they, that...

[01:10:28] 'Cause they ultimately are gonna end up costing us a loss, and we're gonna be more material into them and things of that nature than what we did before. But here, here's the way I like to think about it. The old technology data stuff, that was infinitely scalable at zero marginal cost, like software.

[01:10:44] I publish it, send it to, you know, I create it and then roll it out all over the world, and that's how those companies became so profitable and so dominant. Now, they're in good old-fashioned putting steel in the ground type businesses, systems that a lot of you guys are probably all very familiar with. It has an upward sloping supply curve.

[01:11:03] The more you do, the more expensive it becomes. And so I think what's gonna happen, and you already hear it by looking at the... By the way, I see it on-- I, I use Claude and I use the Max version. My thing spins all the time 'cause I run into the constraints. There in London, it would run into power constraints on a regular basis, but, um, so the...

[01:11:23] But the reality is that, um, you're already feeling it and you're getting, you're hitting that physical floor on the cost of doing this thing and your tokens and running out. And ultimately, the fact that it's a fixed fee And not a, you know, pay as you go like your cell phone, uh, which just means we're gonna quickly move in.

[01:11:44] They wanna get you addicted at the fixed fee. Yep. And then they're gonna move in, and the cost of this thing is gonna explode.

[01:11:49] **Nate Hagens:** That's one of the deflationary risks to a bullish commodities scenario, is that we're building out all these enormous trillions of dollars of, of credit and the hyperscalers and, and all these things, and if society can't afford what's required to keep those companies profitable, there may be an AI winter sort of scenario.

[01:12:12] I mean, I don't know that for sure, but I see that as a potential risk.

[01:12:16] **Jeffrey Currie:** Oh, I think the valuations of these companies, uh, 40% of the S&P, um, listen to anybody that has been around these markets. This is, like, a very precarious situation we're in right now. What's gonna be bad is for the governments, not for the companies.

[01:12:33] I, I think those, those overvalued companies that are sitting there and those, you know, that, that... Like Google, they're gonna experience like what the oil guys experienced in 2014. Yeah, it's gonna hurt. They're gonna be painful. We've all seen it. We're gonna get through it. It's not that bad. But let's go back to your point about the US and the sovereign credit.

[01:12:53] Where is the real imbalance sitting? The real imbalance is sitting on the US government balance sheet. The real balance is sitting in the UK balance sheet. The real balance is sitting in the Chinese bal- imbalance. Blah, blah, blah, list goes on. You know, all of these sovereigns are in a really precarious situation.

[01:13:09] Yes, Google is not as good as off if it was better. It's gonna pay a price. All the... Too much money went in, too investors got too excited about it. You know, I don't wanna get into it, but it's not gonna be... You've seen it before, I've seen it before. We're gonna get through it. It's gonna level out and they'll smooth it out over time.

[01:13:26] But the... But I think what's happening at the sovereign level is very, very, very more dang- is far more dangerous.

[01:13:33] **Nate Hagens:** So you, um, mentioned earlier about what China's doing, uh, and they've been building excess capacity on energy and systems for, for a long time, and I think you've written that the West may now have to build its version of such a system, um, under duress, at a crisis cost, and from a depleted, um, diminished strategic position.

[01:13:57] So what does building under duress, uh, actually look like, and what might we have to sacrifice because of that? precarious position

[01:14:06] **Jeffrey Currie:** You know, China's cut, cut back all cr- critical minerals, and we don't have any access to it.

[01:14:12] **Nate Hagens:** As one example, yeah.

[01:14:13] **Jeffrey Currie:** You know, we've exhausted the SPR, and we need a lot of energy to...

[01:14:18] And diesel. In fact, diesel is where the shortage is now because- A- as

[01:14:21] **Nate Hagens:** another example, yeah

[01:14:22] **Jeffrey Currie:** Another example. Um, we need to, you know, we're basically we're out of turbines to be able to get the power generators to, to really ki- kick up the, the demand for the data. I think the other, the other thing too is about duress is the technologies we, we, we, we're making a one-sided, one horse pony bet here on, on the AI, is that we look at China.

[01:14:44] China comes out with, you know, a whole new technology. It's more energy efficient. The consumer's going, "Hey, why am I g- consuming this one? I can consume that one at, you know, at a fraction of the cost." Um, there's a lot of pitfalls here that when I talk about duress, it, it, they, they can make this so much more difficult.

[01:15:02] The other one is, what if we're in a full-scale, you know, war or something like that?

[01:15:07] **Nate Hagens:** A lot of your clients, uh, and some of the people listening to this program wanna know where to invest their money, um, and obviously you're laying out a case that, um, commodities, especially oil, um, and copper, are going to be going up, uh, in, in the future.

[01:15:25] But-

[01:15:26] **Jeffrey Currie:** Gold.

[01:15:26] **Nate Hagens:** I'll put

[01:15:26] **Jeffrey Currie:** gold into that list too, longer term

[01:15:29] **Nate Hagens:** But where I was going was, um We live in a society that has governance and innovation and people. Um, so financial predictions aside, what kind of policies and actions are you hoping to see governments, the US, the UK, um, and leaders pursue, uh, as our systems enter this period of recalibration in terms of our expectations for physical goods and, and the reality of their continued availability?

[01:16:04] What should we be doing, people that are in those spheres watching this show?

[01:16:08] **Jeffrey Currie:** I, I'm a Chicago-trained economist, you know, uh, very much- I won't hold that against you Um, the... And I'm, I'm gonna say this, and I, you know, I don't wanna come across it, but I think state capitalism is back.

[01:16:23] **Nate Hagens:** What does that mean exactly?

[01:16:24] **Jeffrey Currie:** It means that you're gonna have to put a lot of money. States are gonna have to back these things. They're 27-year duration projects, um, to really move... And why is China moving so quickly in doing this is because they just go in there and they, they, they do it. They back it, you know? So, the fact of having a state, a state-sponsored capitalist model where you're going to help finance quickly...

[01:16:49] 'Cause think about it. What was, what was World War II when the United States could just build all that stuff? It was state capitalism. You know, it was going in there and turning, um, you know, auto plants into weapons plants and things of that nature. I don't know where we're gonna have to go, but the-- here is the core problem.

[01:17:04] It goes back to where we started this discussion, Nate, as people don't like space. There's not a lot of money in it. Yeah. And the reason they don't like it is because it takes so long to build out, and it's not gonna give you the home... By the way, it's a relatively stable return once you've built one of these things, but it costs billions and billions to build it.

[01:17:24] And like, take a copper mine. It's gonna take you, um, decades to get that thing built. Investors do not have the tolerance for that long of a duration project. Um, and then the cash that comes out is more short-term, um, yielding. So it's a very... They're not They're, they're very difficult for investors to swallow relative to other types of investments

[01:17:49] **Nate Hagens:** So said, said differently, the financial market participants are not likely to invest in and build, uh, the societal infrastructure that we're going to need in coming decades, and the state is gonna have to intervene

[01:18:03] **Jeffrey Currie:** Unless we can come up with ways to extend the duration.

[01:18:06] And it goes back to... Let's go back t- 3% of the S&P is, is energy, three to four, somewhere in that range, and like one and a half is basic materials. Too small.

[01:18:17] **Nate Hagens:** And 3% of energy is like 95% of our, the floor of our economy runs on energy

[01:18:24] **Jeffrey Currie:** By the way, I, I, I also wanna make it clear to the leaders why I think peak, peak oil demand's gonna be happening real- much sooner than why I think people have...

[01:18:31] I think this, it... Once it moved out of, once this discussion moved out of environmental and went to security, I think it's gonna get turbocharged and happen for real. Um, but the, um, but I think, you know, t- thinking that this, I'm arguing peak oil's tomorrow, no possible way. You still need to invest a lot in oil to keep the system going.

[01:18:51] It's gonna t- it'll take you years. But the one thing that will change, I think the battery technology, now it's in the hands of defense players, will get there a lot more quickly

[01:19:00] **Nate Hagens:** You were referring to the demand for oil, but what about peak oil supply? That could

[01:19:05] **Jeffrey Currie:** happen Oh, I, I, that, that, that may be already on top of us- Yeah, exactly

[01:19:08] which may force this way faster because- Exactly ... 'cause we don't know how much damage we've done to Russia. So if you've, if you've done damage to Russia, we don't know what's happening in the Middle East at this point in the game. If you took out Russia and the Middle East, well, folks, you, you better learn how to make those batteries really quick

[01:19:26] **Nate Hagens:** Or plant potatoes

[01:19:27] **Jeffrey Currie:** Yes.

[01:19:28] Um,

[01:19:29] **Nate Hagens:** so, um, I wanna be respectful of your time, and I have a few closing questions I ask all my guests, but I wanna do one more oil question. What's the truth and the reality of the Strategic Petroleum Reserve in the US, and, and how close is that to being an issue?

[01:19:44] **Jeffrey Currie:** The numbers I was given before the government published their 70 million barrels, and this was done right after the Biden administration drew it down so much, was somewhere between 270 and 300 million barrels.

[01:19:57] Um, and let's remember, as you pointed out in this c- on this discussion, Trump himself said we were getting close to the bottom. But the Department of Energy just published 70 million is where you can take it down to Uh, I'm gonna stick with the original 270, 300. And Amos Hochstein, who, you know, was Biden's energy guy during that time period, he said 300.

[01:20:20] He lived through that and watched it firsthand. So the 270 to 300, you know, engineers have published it. I think we're getting close to that, and that's part of the reason why that MOU was signed so quickly. Um, and, um, so I think, you know, it's, it's, it's something that's, that's coming up close.

[01:20:37] **Nate Hagens:** But what happens when we get to those numbers or below?

[01:20:40] **Jeffrey Currie:** Cavern, the caverns cave in on them. They're salt, they're salt domes.

[01:20:43] **Nate Hagens:** And, and so then, then we're back to whatever we're producing from the wells and being refined, mixed with Canadian and Venezuelan crude. And so this is the moonshot in product prices that happened.

[01:20:56] **Jeffrey Currie:** Yep. Yep.

[01:20:58] **Nate Hagens:** Yeah. Yeah.

[01:20:59] **Jeffrey Currie:** So that the risk, the risks are quite high when we get to that point, and that's when you...

[01:21:03] This thing, this thing can go a lot higher.

[01:21:06] **Nate Hagens:** I will make a prediction publicly right now that you are gonna be a very busy man in the next six months.

[01:21:13] **Jeffrey Currie:** Yes, I have to agree with that one.

[01:21:16] **Nate Hagens:** So, um, what can someone listening to this episode do now, today, this week, this month, to help address some of the risks that you discussed in this conversation, or is it all up to politicians and leaders?

[01:21:29] **Jeffrey Currie:** My guess is most of the people that listen to this are-- understand this and are frustrated as well as I am at the inability. I think it goes back to the point, I... It's really at the core of this, is how do you get somebody to move away from something that, uh, 53% of the S&P that's going in line straight up, they're all making money and go, "Hey, go buy this volatile thing that's 3%"?

[01:21:55] That's what needs to happen here. Um, and you have the illusion that the Western governments are pursuing that, you know, make it more difficult. And in the op-ed piece I said the, the... I called it the parado- the physical capital paradox, and I asked, "Why won't they?" The m- they, they... By the way, the free cash flow yield at the energy companies is 15% right now.

[01:22:18] I call it the munificent. Munificent means gifting lavishly, munificent seven. Why aren't people putting money into it? They won't. It wasn't the, it wasn't the great returns in the '70s that got people to put money in the space. There were shortages. It was lines. In the 2000s, it wasn't people both seeing that, oh, metals are a great thing.

[01:22:39] By the way, those BHPs, these things went up 50X. They saw the shelves of the warehouses get empty. People don't buy these stories until you run out, and then that capital flows. So I don't know if there's much we can really do and watch it and be frustrated, 'cause I think many of you are like myselves and, um, and I think it will take the actual shortage to get people to move, and then we get the capital move and it's a different ballgame.

[01:23:03] **Nate Hagens:** The ex-head of the CIA and Secretary of Energy, James Schlesinger, who gave me a hug once after one of my talks, famously said America has two modes, complacency and pan-panic, uh, which is kind of what you just said.

[01:23:18] **Jeffrey Currie:** Yep.

[01:23:18] **Nate Hagens:** Um, so you mentioned you have, uh, uh, children. Um, what specific recommendations do you have for young humans in their teens and 20s who become aware of some of these constraints, uh, and El Niño and, and all the things, uh, going on?

[01:23:34] **Jeffrey Currie:** Um, you know, my-- the number one thing is, that I tell everybody is just make sure you understand AI and become AI literate and, you know, there's apps engineers and things of that nature, because the questions and you can prompt it. Then, you know, I, I, you know, I catch myself up late at night talking to Claude and learning things and understanding.

[01:23:54] If I-- if you guys are all systems people, I think you're probably guilty of that as well. But I think, you know, the best advice is just be incredibly literate on AI, 'cause i- if it gets ahead of you, your ability to catch up is i- it'll be incredibly difficult. And so, and, you know, it's like I deal with people some of my age and they, th- they don't subscribe to the max version of this stuff.

[01:24:17] Subscribe to the max version of this thing and, and use it and become completely aware of it. And, you know, with my daughters, I, you know, it's like we sit around, we use it with them all the time. And, um, you know, it's just, I think it's, you know- Falling behind in this technology would be very dangerous.

[01:24:33] Not only helping out the issues that we're seeing right here, but, but more broadly. And it's, it's a wonderful tool, and, uh, we should be using it.

[01:24:41] **Nate Hagens:** I do predict, another prediction, that there's gonna be a bifurcation in society. Those people that follow your advice and those people that find that advice abhorrent, uh, for whatever reason, and the people who use AI or can afford to, and the people who don't is gonna be a bifurcation in society– Yep

[01:24:59] I think. Yep. Yeah. Uh, what do you care most about in the world, Jeff Currey?

[01:25:05] **Jeffrey Currie:** I care most about being connected with other people and making sure we make decisions that are gonna make the world better off in, in, in the future. If we sit in vacuums and don't communicate with each other, and you're asking me, why do I sit on the phone all day?

[01:25:20] And being connected is just understanding and helping, you know, bringing that information and being aware of what's important and trying to make these right decisions. So–

[01:25:29] **Nate Hagens:** I love that answer. Um, I'm, I'm the same way, and my girlfriend complains all the time that I'm on the

[01:25:35] **Jeffrey Currie:** phone. I like to hear it.

[01:25:36] **Nate Hagens:** Um, so if you could, this is maybe an unorthodox question, but if you could wave a magic wand and there was no personal recourse to your decision, what is one thing you would do to improve, uh, the future?

[01:25:46] **Jeffrey Currie:** Yeah, I, I don't wanna sound like a, like the, like the, the environmentalist, but I, you know, I look at our, our planet and, you know, and it... they're all tied to the same, same situation, is just creating an environment where we live in a way that respects the place that we are, everything we're given. So that, you know, when my...

[01:26:06] I look at my... I have, I, I, I have a 22-year-old and a three-year-old, and my three-year-old, I, I look at her every day and I wanna make sure she has, you know, a world that's safe and secure. And part of the reason I had to see her leave Spain, 46 degrees is an environment that's just not healthy for... She passed out on a couch yesterday, so she's back in London where it's cooler.

[01:26:28] Um, and that's, that's kind of frightening.

[01:26:31] **Nate Hagens:** It makes me happy to hear you as a Wall Street icon say that, um, because I think, uh, the planetary boundaries, not just climate, but all of them are not really on the checklist of most people in the financial industry, and I, I fully agree with you. It was great to meet you.

[01:26:50] Uh, thank you for your time today.

[01:26:52] **Jeffrey Currie:** Yeah, Nate, it was a pleasure. A lot of fun.

[01:26:54] **Nate Hagens:** Make sure and get some rest in the coming months. We're gonna need your brain and heart.

[01:26:58] **Jeffrey Currie:** And I'd love to, love to do this again sometime. It was quite a pleasure.

[01:27:01] **Nate Hagens:** If you'd like to learn more about this episode, please visit thegreatsimplification.com for references and show notes.

[01:27:09] From there, you can also join our Hilo community and subscribe to our Substack newsletter. This show is hosted by me, Nate Hagens, edited by No Troublemakers Media, and produced by Misty Stinnett and Lizzy Sirianni. Our

production team also includes Leslie Batt-Lutz, Brady Heyen, Julia Maxwell, Gabriela Sleiman, and Grace Brunfelt.

[01:27:33] Thank you for listening, and we'll see you on the next episode