



MACRO Voices

with hosts Erik Townsend and Patrick Ceresna

Luke Gromen: Why the Gold Recycling Trade is Accelerating

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Erik: Joining me now is [Forest For The Trees](#) Founder, Luke Gromen. Luke, it's great to have you back on the program, it's been a long, long time. I want to start with what the heck is going on with China, because I've been trying to get my head around this all year. I've been asking lots of our feature interview guests to explain the China situation. And the explanation has been, everybody thought China was going to recover and the stock market was going to recover, and it just didn't happen. Well, that was only two weeks ago. I swear, I'm not making it up. Now, it seems like China is outperforming everything. The Chinese equities are overbought, outperforming the S&P on the year. What just happened, what's driving it, what's the bigger picture, and how does this fit?

Luke: I don't know if I'm the right person to talk to on that...

Erik: I think you're the perfect person to ask for that question.

Luke: So for me, I've said this in a couple like the video appearances that I do and what have you is, I couldn't figure out what China's plan was. To me, we know China tends to not do anything without a plan behind it, and we knew overwhelming Western consensus was China's making a mistake by not stimulating, etc., and sort of, China is uninvestable, and China is collapsing. And I, knowing that China tends to have a plan, knowing that clearly the economy was weakening meaningfully, and they weren't stimulating, etc., I was sort of grasping for possible reasons, one of which I came to was maybe they're engaged in basically a pain contest, which was to say, you know what, we're not going to stimulate. And the problem with that is, if we don't grow, that's going to force you to cry uncle first, USA, you're going to have to cut rates. You want to weaponize the dollar against us? Great. We just won't stimulate. We'll take pain, we'll take pain, we'll take pain, and we'll see who ends up going first. And that was kind of my working theory, loosely held. So fast forward two weeks ago, we have Powell come out and surprise most of Wall Street by doing 50 basis points and promising 50 more by year end. Dollar weakens, US asset crisis rip. Then, we have China follow up four days later, doing what they did. And so, now it starts to look like one of two things, which is either Powell cried uncle first, which gave China the ability to sort of then finally, do the stimulus without having to do stimulus with the yuan at a key weak threshold, the yuan has obviously rallied meaningfully versus the dollar from July through today, and that gives China the breathing room. Or, the US and China are coordinating on some level. We've been writing since November of last year,

when Treasury went over to Beijing and talked about, China needs to basically raise their costs, right? Well, they raised their costs by raising the currency, by weakening the dollar. So, we've been saying for 10 months, starting last November, that it looks like the that Yellen and the Chinese are working on some sort of deal to strengthen the yuan, weaken the dollar. And maybe this is part and parcel to that, that basically, sort of a point has been reached where, okay, they agreed to something, and we're moving in that direction. So, now the Americans can cut rates and weaken the dollar, and the Chinese can do what they're doing, which is stimulating. And I think, maybe the most important takeaway that I took so far from the stimulus is the yuan rose against the dollar on this, that is, if you would have asked 100 people, including me, hey, China comes out last weekend, before they did this, China is going to do a big stimulus this week. What does the yuan do? I would have said, and all other 100 probably would say, yuan falls sharply, and instead, the yuan rose pretty notably. And so that points to sort of a capital repatriation, tight dynamic that I don't think a lot of people are talking about yet. I don't even feel that strong about it yet, just been too short, but that's how I'm thinking about as a framework. I could go either way. I could be pushed either way on it. I don't have a strong feeling on it, but that's kind of the framework I'm looking at about it.

Erik: Well, Luke, I certainly agree with you that there's something more to this China situation than meets the eye. I'm not sure what, but my spidey senses say there's more to this picture than we've seen so far. Let's move on to something that you wrote about in a recent piece called Tree Rings from Forest For The Trees. You talked about the Taylor rule, and the fact that it would actually have called for before this latest policy move from the Fed, before the 50 basis point cut, if you'd applied the Taylor rule, it would have prescribed a hike, not a cut in US rates. So, the Taylor rule has generally been very well received, respected by the Fed. How is it possible that they're kind of doing the opposite? No, we're not political, but we're just going to do the opposite of what we used to believe in.

Luke: Exactly, right? Yeah, there was a great post by Vincent Deluard, my friend Vincent Deluard, on X shortly before the Fed meeting a couple of weeks ago, pointed out that the Taylor rule suggests the neutral policy rate would call for a 25 basis point hike. Instead, the Fed cut by 50 basis points and arranged the Fed dot plot to suggest another 50 basis points of cuts coming by year end this year. And if I knew nothing else other than, the Taylor rule said they should be hiking 25 and they cut 50 and promised 50 more, I'd say, buy gold, buy Bitcoin, buy stocks, sell the dollar, and sell long-term treasuries, particularly against gold, Bitcoin stocks. And that's sort of exactly what that it is, exactly what happened. And the question is, why? And to me, the why is crystal clear. I think there is clearly some, in the very short run, some politics. We know the Fed doesn't like Trump, per Dudley's comments, going back in 2019 where he wrote a Bloomberg op-ed saying that the Fed should act to basically kneecap Trump and make sure he doesn't get reelected. But away from the tactical politics of that, which are what they are, I think there's way more important politics that Wall Street, it's sort of the boogeyman they don't want to talk about, which is the Fed's doing this because they have to, the fiscal situation of United States is dictating this. Which is to say, because the Fed raised rates so aggressively with US debt, the GDP as high as it was, US, we call true interest expense, which is just the gross interest expense plus the entitlement, current portion of entitlements, it's approaching 100% of

US receipts for fiscal 2024, ending today. And critically, it was 120% of July receipts, and it was 150% of August receipts. Now, July and August are sort of off months because of just how the corporate tax calendar goes, etc. But the point is, that the Fed screwed up this time by not letting inflation run higher for longer. Had they done that, they would have allowed US debt, the GDP, to get down to 70%, 80%, 90%. And had they done that, they could have raised rates aggressively without pushing the true interest expense of the United States above tax receipts. But because they didn't do that, now the fiscal situation dictates they have to cut rates to get interest down, because they can't cut entitlements and they can't cut the fence, and so they need to cut rates. And in my opinion, that is the elephant in the room. Political reason of why the Fed is cutting when the Taylor rule says they should be hiking, is they have to finance US government deficits.

Erik: Luke, you and I have been talking for years about this risk that, oh my gosh, what if foreigners who have massive holdings of US Treasuries continue divesting themselves of those US Treasury holdings, and it puts the US into a really serious fiscal crisis at some point where it can't fund itself. But hang on a second, Luke, foreign holdings of US Treasuries, just hit all-time highs. How's that even possible?

Luke: It's possible because the US has gone from financing with very patient creditors, like central banks and Japanese pensions and insurers on the margin, to financing with very fickle creditors who are housed offshore. So, the headline was US, foreign holdings of US Treasuries hits all time record, and that's about as deep as most people got. So, we called up the major foreign holders of US Treasuries report publicly available, and what we found was Japan is still the number one creditor, but in the latest month, they actually sold, and they've been selling all year. China's still the number two. They too, sold in the month, and they've been selling all year. The number three creditor, the UK has been, I guess, up a bit on the year. It's very odd that the UK is the third largest creditor to the United States, because they are a twin deficit nation. They are having, arguably, their fiscal situation is at least as bad as ours. And so, how are they possibly, with running twin deficits and having a debt problem of their own, buying our debt? And the answer is, of course, London, financial center, means it's largely investor and hedge fund buying. So, hedge funds are very different creditors than central banks, much more fickle. They want to make money. Central banks tend to buy to manage to a political outcome over longer periods of time. Okay, so the number three creditor to the United States, United Kingdom. Number four creditor of the United States, Luxembourg, country most Americans can't even find on the map, not a very big country, very nice country, tax haven. Again, more fickle creditor. The number five creditor of the United States of America, Cayman Islands. Population 68,000 and they, actually Cayman Islands, when we have record holdings of foreign treasuries in the latest date of July, by far, over half of the foreign buying in July came from the Cayman Islands, tax shelter pillage funds. So you've got the most powerful country in the world not financing its debt with its patient creditors or with foreign central banks, but with the three, four and five biggest creditors are the UK, Luxembourg and Caymans. Number seven is Ireland, which are just US corporation tax havens. So, basically, you've gone through this period where you are going over the United States, since 2014, has gone from financing with global central banks who are very patient. They don't buy for profit. They buy for political reasons. And there

was sort of a virtuous cycle of trade where we buy more stuff from Japan and China. They buy more treasuries. Wash, rinse, repeat. Now they're selling their treasuries, Japan, China, OPEC, and instead, UK, Luxembourg, Caymans are where we are marginally financing, which, again, is fine, except hedge funds don't want to buy long term paper. They want to buy bills because they want to make money now, they don't want to take the duration risk. So United States is increasingly seeing its foreign financing, marginal foreign financing, shift to more and more fickle creditors at shorter and shorter durations, and that is driving secular volatility in the treasury market higher and higher. We've seen that over the last five years. And it's also secularly inflationary, because if you finance it 10 years, it very much sterilizes the government spending. However, T bills are much more cash-like, right? If cash, at the end of the day, is just a 0% yielding bond of zero duration, right? That it says federal note, Federal Reserve Note on every US, dollar in your pocket. A note is just a bond. \$1 bill is just a 0% yielding bond of zero duration. So that's cash. T bills are sort of the closest relative of cash. They are short term paper with a yield. But the more you finance in Bill markets, the more secularly inflationary it is. It's stimulative. You can use that more easily, as collateral. And so, what you're seeing is the US being forced to shorten where it finances with more and more fickle customers who want to make money. Hedge funds need to make money now.

And it also leads to this one last really important point, which is hedge funds tend to have monthly mandates, and they tend to buy treasuries on a levered basis, particularly the relative value hedge fund trade for treasuries when volatility picks up. What hedge funds tend to do is, de-gross, de-lever. And that's volatility anywhere. So if VIX goes up, if equity volatility goes up, and they're running a levered Treasury book, they're going to de-gross a bit. That's just what their models tell them. And so that gets into this pro cyclical dynamic now, where, as equity volatility goes up, Treasury volatility goes up, and then we've seen this play out four or five different times over the last five years. Ultimately, it forces the Fed and Treasury into a position where they have to continually, the Fed put everybody has been looking for in equities is actually in Treasury volatility. So, the Fed and Treasury have had a put on Treasury volatility for the last four or five years, and it continues. And the release fell for that, are equities basically. So basically, it keeps liquidity high, it keeps equities high. And that's a lot of detail, but this shift within the US' foreign holdings of treasuries is a very, very powerful ship. Global central banks have not bought an incremental Treasury in 10 years. We're financing now with hedge funds in the Caymans, Luxembourg and UK.

Erik: So putting this in perspective, Luke, what you're saying is, you and I have been talking for years about the fact that there's a perilous situation, which is the US debt is basically in the hands of a bunch of foreign lenders that might not always want to continue lending. That perception that they might divest, you're saying that is in fact happening. It's an illusion that it's going in the other direction. And the reason for that illusion is, that hedge funds, hot money, and we don't know for sure that it's hedge funds, but money that's coming from hot money jurisdictions like the Cayman Islands, probably hedge fund money is coming into this market in short duration, and it's the kind of holders who, just as they come in quickly, might leave quickly. So that begs a couple of questions, why are these hot money traders suddenly buying so many T bills? And more importantly, what's the catalyst that might cause them to just as suddenly start

selling them? Because that would be the situation, if I'm understanding you correctly. That would take us from the illusion of the lending problem not being as bad as we thought to the realization that it was actually much worse than we ever even imagined.

Luke: I think the reason they're doing it is multi-pronged. Some of it is, obviously, rates are higher, but there has been a number of different very interesting articles about the size and scope of the relative value basis trade. So basically, there is an arbitrage available where you can, hedge funds, can sell treasury futures and buy cash T bills, and you pick up a few basis points. But if you lever that enough, it's a great little money maker. And so, there was an article last September, where a senior hedge fund at one of the biggest hedge funds in the world was quoted that relative value hedge funds are routinely putting anywhere from 100 to 500 turns of leverage on this, which you can do because those aren't treasuries, that's not debt, those are risk free collateral, and so, why not? And like I said, ultimately, that is fine, that can go on and on and on. And where the release valve to that, you will see hiccups, like we saw in, say, 3Q '22, when the US Treasury move volatility index spiked as stock markets sold off and rates rose, you saw that Treasury volatility hit levels, that the creator of the MOVE index, Harley Bassman said, he was telling you that the Fed had completely lost control of the bond market. Effectively, that's what the MOVE index, I think, hit 160 or 170 in September 2022, and very quickly, Powell didn't come in to change anything, but Yellen did. Yellen ran down the TGA, injected dollar liquidity, and the dollar went from 114 in September, early October 2022, the dollar fell at a 25% annual rate over the next three to six months, which is a huge rate for the dollar. And that sort of state stabilized things. We saw it again in 1Q '23 when Silicon Valley Bank and Signature Bank had their issues. Stock market sold off sharply. Treasury market sold off sharply. Treasury volatility spiked again. Fed came in, they did BTFP, which was basically bailing out bank treasuries at par. Rather than making the banks take the losses on their treasuries, they injected dollar liquidity. Stock markets responded higher. 3Q '23, same thing. We had Treasury volatility pick up, stock volatility pick up, and as soon as US Treasury volatility, the MOVE index, hit 130 in the next 10 days after that, day seven, Fed governors came out and said that the bond market has done our job for us, literally like they were reading from a script basically saying, we're done, and done raising rates. And Yellen, shortly thereafter, came out and shifted, surprisingly, a significant portion of treasury issuance to the front end into the bill markets where the demand was, and that calmed things down a liquidity injection. So, we've seen this pattern play out multiple times. And it's instructive, in terms of, what does it mean that the US has shifted to the front end? It doesn't mean that the world's going to end Treasury market class, the bond vigilante, whatever. What it means is that unless the US government, Fed and Treasury, are willing to stand aside and let Treasury volatility not just rise to levels that imply the US losing the Fed, losing control of bond market, but then stand aside as yields rise, etc. Then, all that it means that the United States is now marginally financing with hot money, is that the Fed is going to have to take the other side of that in a hot money way.

Same thing with Treasury, Fed and or Treasury, it doesn't matter who does it. But what does that mean? In plain English, it means they are going to manage, and they have been managing to Treasury volatility. As long as Treasury volatility stays low enough, Treasury markets function, and as Treasury markets function, it's fine, but they have repeatedly injected whatever

dollar liquidity is needed to keep Treasury markets functioning. They've been doing it for five years, since the repo rate spike. So it doesn't mean you can't have declines in other risk assets, but what it means is that, anytime Treasury market volatility picks up, equity volatility will pick up, and then the Fed Treasury will come in right away with more dollar liquidity, and they'll stabilize the Treasury market, and stocks will go higher. And we've seen that pattern repeat. Like I said, we saw it in Q3 '19, we saw it 1Q '20, we saw it in 3Q '22, we saw it in 1Q '23, we saw it in 3Q '23, we saw it in April of '24 and so I think it's going to keep happening.

Erik: Luke, lots and lots of people focus, if not obsess, on the question of US national debt. They think about it in terms of how big the principal repayment number is. I think what's actually more important is the flow dynamics of this question, not how much, however many trillion we're up to now in US debt, but rather, it's not so much can you make the mortgage payment, but what happens when you get the notice that the payment went up, rather than focus on the amount? Let's talk about Treasury roll rates. How many treasuries does the US have to issue just to service paying back the ones that are maturing?

Luke: It kind of ties into this point of why are we issuing at the short end? We highlighted in this recent report that back in the third quarter of 2014, the Treasury borrowing advisory committee, or TBAC, they do a quarterly report, and they should have a chart in every quarter showing the weighted average maturity of marketable US debt outstanding. And in June of 2014, when the weighted average maturity, or WAM was 68.4 months, and it was projected to go from 68.4 months in 3Q '14 to about 83 months by 2024, where we are today. As John Lennon once said, life was what happens to you while you're busy making other plans. Reality is, that global central banks stopped growing holdings of treasuries the very next quarter after that report came out, and US weighted average maturity has basically never risen from that point. It's basically been flat, with a dip down and a dip back up and come back to this level. So, we're still right around 70 months, when, remember, the plan was in 2024 to be at 83 months. And the question is, what happened? Well, what happened is what we just described, which is when central banks stopped growing their marginal holdings, and then we had to shift to the front end, to where the demand was. And that brings us to the point of this roll dynamic we talked about back in 3Q '23, in October of '23, then Treasury Secretary Jack Lew gave a testimony to Congress around the debt ceiling. He said, "every week we roll over approximately \$100 billion in US bills. If US bondholders decided that they wanted to be repaid, rather than continuing to roll over their investments, we could unexpectedly dissipate our entire cash balance." There is no plan other than raising the debt limit that permits us to meet all of our obligations. Let me remind everyone. Principal on the debt is not something we pay out of our cash flow of revenues. Principal on the debt is something that is a function of the markets rolling over." And so, when we saw that, someone flagged it to us in 2018 that quote, and it was like, wow, \$100 billion a week. That's a lot. And so we've said, all right, well, that's a gross issuance number, right? That's not a net issuance number. It's just gross. But they're rolling over principal within that. So we said, all right, well, we said, that's the roll. What's the roll in 2018, in 3Q '18? When we saw that, and what we found was that the \$100 trillion a week roll that Jack Lew testified to Congress to in October 13, by October 18, was \$200 billion a week, huh? Wow, lot more being done at the front end, presumably because debt's going up. There's not enough demand at the

long end, because central banks aren't buying anymore, and so they're having to basically issue where the demand is at the front end. Okay, again, that's fine. There's a very predictable set of contexts that that generates. But again, it's fine. So, we hadn't looked at it recently, and so we decided to, again, from the TBAC report, what the gross issuance is. And we were astonished by what we found, which is that the roll that was, the gross issuance that was \$100 billion a week in 3Q '13, that was \$200 billion a week in 3Q '18, it's now over \$500 billion a week. That's a CAGR, or a compound annual growth rate, of over 16% in the past six years. And again, it's the same issue. It's that we are issuing more and more debt, more and more frequently at the front end, because the debt is getting so big, and the sort of big, patient, nonprofit, motivated, creditor central banks haven't bought any US Treasury bonds in 10 years. And so again, this is fine. This doesn't mean, oh, the world's coming to an end, but this is like payday lending kind of stuff, and it has, again, a very specific set of contextual implications, which is issuing more and more bonds at shorter and shorter durations with more and more fickle creditors, in a world where the Fed and Treasury are not allowing Treasury volatility to go above a certain level. The more you issue with the short end with fickle creditors, the more you have to make sure Treasury volatility stays low. And the more you keep Treasury volatility low, the more you got to keep equity volatility low, and the more you got to keep equity volatility low, the more you're going to see earnings multiples, equity multiples, equity market prices and inflation, and nominal GDP growth had higher sort of ad infinitum, until you drive stocks in the economy high enough that your tax receipts are really reducing your expenditures relative to your receipts.

Erik: Luke, needless to say, you're preaching to the choir. I couldn't possibly agree more with you. But you know what? There's going to be some of our listeners who probably feel like, oh, for crying out loud, Erik and Luke have been talking about this for years and years. And let's face it, so far, despite the fact that all of this stuff really is happening, the declining demand for US Treasuries hasn't hurt the US financial situation yet. So, is it really going to happen, Luke? And if so, when is it going to happen? And what would you say to those skeptics who were just saying, hey, you guys been talking about this stuff for years.

Luke: To me, it's people saying that, are simply not understanding what they're looking at in terms of the symptoms, right? You have to understand the symptom of what you're talking about. A lot of those people tend to think, oh, I'm going to see the long end spike and I'm going to see stock market crash. No, you wouldn't. No, you wouldn't. Not necessarily, not if Treasury shifts all the issuance to the front end. And so, like I highlighted that gold over the US long term treasury bonds has outperformed long term treasury bonds by 7% per year. Since Jack Lew gave that testimony in October 2013, the S&P 500 has outperformed long term treasury bonds by 12% per year, CAGR. Since Jack Lew gave that testimony in October 2013, the NASDAQ outperformed long term treasury bonds by 19% per year, CAGR. Since Jack Lew gave that testimony, and on face peeling volatility, Bitcoin has outperformed US Treasury bonds by 74% per year, CAGR, since 2013, since Jack Lew testified to Congress about this rule. And so that's what I would say to people saying, oh, you've been talking about forever, yes. And as long as you keep looking for the symptom of the problem to be a spike in long term rates and a crash in stocks, you're never going to see it. You're never going to make it, as the Bitcoin people like to say.

What you would see, if the US government deals with this problem by shifting issuance to the front end, capping Treasury volatility by whatever means necessary, when that spikes up, is what you're going to see is neutral reserve assets like gold and Bitcoin crush the incumbent primary reserve asset, long term treasuries. Because, remember, long term treasuries are simply a competitor for gold. Treasury is a long-term bond reserve asset with a coupon. Risk-free gold is just a 0% yielding risk-free bond with finite issuance and infinite duration. And so, there's a chart I've highlighted for clients. Recently, Charles Gave was on your show, Erik, on May 10, 2018, and he said, I'm watching gold over the long-term US Treasury bond. Because if gold is going up against the long-term treasury bond, that means inflation is coming back and the Chinese are winning and the US is losing, and if the opposite is true, then the Americans are winning, and inflation is dead. And since he said that, if I use ZB as my long-term Treasury future number, the day he said that on your show, the ratio was 9. Today, the ratio is 21. So you've had gold massively outperform since he said that, and massively outperform since Jack Lew gave that testimony. So I always just kind of laugh when people say, well, there's no signs of the stress anywhere, but you're looking for the wrong stress. Sovereigns don't go bankrupt by having rates explode and the stock market crash, if they can print the money, if they're the reserve currency, if it's a fiat currency system. Where you see it is, you see them basically implementing de facto version of yield curve control, except it's really not yield curve control yet, it is Treasury market vol control and the release valve is going to be asset prices crushing gold, stocks, Bitcoin, crushing long-term Treasury obligations of the US. And you're going to see inflation pick up by the most in 40 years, which we did. And you're going to see a shift to the front end, which we've done. And so all of these things, I think, are the things you have to be watching for, the real symptoms of what's occurring.

Erik: Since you brought up gold, the competitor to long-term treasuries, let's also talk about a perspective you shared with your readers recently on Forest For The Trees, which is the gold-oil ratio breaking out. Please explain why the gold-oil ratio is significant from a macroeconomic perspective. And also, I've noticed that gold is breaking out against several non-dollar currencies. Seems like there's a big picture here. There's more to this picture than meets the eye, so to speak.

Luke: From a big picture perspective, the gold to oil ratio is a temperature gauge on the health of the sort of petrodollar system, if you will, right? So, a low gold to oil ratio means gold, which is the primary competitor of long-term treasury bonds, is low in price, oil is relatively high in price in the denominator, low gold to oil ratio and higher oil prices are good for OPEC, and OPEC recycles into treasuries, supporting treasuries. And so, all else equal under the system that existed from, call it '71 and until, I don't know, 2018, 2020, 2016. Low gold to oil ratio meant things are, everything is great. Rising high and rising gold-oil ratio is a pressure gauge, suggesting that system is breaking down. Higher gold prices means more competition for US treasuries. It means more investors seeing inflation coming back, and relatively low oil prices means relatively low OPEC flows back into treasuries and surplus US dollar assets, which means the US needs other sources of financing. And so, a high and rising gold to oil ratio is a sign of stress. So, what we've seen is, since Putin began putting significant amounts of his

reserves into gold in 2008, when he started that, the gold to oil ratio was, I don't know, about 7, 8 barrels of oil per ounce of gold, and it's now 39, so gold has risen. What is that, 5x, 6x? 5.5x in oil terms in the last, call it 15 years. Now, why has this happened? As a practical standpoint, we have seen, and you and I've talked about a lot, Erik, over the years, oil is beginning to be priced outside the US dollar, increasingly. China, in particular, more recently, India, few others on the margin. And as that happens, nobody trusts you on debt. China has a closed capital account with one exception, gold. You can get gold in and out of China at the Shanghai gold international exchange. China also has offshore renminbi clearing banks in London, gold hub, Switzerland, gold hub, UAE, gold hub, Singapore, gold hub, Hong Kong, gold hub. So, there's ways to net settle any renminbi imbalances, which tend to be only with energy and commodity producers at a wide variety of places around the world that are also gold hubs. And we've seen people talking about this, Jeff Currie, most notably, former head of Goldman's commodities desk, for a long time, talked about petrodollar recycling is becoming gold recycled, the oil surpluses are moving into gold. More recently, we saw this dynamic significantly accelerate after the United States sanctioned Russian gold, or, excuse me, FX reserves in 2022, since that happened, global central bank buying of gold surged to over 1000 tons a year, every year since, it's continuing at that pace. And so, you're having, effectively, this new emergent system where oil, in particular, commodities more broadly, are being bought in non-dollar currencies, and then they are settling any imbalances in locally produced goods, right? So, if I'm Saudi, and I end up with renminbi in my pocket from selling oil to China, and last November, China and Saudi signed into currency swap arrangement. I can then use that renminbi to buy Chinese goods, because China is the factory for the world still, and anything I have left over is Saudi. I can't buy Chinese government bonds in any real way, but I can buy gold, and I'm happy to do that. And so, as you have more and more of this gold recycling trade, as Currie called it, happening, you're seeing, you know, the issue is that oil markets alone, on an annual US dollar production basis, are about 12 to 13 times the size of the gold market in annual physical production terms. So, oil market alone is way bigger than the gold market. Then you layer in the gas market and the copper market, the nickel market and the coal market, iron ore, so on, so forth, what you end up with is a whole lot of commodity net surplus is bidding for not a lot of physical gold. And you're seeing these gold flows happen. We've shared with clients, a significant increase in gold flows from Switzerland to Saudi Arabia over the last two years, for example, and into the Persian Gulf more broadly, very significantly, as this recycling trade is happening. And so it's really just a function of trying to fit 12 pounds of oil net surpluses into a one pound gold bag, that 12 to 1 ratio in terms of relative size. And as they try to do that, over time, we've seen gold go from 8 barrels an ounce in 2008 to 38 or 39 barrels an ounce today. And I think over time, it's going to go to 100 or 150 barrels an ounce, maybe higher. And I think it's mostly going to come from gold rising, because ultimately, US shale has a hard time keeping production flat, much less growing at too far below \$70 or \$65 a barrel.

Erik: Okay, look, let me see if I have all this straight, because if I'm assimilating what you're telling me correctly, we are currently issuing about a half a trillion dollars per week of new US Treasury issuance. But if you get concerned about that, the answer is, oh, don't worry, that's just a gross number. If you net it down because of all the borrowing that we're doing, the number is much smaller than that. And if the person asking the question says, well, but what if you couldn't

borrow because nobody wanted to lend to you anymore? The answer to them is, oh, you don't understand, you know that could never happen to a government like the United States. Then when we look at the measure of when that really could happen to a government like the United States, which is the gold-oil ratio, as you've just described, that's the measure of the health of the petrodollar recycling system. And it's looking really, really bad. And as we talk about energy, and you say, okay, well, the energy is really critical to this. Guess what? Sam Altman just went and lobbied the White House to try to get them to support building 5 gigawatt, not five times a one gigawatt, but individual data centers that draw 5 gigawatts of electricity continuously. That's more than the electric demand of several sovereign nations. Really, really huge electric demand, and Altman wants to build several of them. Meanwhile, Microsoft reportedly just paid, maybe as much as \$100 per megawatt hour for a 20 year contract to support the restart of the Three Mile Island nuclear plant. Luke, this all comes together and paints a picture to me that says we're going to have an energy crisis and we're not going to be able to pay for it, and it sounds like the escape is the price of gold. Am I missing something? Is it really that simple?

Luke: I mean, I think in very black and white, stark terms, I think directionally, that's right. I think ultimately, the US government isn't going to have a problem financing this gross number, because the regulators have classified the T bills as regulatory capital, which is brilliant. So, they're going to keep issuing more and more at shorter and shorter durations, and they're going to be able to roll all they need, because not only that's dead on one side of the ledger, but it's a collateral to leverage up on the other side of the ladder for Wall Street in the financial sector. So they can keep that going, which is fine. However, the release valve is exactly what you intimated at, and then ultimately gold, but what you intimate at is in terms of energy. So now if I'm Saudi Arabia or I'm Russia, or I'm any major energy producer, I'm looking at this going, okay, their roll, they can do that, and they're doing that because they're classifying it, the government debt as collateral, which is fine. That's their prerogative, but I don't have to store my energy surpluses, and that same debt supplies of which have gone from \$100 billion a week on a gross basis in 2013 to \$200 billion in 2018, to over \$500 billion here in 2024. The compound annual growth rate over the last 11 years has been 15% to 16% in terms of the gross roll. Again, that is fine. That is not problematic for us, looked at very narrowly. For the foreign energy creditors of the dollar system, OPEC, that is a huge problem. I can't store my limited reserves in paper, whose roll is growing 16% CAGR for 11 years. I would be a fool to do that, because at some point my oil well is going to go 100% water cut. I'm going to be sitting on paper whose supplies are growing on a gross basis at 15% to 16% and when I go 100% water cut, I have to go use that paper out in the open market and have to buy back oil for my own people at a price that's way higher. I'm better off just leaving the oil in the ground and not buying it. And that is not a good thing for the global system either. And so, as a result of that logic, that primrose path of logic, what we are seeing are those nations saying, okay, America, you don't want to cut your spending, your prerogative. We're not going to buy long term paper, our prerogative. You're going to roll it all at the front end with fast money, hot money. You know, 400 billion of holdings in the Caymans, etc., that's fine. That's your prerogative. That's going to add inflation, also your prerogative. But our prerogative then is, we are going to store our net surpluses in gold, and as a result, gold will, in my opinion, continue to rise against the dollar, oil, treasury bonds. And critically, if you look, interestingly, gold is actually global. Stock markets around the world, even

the S&P are starting to roll over versus gold. It looks like, and I think in the next two to three years, I think we're going to see gold outperform even major developed world stock markets.

Erik: Luke, as always, I can't thank you enough for a terrific interview. But before I let you go, please tell our listeners a little bit more about [Forest For The Tress](#), what people can expect to find at [fft-llc.com](#), how they can follow your work, and generally what you do.

Luke: We aggregate a large amount of publicly available data in a unique manner to try to help our clients outperform. And [fft-llc.com](#) is the website, you can see and learn more about our institutional and mass market product offerings there, and for updates on what we're up to and thoughts. I've got an active X feed as well at [@LukeGromen](#).

Erik: Patrick Ceresna and I will be back as MacroVoices continues right here at [macrovoices.com](#).