



Jeffrey Snider & Luke Gromen: Global U.S Dollar Shortage Demystified

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Erik: Joining me now are [Alhambra Investments](#) CIO [Jeffrey Snider](#) and [Forest for the Trees](#) founder [Luke Gromen](#).

As MacroVoices addicts already know, Luke and Jeff have both been outspoken in their [MacroVoices All-Stars](#) appearances about a global US dollar liquidity shortage.

But while Jeff and Luke clearly agree that there is a problem, they see that problem differently, sometimes leaving our listeners struggling to understand precisely where they agree and where they disagree.

But Jeff and Luke told me off the air that they both respect one another's views and neither one of them wanted to be part of any sort of debate intended to prove the other guy wrong. And I applaud both of them for their professionalism in that regard.

But, since so many of you have asked for clarity on where Jeff and Luke agree and where they disagree, they've agreed to talk through their views in today's feature interview.

So let's jump right in.

Luke and Jeff, you've both spoken in the past about a US dollar global liquidity problem. Please help our listeners understand how each one of you understands this problem.

What exactly is the problem? Why is it so important? What caused it? And what adverse effects are being caused by it?

Jeff, why don't we start with you?

Jeff: Erik and Luke, I think the best place to start is by reviewing why I use the term "Eurodollars" specifically rather than just saying "global dollars." The word itself is far more meaningful than it might otherwise appear. There's a whole lot that's packed into especially those four letters tacked on to what should be straightforward national currency, a dollar. Right?

Even today, if you go looking for a mainstream definition of a Eurodollar, you'll get something

that says it's a deposit of US dollars overseas. Now, while that's technically true, it's a very small subset because that's what the Eurodollar was more of way back when it first popped up six decades ago. So you already see that conventions, when we're talking about the Eurodollar, they're already extremely outdated.

So, while it started out as deposits of US dollars overseas in the '60s and '70s, it became a whole lot more than those. That's why when former [Kennedy administration] Treasury Undersecretary for Monetary Affairs, Robert Roosa, attended the 40th anniversary of Bretton Woods in 1984, he said these Eurodollars were what he called new networks of interbank relations that made possible the creation of additional supplies of dollars outside the United States and beyond the control of the Federal Reserve.

And a few years before that in 1979, the former head of the Bank of Italy, Guido Carli, said practically the same thing: There is a presence of an international banking system that multiplies US liquid liabilities outside the control of any monetary authority.

So you have to understand that what these two were talking about was essentially two very big conceptual and functional leaps.

The first was that these were new networks of international bank relations or this new international banking system that was multiplying US liquid liabilities. It was a bank-centered global system which had evolved into its own way of doing things, these monetary things.

And it had pioneered all sorts of innovative and creative ways of doing monetary things which revolved around these interbank relationships long before the end of the 1970s. This Eurodollar system had invented its own monetary language, if you will.

Now the second crucial distinction is where this has all been taking place. Now, Roosa said *outside the control of the Federal Reserve* while Carli said it was *outside the control of any monetary authority*. That's what offshore is – "Eurodollar" means offshore, not just overseas.

It is a shadow money system that has existed in the vast expanse of these black spaces all throughout the world. So the term "Eurodollar" means these two very important things: an offshore system that had long ago developed its own very different way of doing things, its own language. It's a meaningful distinction from merely saying "global dollar."

Now, what the Fed and other monetary authorities around the world had done was they realized how they didn't speak the language. They weren't at all fluent in "Eurodollar." In fact, officials would occasionally admit they barely recognized any of it.

So what they decided that they were going to do was the central banks would take a detached, higher-level approach to money. Instead of worrying about the details of these unintelligible offshore interbank networks, the Fed would move around a single money rate, the federal funds rate. Interest rate targeting was an expectations-based policy, not a money-based policy.

And it was Alan Greenspan's Fed who, in particular – he kept saying, since we don't speak the language of the Eurodollar system, we'll just move the federal funds rate around. And we'll just expect that the system will translate those inputs as necessary.

We don't need to get into any of these monetary details. The banking system will do that for us. And it will take care of them in order for the monetary system to behave in the way that we want it to.

So, several key points during the 1990s – Alan Greenspan very publicly worried that something might be missing from all of this, that Robert Roosa and Guido Carli and many others may have had a point.

In 1996, during Greenspan's infamous irrational exuberance speech, he wasn't really talking about the stock market.

What he said was: Before you even get to irrational exuberance, money supply trends have veered off-path several years ago. So how would we even know if it was being rational or irrational? We don't speak the monetary language anymore. And since it is offshore, we have no real monetary frame of reference.

So, in a nutshell, that's all 2008 really was. Subprime mortgages were such a small part of it, maybe only just a catalyst to kick things off. It got the system thinking about all of these lingering doubts, doubts that increasingly had no answers from authorities or anyone.

So, in other words, to sum it up, you had this detached, bank-centered, global money system spring up organically, all on its own, independent of monetary authorities.

And then when things started to go sideways in 2007 and 2008, those same authorities tried to come to its rescue but found out (#1) they didn't speak its language. And (#2), because it was offshore, they had no direct means to plug into it.

Erik: Okay, Jeff. You are framing the present-day US dollar liquidity squeeze that exists internationally in terms of something you've been studying for a very long time. And, as I understand it – you described in [Eurodollar University](#), the series that we did with you a couple of years ago, this long story about the Eurodollar system – and you're describing the present event, which is a global US dollar liquidity shortage, as being another symptom of this breakdown of the Eurodollar system that began in 2007.

Now I want to go to Luke and find out, Luke, are we even talking about the same problem? Do you think that the global liquidity shortage of US dollars that you and Jeff and a whole bunch of other people have observed, do you think it fits the description that Jeff put it in? Or are you talking maybe about a different US dollar liquidity squeeze?

Luke: I think he did a good job of framing it up.

I think at the end of the day what we're talking about here is you have **red dollars** and you have **green dollars**. The green dollars are the onshore dollars and that's what the Fed has governance over. The red dollars are the offshore dollars. And the Fed has no governance over that.

The Fed can only create base money for – and they have typically managed to – the green dollars. And the issue is that the ratio of red dollars to green dollars over the past 50 years has just gone into the stratosphere.

What started originally as a regulatory arbitrage sometime in either the late '60s or '70s took on a life of its own. So now you have this system that can create dollar liabilities but cannot create dollar-based money to cover those liabilities.

And it can all work just fine as long as the Fed can move rates from 15% in the early '80s all the way down the curve over 30 years down to zero. But once you get to zero, you have a problem. And it leads you to one of two conclusions once you get to that point.

The two outcomes or the two solutions, once you get to that point, is either the whole system basically defaults on the Eurodollar system, the system breaks down. And, of course, the challenge within that is that the Eurodollar system is effectively infinitely leveraged. There's no reserves, as we just noted.

So when you go back to '08, the "too big to fail" banks, they got into trouble, were leveraged 40x, 50x, 60x. And people that are negative on China these days say, well, China is leveraged 50x or 100x or 200x.

That's child's play compared to the Eurodollar system, because it is infinitely leveraged.

Once you get rates to zero, then the supply, the Fed's ability to manage the onshore dollar/offshore dollar relationship becomes impaired. And once you get to that point, one of two things happen.

Either you basically have to default on the Eurodollar system or basically the whole system implodes, Or the Fed has to start creating base money in extraordinarily large amounts.

So ultimately, I think we're seeing this dollar liquidity problem vis à vis the Eurodollar system in a pretty similar manner.

Jeff: Yeah, Luke, from my understanding and the way I see this, interest rates are an independent part of this. I don't think interest rates are any constraint on Eurodollar liquidity or Eurodollar leverage or however you want to describe it.

One of the reasons I think that way is because the Eurodollar system is not a store of value. It's not like this is credit creation for the sake of storing money and doing all the things that go along with that monetary function. It's historically been, essentially, strictly a medium of exchange.

So the level of interest rates – I don't want to say it's immaterial, because that's probably going way too far – but the way interest rates actually factor in the Eurodollar system, it almost doesn't matter. Because what does matter are all of these other things that banks do.

Like when you pointed out – Lehman Brothers was leveraged 60x, Bear Stearns was leveraged 60x – it's the way that banks construct their balance sheet. Because this is a bank-centered system, what matters to it is not interest rates. What matters to it is how banks can efficiently manage their liability and asset structure.

So that's how I see what is a global dollar problem since 2008 is the fact that banks can't manage their balance sheets in the way that they used to. And it has very little to do with what the Federal Reserve does.

Luke: I don't disagree with that. When I think about the interest rate side of it, it's more just (to your point) the expectations management, the liquidity increase you get from the expectations management. Once you get to zero, everybody knows, okay, now what? They can't cut more.

Jeff: From the Fed's perspective? Yeah, the Fed's out of ammunition.

Luke: They're out of ammunition.

Jeff: They've got nothing left.

Luke: Yeah, it changes the liquidity perspective in terms of how you're going to manage those liabilities in terms of all that. Because everybody knows the system is infinitely leveraged and you kind of go – it's a moment akin to what you had in (call it) '06-'07 or whatever, where everybody knew everybody else and themselves were all doing all of these crazy things in subprime and with subprime derivatives and nobody wanted to do anything because they all sort of knew everybody was in the same boat.

And I think there's something akin to it here where you kind of go, okay, everybody knows the Eurodollar system is infinitely levered, and that means either the system is really going to come unhinged or they need to create epic amounts of liquidity.

And I think on some level you can see that in the behavior of markets since 2008 where it's either feast or famine. Either, okay, they're going to supply some more liquidity to keep this thing going. Okay, own risk. Or don't own risk. It's just been very binary.

Jeff: Right. It's a big point.

And I think maybe the biggest point here is what does the Fed do now? They've run out of ammunition. Interest rates are already low. ECB, what are they going to do? They never even got off of zero, never even got off of negative rates.

But where I'm coming from is the market knows that. And it knows that, no matter what the Fed does, it doesn't matter. Because it's already proven they don't speak the language. The Fed doesn't understand the system. They don't speak the right language.

And even if they did speak the right language, what could they do? Because, again – I like the way you put it: red dollars and green dollars. The Fed has no statutory authority in the red dollars. In fact nobody has authority in the red dollars, which is exactly what Guido Carli and Robert Roosa were talking about 35 years ago.

What happens, when we have this organically grown offshore system, what happens if it starts to go awry?

And what I'm talking about, Erik, what we had talked about a lot is 2008 was not a one-off event. It was a systemic break. So the system has been in some form of decay ever since that point. And over time we see these increasing responses from central banks that, outside of sentiment, have very little or no monetary effects on that system.

And I think that's incorporated into what you're seeing in market prices now, which is everybody knows the Fed is going to do something. Everybody knows next week or this, ECB is probably going to do more QE. They're probably going to do more negative rates. And still you see the markets say, eh, doesn't matter.

The Fed doesn't speak the right language. The ECB doesn't speak the right language. And there is very little they can do about it as the system is currently construed.

Luke: I agree. And I think the key phrase to that is "as the system is currently construed."

Then you start to take a look around and see what some of these policy-makers are beginning to discuss – whether it's Mark Carney two weeks ago saying, the dollar is the problem, we need to change the system away from the dollar as purely the reserve asset.

If you look at, even today in the Financial Times, there is a real "whoa" moment for me – I don't know if you saw that Euroclear is talking about setting up a system that will allow Chinese sovereign debt to be accepted as collateral for repo transactions anywhere in the world.

And when you take a look at what central banks have been doing all along with gold, particularly in the European side in the last three weeks where they, for the first time in 20 years, decided not to renew the central bank agreement on gold. All by way of saying that (your

point) as the system is currently constructed is the governor on this thing. It's the limiting factor on generating liquidity.

And so if you take a look around on the fringes or watch what is being done rather than what is being said, to me it seems very clear in a number of different markets – and of course a big thrust of what we've been talking about, which is multi-currency pricing on energy and other commodities – all move the system towards being restructured.

Because, to your point, as the system is structured, your options are collapse or the Fed monetizes it all permanently.

Erik: I'm going to jump in here and summarize what I've heard so far and ask you both to confirm whether I've got it right.

Clearly, we're talking about an international phenomenon. This is not about something happening inside the United States. The issue, as Luke put it, is we've got red dollars and green dollars. The green dollars are in the United States. The red dollars are the US dollars that are outside the United States.

And, to summarize what I've heard, in the past, going back a few decades, even though the Federal Reserve wasn't doing anything at all to service the liquidity requirements for those red dollars, those liquidity requirements for the red dollars were getting serviced through free enterprise.

For whatever reason, we had motivations in the balance of economics that allowed the commercial banking system to create all of the US dollar liquidity that the world needed by creating US-dollar-denominated loans outside of the US banking system. And that worked for a while.

The thing is, the private sector does things when there is a profit to be made and its government that steps in to do things when there is no profit and liquidity is needed.

The Fed has always been organized to meet domestic liquidity requirements. And when we now have suddenly an international US dollar liquidity requirement that's not being addressed by the commercial banking system in the private sector, there is nobody to step up to the plate and deal with the problem.

Is that essentially what we're talking about here?

Luke: I think that's fair. I think you've just reached this point where you can't – I think that's fair.

Jeff: Yeah. And, Erik, it's tough to summarize this stuff, as Luke and I both know very well and you know very well. There's a lot more complexities to all of these things. But, to put it in a

nutshell, yeah, that's pretty much what we're talking about here.

Erik: Okay, so now that we understand what the dollar liquidity problem is, which is that there is international demand for red dollars, dollars outside the US banking system. That demand was satisfied by the commercial Eurodollar system historically. Nobody has an obligation to satisfy that need. Suddenly, the commercial Eurodollar system is not solving the problem.

What I want to talk about next is you guys, in the course of a few minutes, have explained that very succinctly. So you understand it, I understand it, now our listeners understand it. My question is, how well does the Federal Reserve and the other central bankers around the world understand this problem?

Do they understand that right now we have a crisis being created by an insufficiency of red dollars in the global economy? And that there is no governmental organization, the Fed or any other, who's chartered with satisfying that need and that it's causing problems?

Do they get it? Do they understand it? Do they know that something has to be done? Or are they not paying attention because it's not their job? (And, let's face it, it's not their job.)

Luke: It depends on which central bankers you're talking about, Erik. Upton Sinclair famously said *it's difficult to get a man to understand something when his salary is dependent on his not understanding it.*

So when I take a look back, the system broke, as Jeff noted, in 2008. By March of 2009, the head of the PBOC, Zhou, said – he told us what the fix is. He said the world needs to move to a neutral settlement asset to create new liquidity and basically break this dollar problem. And it was an interesting piece put out there.

The IMF said something similar in 2011.

But the point of it – to tie that back to my point that some central bankers get it and some don't or don't want to – is that we can see obviously the system has not changed in the ensuing 10 years in the manner in which the PBOC wanted it to change. So what you've seen is China go about arbitraging the fact that the system did not change in the manner in which it needed to be changed.

By that I mean PBOC comes out and says we need to move to a neutral settlement asset. Basically, we need to create a new source of repo collateral liquidity, as I suspect Jeff would refer to it in terms of the parlance. And the world said no.

And so China said, okay, we're going to borrow all the dollars we can possibly borrow and we'll buy anything but dollars. We will buy finite ports, gold, oil fields, copper mines, stocks, anything that is basically – and we'll just keep doing this.

Because they understand that the system is broken. They have to understand. You can see it in their actions.

If in 2008 the outcome was either restructure the system or the system will collapse, and they don't restructure the system in 2009 as the PBOC advocated, then the optimal strategy is borrow as many dollars as you can as long as you don't have to mark-to-market. And just keep buying assets until, basically, what it would amount to is the dollar is forced to be mark-to-market.

And so I think the PBOC gets it. I think on some level Western central bankers get it. I think the issue is less *do they get it or not?* I think, more, the issues are the political ramifications on a couple of fronts.

And, when I say political, I just mean we're talking about the structure of the dollar's reserve currency status and the way the system has worked since 1971, which confers a lot of power in Washington.

So this isn't just a pure case of *hey, do the central bankers get it or not?* I think it's *do the central bankers get it and are they allowed to get it by the people in Washington?* Because these are geopolitical issues, not simply economic.

Jeff: Yeah, Luke, you're exactly right about that point. And it's been this way since Bretton Woods, even long before then.

Global reserve currency is a political hot topic and it always will be. There's always going to be resistance to even discussing the point, whether it's the US officials or not. They're not going to want to say, hey, we're going to do something about the dollar. Because the dollar, everybody perceives of as a national interest rather than an international interest.

But where I think I would disagree with you is on China.

First of all, I don't see the Chinese officials acting particularly long-sighted. I see them very much reactive, because they have world's biggest dollar problem. You're right, they have the world's biggest dollar problem.

So what they've been doing, over the last five years in particular, is they've been hit with the worst end of the dollar shortage and the dollar squeeze, and that has forced them into all sorts of bad consequences. Including, as Erik and I talked about a few weeks ago, an internal monetary problem.

Because that's how this dollar is set up. Not only do we have to worry about the red dollars, but the red dollars actually have impacts in these local systems. Especially China. The Chinese monetary system, RNB (renminbi), is dollarized. So every dollar, every red dollar that the

Chinese don't have, that's RNB that the PBOC cannot create.

And so what you've seen over the last five years is a monetary squeeze inside of China as well as outside of China. And, because of that, they've had all sorts of bad ramifications from it.

So the larger issue to me is, what are they waiting for? If they know that this is a problem, and they see that there is a solution to it or they think they could possibly get something on the books, some kind of alternative, to even get the world thinking about an alternative, we're talking about five or six years.

2013 was when all of these symptoms started showing up. And the CNY (yuan) reversed in early 2014.

If they could have done something, they would have long before now. Especially now with the Chinese economic system becoming a total mess. In fact, we have no idea how bad it is inside of China right now.

And, again, it all traces back to the fact that the PBOC has a dollar problem.

And, you're right. They have a dollar problem. But whether they know enough about it, or whether they have the ability to understand exactly what's going on so that they're going to do something about it, or whether they can even think about doing something about it, I think those are very much open questions. And especially recently, the last couple of years.

I see more of a central bank in panic mode than anything else.

Luke: I don't disagree. I think you're exactly right that they have been managing out of panic mode over the last five years.

I disagree that they haven't been acting. And what I think they've been working to do –

This, then, ties back to our point on the energy markets with this yuan oil contract, which launched in March of 2018, was widely expected to be a flop, has not been a flop, is now rivalling in front- and second-month volumes the Brent contract in terms of open interest.

But the point is this: China has a dollar problem and, if you look at China's current account, China's non-commodity goods trade surplus is about \$700 billion to the good. So it's a surplus.

Another way of saying that is, if China can price its energy and commodity imports in yuan that it can print, then China will be able to create out of thin air \$700 billion per year. Dollars. Which will end their dollar problem basically forever, until our kids have kids have kids.

So I agree that they have been scrambling. And that has gone live in 2013.

I disagree that they're not doing something about it.

And, ultimately, I think what we're seeing is a change in the monetary system is being forced through commodity and energy markets.

Jeff: I agree. I don't think the PBOC has been doing nothing. They haven't been sitting on their hands. It's not in their nature to sit on their hands.

But what I'm saying is what they have done is ineffective, because global reserve currency means something. It doesn't just mean that we're going to reprice something in our own currency. There has to be depth, there has to be liquidity.

You know, Robert Solomon's three pillars of global reserves. There has to be liquidity, there has to be adjustment functions, and there has to be confidence.

And CNY, Chinese yuan, does not meet those thresholds. In fact, the internal monetary problem in RNB prevents them from using yuan as a global settlement currency because there isn't enough of it. There has to be enough of this currency. That's the whole point.

That's the whole reason the Eurodollar took over was because it had solved what Robert Triffin called a paradox, which was a national currency supplying enough of itself into the international system that – beyond its own means. And so the Eurodollar had created. in essence. the ability to solve Triffin's paradox. And there is no way in my mind where China –

Luke: Temporarily, right?

Jeff: Well, yeah, temporarily. It lasted for a few decades.

Luke: We wouldn't be talking about it, but yea its related -

Jeff: That was the Eurodollar's best attribute, the fact that it could provide all the liquidity for a while – up until 2007 – all the liquidity the globalizing world would ever need in US dollars. Which also solved the confidence issue. And, by the way, it was also so flexible it could reinvent itself over time. That was the adjustment function.

The way that the international Eurodollar system works today is nothing like what it did – again, going back to it was offshore deposits of US dollars. Now it's a bunch of FX and interbank derivatives.

CNY doesn't meet those aspects.

So I'm going to disagree with you and say that what can the Chinese do about it in terms of their global reserve currency? They still have a dollar problem.

Erik: Hang on a second, guys. Because what we're talking about here is how we resolve this problem that the US dollar is the world's global reserve currency and it needs to supply enough of itself, as Jeff said, in order to satisfy global needs.

That used to be satisfied through the eurodollar system. That isn't working anymore. The Fed's not stepping up.

Now, it seems to me that we can't ignore something like Mark Carney, the head of the Bank of England going to Jackson Hole a couple of weeks ago, the Fed's big event of the season monetary conference, and saying, guys, we need to consider a multi-polar, as he put it –

(Now, I see the word "multi-polar" as a central banker euphemism for *we need to ditch the US dollar as the world's global reserve currency and replace it with something where we don't have one country in charge of the global reserve currency anymore.*)

And he's proposing a digital currency – as I predicted in my book, by the way – that would potentially do that.

So it seems to me like the game is changing really, really quickly. It used to be unthinkable for anyone to suggest the US dollar was not going to be the world's global reserve currency forever. And we got the head of the Bank of England at Jackson Hole, the Fed's own turf, saying, guys, we need to think about a multi-polar solution here.

To me, that's a really big upset. Do you not see it that way?

Jeff: No. I think Luke's point earlier, the governor of the PBOC Zhou said the same thing back in 2000. That was 10 years ago. I think things are moving incredibly slowly, not quickly.

Luke, you mentioned how the central bankers have seen the dollar problem. Well, yeah, it took them 12 years to realize that when the dollar rises in exchange value that's a bad thing. It took them 12 years to figure out what was the easiest correlation in the world to establish.

So I don't see them moving at a quick pace. I see them moving glacially. Which is, I mean, look, that's what central banks are, they're bureaucracies. There's a ton of institutional inertia associated with these things.

I think what Luke is talking about is a more likely situation that, if the Eurodollar system breaks, then it's like, oh, crap, what do we do now? Now we actually have to do something.

But I think the way that the world is moving now (absent, say, another 2008), incredibly slowly, at a glacial pace, where it's, like, we only admit something when it's completely obvious and it happens four times.

Luke: I don't disagree. I think they've known it for a long time. I think there is *when do you*

know something and when are you allowed to admit it?

Jeff: That's the key question. Right?

Luke: I think they knew it 12 years ago. Otherwise Bernanke wouldn't have written all those checks to the European banks. Right?

The fact is that you don't write, what, how many trillions to banks and not know the reason you're writing the checks. I mean, he was awfully sheepish in his congressional testimony about why he wrote those checks, who he wrote them to. And I just have a hard time believing somebody writes trillions of dollars in checks or prints trillions of dollars in money and hands them over to foreign banks, knowing you're going to have to testify, without understanding it.

So I think it's more they know but they're not allowed to say.

Jeff: We've got a recent example, Luke. The IMF and Argentina.

The IMF, June of 2018, Argentina was begging, begging for some kind of aid because they have a dollar problem. And the IMF said, hey, we're going to come in and fix this for you. We've got the largest bailout in the institution's history. We're going to calm every market. The peso is going to be rescued. Because we know what the hell we're doing.

And it blew up in their face in a matter of months.

By August of 2018 Argentina was back to the IMF begging them for more: Hey, speed up those tranches. Oh, and by the way give us \$7 billion more.

And the IMF came in and said, you know what, we're going to do it our way too. We're going to rewrite your monetary system. We're going to put the peso in a non-intervention zone. We're going to do all sorts of these creative things.

And it didn't work.

What I'm saying is – it goes back to my original point. These people don't speak the right language. I don't think they really understand all of the nuances, all the complexities, all of the details behind what's going on in the dollar system. And it shows.

And, oh, by the way, what happened to Christine Lagarde, the head of the IMF? She gets bumped upstairs to the European Central Bank. And don't think that markets haven't noticed that.

Luke: Right. Well think about this. Where did Argentina run into problems? It's with their imports, right? They're importing more than they're exporting. And they have a dollar problem. They don't have enough dollars, at the end of the day.

And that ties back to the original point of who gets it, who doesn't.

The PBOC, you look at what's going on with Chinese oil imports. They're paying it. Can they run out of yuan? The answer is, no, they can't. They can print it.

And when you say, well, it's not being accepted, I would say two things to that.

Number one, if you look at IMF FX reserve balances over the last 12 months, US dollar balances have risen about \$200 billion globally and renminbi balances have risen \$70 billion globally. So renminbi's FX reserve balances have risen in total about 35% as much as dollar balances have.

But I think the broader or more important point is you have to understand that China doesn't want to run the dollar system. The dollar system required us to hollow out our manufacturing base, send it first to Mexico, then send it to China. And that's become a strategic weakness for the United States that China is not even going to start on. And so what China is really –

Jeff: I just want to say I agree with you there. The Chinese don't want this. It's a burden; it's not a privilege. I think that's a point that you're very right to make.

Luke: 100% right. So if it's a burden and not a privilege –

Jeff: It's a huge burden –

Luke: And that's where – if you look at what China's doing, they're a creditor. Right? So if you're holding renminbi – I have this discussion with people all the time – well, no one's going to take your renminbi. Well, no kidding. They're not going to take and hold the renminbi. What they're going to do is hold the renminbi.

Number one, who runs a surplus against China? And the answer is virtually no one. So there is not going to be a lot of renminbi outstanding (to your point about the liquidity). But that's not a flaw. That's a design. That's the feature.

So if you do end up with renminbi, you can do a couple of things with it. You can buy Chinese goods, which 10 to 15 years ago were cheap, plastic trinkets at Walmart. Nobody wants that. But now, hey, would you like a completely state-of-the-art 5G system from Huawei. Yeah, sure, I'll take that with my renminbi.

And, oh, you still have some left over? How about some gold? But you can't take our gold. You can take gold out of London; you can take gold from the US. But you can't take gold that's in mainland China.

And in doing this, this is over time going to bid the price of gold up. And, as the price of gold goes up, it ends the dollar shortage. So they've thought about this. The system is there. The

function of how fast it gets fixed is how, basically, how fast the price of gold rises.

Erik: Okay, I think we've established now that central bankers probably do understand more than they are at liberty to admit. But, still, their institutions and the nature of government bureaucracy causes them to be able to respond at a pace slower than we would be used to in the private sector.

I want to shift gears now and discuss a hypothetical scenario. Please assume for the sake of this discussion that the central bankers do understand these issues every bit as well as you guys do. I don't think that's really true, but hypothetically let's pretend that that were the case.

With the assumption that they fully understand the problem, can it be solved or could it be solved through policy action? Is there something that could be done here that would allow this dollar liquidity shortage to be solved?

Or are we really in a situation where this is the impetus maybe that's going to take us to people responding as Mark Carney has begun to respond and say, hey, we need to find a different system because the US dollar at the center of the global financial system is not working anymore?

Luke: I think Mark Carney is laying out the fix. I think that's the only fix there is, that you have to separate the store of value or the repo collateral, however you want to call it, the reserve asset has to be neutral.

And this is what we heard from Charles de Gaulle in 1965. This is what we heard from Jelle Zijlstra in 1974. This is what we heard from the euro when they put 15% of reserves into gold mark-to-market quarterly in 1999. This is what you heard from Zhou in '09. And now this is what we hear finally from the Bank of England in 2019.

Erik: Well didn't we hear it from John Maynard Keynes in '44?

Jeff: Bancor, yeah.

Luke: We heard it in '44.

And we have the Chinese moving the world towards a Bancor system by virtue of what's happened, what they're doing in the energy markets.

If you look at what China is doing with this yuan oil contract, they are basically forcing the world – by using their clout in global energy and commodity markets – forcing the world to the John Maynard Keynes Bancor solution of 1944 where you have a neutral reserve asset that floats in all currencies and basically is at a different price in each currency based on each currency's balance of payments.

We're moving in that direction. To Jeff's point, will it get there fast enough? I don't know.

And I think part of that is, again, it's a political question. Because this is not, hey, the central bankers get together and agree. This is the central bankers get together in Basel and agree. And then they call up the United States and the United States Marine Corps and say, hey, here's what we're going to do and you guys are going to have to figure out how to finance yourselves going forward.

And they say, yeah, about that? No. Or at least, no until certain conditions are met. And I think it's that latter, where it's no, not until certain conditions are met.

So when Jeff says it's taken us 12 years, well, I think those conditions, number one, energy security. The United States would never allow this to happen unless it was self-sufficient in oil. In 2008, the United States produced about 6 to 8 million barrels a day and imported 10 to 12. Take a look at us now. We've got shale. Okay, check #1. We've got that part done.

I think part two is you've got to really figure out a way to start getting US manufacturing back here. We're talking about that now.

To Jeff's point, it takes a while. But I think Carney's telling us the solution.

Jeff: I have to disagree because, again, I have a big problem, Erik, when you say we're going to assume that authorities know what they're talking about. Because that's the big sticking point.

How do you go from A to B? That's what we're really talking about. We all agree there needs to be a B. We all agree there needs to be a system beyond the Eurodollar system that actually functions.

The question is how do you get there?

And if the authorities don't really understand what A is, they're not going to be able to get to B. That's my point. My point is, if you don't understand A you can't get to B.

And I include the Chinese in that because it's not just a function of everyone's merchandise value. That's not what the dollar is used for. In fact, much more than that is investment flows, or what people call hot money. The yuan is not going to be able to replace the dollar in terms of that financial function, which is a necessary function part of a globalized economy.

So if you don't understand A, how do you get to B?

Let's assume that they do understand A. How do you go from A to B? It's good that people are thinking about what B might look like. But you still have to get from one to the other.

How do you revalue trillions and trillions of contracts that are not on anyone's books? How do you revalue everything so that it doesn't just blow up the system?

Maybe going from A to B is worse than sticking with A. Which, by the way, I would argue is one of the reasons why A has persisted as long as it has, because there is so much complexity. It's like a Gordian knot. How do you untangle this mess and straighten it out enough that you can design the system that goes from A to B?

So my big contention is how do we get to B? Before we even think about B, how do you get out of A?

Erik: Well it sounds like Luke is saying that what the B really is is that the US dollar's status as the global reserve currency has come seriously under question and is very much at imminent risk of changing.

Now, I don't think that anybody in the US government, including the Fed, sees it that way. I'm not saying that it's not perhaps true. But I don't think the US government believes that the US dollar's hegemony over the global financial system is at risk of ending.

Is that what you think Luke? And Jeff, what do you think?

Luke: I think if you asked the people at the Fed they would agree with you.

I think if you asked the guys at the Department of Defense, they would have an entirely different opinion. Because they now see it's a matter of national security, basically, that it does end as structured and move to something more akin to pre-1971 and probably something more like possibly Keynes' Bancor.

There was a great report last fall put out (the unclassified version) laying out that, basically, significant portions of the United States' defense supply chain is either sole-sourced or no-sourced, no-sourced domestically or sole-sourced domestically. And, in some cases, sole-sourced through China, which is a sub-optimal arrangement.

And that's a function of the deindustrialization that has had to take place by virtue of the constraints of this Eurodollar system since 1971.

I think in terms of going from A to B – to Jeff's point – I think if you look at what these Basel III regulations or reforms have done (as one of my best relationships on the Street noted), in short, basically Basel III constrains the size and elasticity of matched repo books.

So, to the extent that that's happening, that's – the dollar shortage we're feeling is by design. Now the question is, okay, are they doing this to kick off the crisis you need to fix the problem? Or why are they doing this?

Jeff: Can I jump in here for a second? Basel III, all it did was codify what the banking system had already been doing since 2007. Basel III had no impact on the way banks construct their balance sheet and the constraints that they're feeling. The behaviors that banks undertook in 2008 was what Basel III eventually did years later.

So the fact that the regulators caught up to something that had already happened years ago, again, to my point that I don't think they really understand what's going on. They're just doing things in the dark because they don't know what else to do.

So it gets back to the point: If you don't understand A, how do you get to B?

And I think the big question is before we ever even design B we need to understand A. How do you untangle this? This is not 1944 anymore. It's not as simple as John Maynard Keynes and Harry Dexter White getting together in New Hampshire and saying, oh, we'll create this other Bancor type of global reserve currency.

How does that work in the modern environment where everything is traded in a microsecond and in massive size? These are questions that I don't believe anybody has seriously contemplated. And, for one reason, it's because they don't really understand the nature of it.

A lot of the stuff that takes place – when I talk about shadow money, I mean literally shadow money. There is money that exists out there that nobody knows about. BIS doesn't know about it.

I mean, when the BIS took a look at the Eurodollar system a couple of years ago – I think it was 2017 in one of their quarterly reviews – they said, you know what? We went looking in the footnotes of all of these banks and we found tens of trillions of dollars in functional FX derivatives that function as debt and currency, but it doesn't appear on any tape anywhere.

So we don't even know how big of a problem we have.

Luke: Well, it's interesting, right? I remember that report. And if you look at (what was it?) \$13 or \$14 trillion in derivatives they found. What the function effect of that was to allow the US government to borrow more money than they otherwise would have, to basically circumvent balance sheets and –

Jeff: Oh, hey, the US government only has a privileged position because of the original sin, which was all sovereign debt will be given a zero-risk weighting and that the repo market accepts sovereign debt as a lowest haircut option.

The intent was not to give the US government borrowing privileges. It's been piggybacking on those privileges.

Luke: It's been piggybacking. And it's interesting. Right?

Because as soon as – if you go to last fall, you know back in September of last year, regulators began telling banks, hey, stop growing your FX swap books. And that was when you started to see FX-hedged Treasury yields go wildly negative as, basically, once banks' FX swap books were unable to keep growing forever and ever and ever, to your point –

Jeff: Yeah, but they've been shrinking since 2008. It wasn't like they have been growing exponentially. No. FX books have been shrinking for the last 12 years, which is part of the problem, what we're talked about here.

The efficiency of banks to be able to construct their balance sheet derivatives are a huge part of that both as far as regulatory capital oversight, risk oversight, as well as liquidity function. Because FX functions as liquidity.

What the BIS report was talking about in 2017 was these trillions of dollars in FX are a liquidity function. Yeah, the US government was piggybacking on it but it's –

Luke: Yeah, it's the US government –

Jeff: But that's not the intent here. The intent is to provide liquidity. And if there is lack of liquidity in FX, what do we do about it?

And, again, it gets to the point of how do we get from A to B? How do you solve that issue?

Luke: You raise a critically important issue. If it was ultimately the US government borrowing and now these things are unwinding, who's getting cut off? And you can see this manifestly and the answer is the US government. And so it's –

Jeff: Well, no, because that makes the Treasuries more valuable because of the liquidity of them.

Luke: 100% it does.

But it also is – you know, how do you choke out the global Minotaur? And the answer is, you do it very carefully. And you make it look like it's everybody at once. You don't try to do it all by yourself. Ad you do it by regulation.

So what you're watching is, basically, global regulations post-2008 that are forcing the United States to finance their own deficits for the first time in 70 years. And, like you said, the initial impact of that is that, yeah, Treasury yields go down a bunch. And the dollar goes up a bunch.

And, obviously, we've seen that since 3Q14 when global central banks stopped sterilizing US deficits. And so what we've been seeing –

Jeff: That's a dollar shortage –

Luke: It creates a dollar shortage, until it doesn't. And that's what we've been writing about, which is this it is this crowding-out effect where the global regulatory regime post-2008 has been effectively designed to force the United States to finance its own deficits. We don't run these deficits because we're bad or because we're profligate *per se*. It's because this is how the system works. We had to run the deficits under that old world.

So if the world is changing, the first way you stop that world from changing, or within the course of that world changing, the US has to stop having the rest of the world finance its deficits.

To your point of where are we on this and how do you go from A to B, I think we're in the process of going from A to B. And the way that starts is you start regulating the United States to start financing its own deficits for the first time in 70 years. And, Jeff, to your point, in post-'08, that began happening. Then –

Jeff: But if you look at the market prices of all of these dollar events, they don't line up to regulatory changes. In fact, the regulatory changes play very little part in what's happening. It's the banking system, this bank-centered system reacting on its own.

Luke: 100%. It is reacting on its own.

But it's basically the market once you regulate it. And then, once global central banks stop sterilizing US deficits, that's all you have to do.

This is like the subprime avalanche. This akin to when the banks stopped writing subprime insurance, stopped writing CDS and turned buyers. The markets took care of the rest. The whole facade came unraveled.

This is something similar here, where all you have to do is put the regulations in place. And then global central banks have to stop buying Treasuries, which they did in 3Q14, and everything else will take care of it.

Now, what will that look like in the short run? Well, initially you'll see the dollar rally tremendously, right?

So in 3Q14, we saw the DXY go from 70 to 88 in (call it) 15 or 16 months before it peaked at 103 a year and a half after that. You would see just a relentless bid for Treasuries for regulatory purposes. We're seeing that.

And, ultimately, where this would all continue to play out, you'd eventually see negative interest rates elsewhere as FX hedging costs for dollars got so expensive that actually, as an American, I can buy euro debt at a negative rate, hedge out the currency, and actually make a

positive yield –

Jeff: But wait a minute. That's dollar shortage.

Luke: 100%.

Jeff: Look, cross-currency basis, the negative is another form of the dollar shortage. And you go back to what central banks have been doing –

Luke: The end game is that the Fed has to print it off. Basically, the US either has to go into austerity or the Fed has to monetize. That's where this is all going.

Erik: Guys, I want to jump in here. So far we've been talking about things I think that we all agree on, which is there is for sure a global dollar liquidity squeeze. There is a shortage of dollars internationally and it's causing all kinds of serious problems.

Now that, I think, we can agree at least brings some question to whether or not the US dollar can continue to be the world's global reserve currency in the same capacity that it has been in for the last several decades.

The place where I think it's really important for us to get to in this interview – a lot of listeners have been trying to understand why you guys disagree so strongly on some things and yet you seem to agree so completely on some of the other.

Luke, you think that, even though you've just described a whole bunch of reasons for this dollar squeeze pushing the dollar higher, you think that that's about to end. And I'm really struggling to understand why.

For all the reasons you yourself just described, I think what Jeff and I see coming is a continued US dollar appreciation against other currencies because, although certainly the US dollar's status as reserve currency may come into question, it is still in that role today. As long as it's still in that role, we're seeing a squeeze. We're seeing the dollar push higher.

Why would you expect the dollar to move lower under these circumstances?

Luke: The answer is really simple: Because the US Defense Department wants it to. The US Defense Department needs it to. There is nobody more short dollars than the United States, and the United States government specifically.

So I would reference you back to the point I made before about this Defense Department report from last (either) October or November. The United States' ability to fight wars is being impeded by the dollar at 98, by the dollar where it is.

If you're short dollars more than everybody else and, importantly, you're having this rivalry

with China (that I don't think we need to go into; I don't think anyone would say that's not happening), you can't have China sole-sourcing manufactured goods. Ultimately, you've got to bring some of this stuff back.

To do this you have to have the dollar structure changed back to where you can make stuff here. And there's a number of different ways you can do that. But the bottom line is that, whether you look at it from the Defense Department supply chain angle or whether you look at it from the US government tax receipt angle –

Last time we were at 103 on the DXY, you had tax receipts falling at a 3-5% annual rate. When you have tax receipts falling at a 3-5% annual rate, and the debt and the interest coupon on your debt – which is 100 and almost 10% of GDP – growing at a (call it) 2.2 or 2.3% rate, that's what's known in the parlance as a death spiral.

And we have more leeway on that death spiral than everybody else.

But at the end of the day, the way that gets resolved is they'll print the difference.

So whether we decide to do it proactively, unilaterally, or whether the dollar goes to 103 or 102 or whatever it is – people say, oh, it will go to 110, it will go to 120 – tax receipts will be falling 10-12-15% a year with a 2.2% coupon to the positive. But every year we'll be falling 10-12% further into a death spiral.

And this is not going to be allowed to happen for any real period of time.

So I think when you say, despite all of these things which are dollar positive, which they 100% are, the political realities, the domestic political realities of national security –

Look, Warren Buffett says for 240 years it's not paid to bet against the Americans. I'm not betting against the Americans. I'm betting on the Americans. And the Americans need the dollar down.

Jeff: I agree with you, Luke. I think that's one of the things that we both agree on is that the situation is untenable.

Where I think we disagree is in how.

The US Defense Department may want the dollar devalued so that they can do all of the things that they need to do to fulfill their mandate. The question is – the US Treasury is not in charge of the dollar. The Federal Reserve is not in charge of the dollar. The dollar is set by a Eurodollar system that, at the current moment, preferences the dollar and the dollar-valued assets. Especially US Treasuries as repo collateral.

So it's not a matter of, okay, we see that there's a problem. We need to do something about it.

It's what can you do about it? And there, again, they're very limited.

Number one, I don't believe they understand the problem as it actually is because it took them 12 years to figure out, hey, if the dollar goes up that's a bad thing. So, okay, now that you see that, what's all of the stuff behind it? You've got 60 years of banking and monetary evolution to catch up on.

Maybe there's a few staff papers here and there that's been written by central bankers every once in a while. But, especially in the upper levels, there's a very clear lack of understanding of the situation.

I don't want to say they're a bunch of Pollyannaish, rose-colored-glasses type of people. But I don't think they really understand the nature of what they're facing.

In fact, that's why 2008 happened. That's why 2011 happened. That's why 2014 happened. And that's why we're doing it all over again.

So, without being able to answer the question of how – how do you get the dollar to behave in the way that you want it to behave? – it's essentially a moot issue.

Erik: Jeff, I want to ask one point of clarification. When you and I hold the view that this has to result in the dollar appreciating from here – I know you and I agree on that, where Luke says the dollar needs to go the other way.

Do you disagree with him, or would you agree with me in saying Luke is exactly right but he's just early?

Jeff: I think the key word in what you said is "need." The dollar needs to go the other way. That I would agree with.

The question is, can the dollar go the other way as the system is currently construed? That's where I have all this problem.

I run into this a lot. People think I'm advocating for the system. I'm not. I'm just trying to analyze the system as it actually is and understand that our problem is system A, this red dollar versus green dollar system doesn't work. But there really is no functional, no effective, no realistic alternative to it.

And so, does the dollar need to change? Yes, absolutely.

Are we close to the point where the dollar can change and something can take over for it? No, I don't think we're anywhere close to that because, again, I don't believe officials have any idea of what they're up against.

Erik: See, I think this all comes to a head someday and then Luke gets proven right. So, Luke, I want to give you the last word here.

Why would the dollar start to move down against other currencies before this all comes to a head and the world changes its mind about the dollar being the reserve currency?

Luke: I think you just have to watch the tax receipts and the US' relative position from a national defense perspective. Economically speaking I agree with you guys.

Geopolitically speaking, I would love to be a fly on the wall the day when someone walks over to the Pentagon in Washington and says, hey, guys. We need you to bring home about half of those bases and we can't develop your weapons because we don't have enough dollars. And I know that we're in this competition with China, but we're going to have to cut your R&D budget.

And that's going to be a really short, really one-sided conversation, probably at a pretty high volume on the part of the Defense Department guys.

So my point is that, yes, there is a dollar shortage. Nobody is more short dollars than the US government. And, as far as I know, there is no government in history that has had a purely fiat currency and had willingly gone out of business for lack of fiat dollar or fiat currency.

Greenspan and Richard Fisher and Larry Lindsey, the former Fed governor, talked about this. In 2015, what Lindsey said is, listen, this is a matter of liberty. The obligations of the state are no longer affordable.

The problem is that the state will not let itself go out of business. It will push everybody else out of the way. It will get itself funded.

And that's what we've seen since 2014. And that's what driven the dollar higher. It's what's driven rates lower.

But, at some point, the state is so big in terms of the credit markets that even that is not enough. They can crowd out everybody else and the money still has to then turn into helicopter money.

I just think we're a lot closer to that helicopter money moment than most people think. And I think some of the things we've seen recently – BlackRock Institute with Stan Fischer and John Jean Boivin and Philipp Hildebrand, their paper last month, for example, talking about in the next crisis we're going to go direct and just [stop short of] helicopter money and pin yields etc.

I just think we're much closer to that moment. I think the data suggests that we're much closer to that moment than a lot of people think.

Erik: We're going to have to leave it here in the interest of time. I can't thank both of you enough for an absolutely outstanding interview. We will continue to get both of your views heard in your upcoming All-Stars appearances.

Listeners, be sure to send us any questions or follow-ons you want us to address with Luke and Jeff in those All-Stars appearances

Patrick Ceresna and I will be back as MacroVoices continues, right here at macrovoices.com.