Jeffrey Snider: Dollar bulls don't understand why they are right May 26, 2017

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Erik: Joining me next is one of our most popular MacroVoices guests ever- Alhambra Partners Jeffrey Snider. Jeff prepared a fantastic book of more than 50 graphs and charts for this interview, so I strongly recommend that listeners download it before continuing. Registered users already receive the download link in your research roundup email, and we explained for everyone else how you can register and get the download earlier in the program.

Now Jeff, in your past interviews which have all focused on your work on the Eurodollar market, you've given us some of the best and most advanced content that we've ever aired on MacroVoices as evidenced by your popularity with our listeners. So, I really want to thank you for that excellent content, but quite frankly Jeff, even some of the finance professionals in our audience have felt it a little bit overwhelming because you take such a deep dive straight into what swap spreads are, telling us about the Eurodollar shortage, and so forth. So, what I'd like to do, if you don't mind, is to start today's interview by reviewing the key points that I've taken away from our prior interviews and asking you to correct me if I've gotten it wrong as we introduce the basics.

Let's start with the "US dollar Serves as the World Reserve Currency," and what that means is two things- first, the global trade. For example, France buys crude oil from Saudi Arabia- they're going to pay for it in US dollars. Second, central bank reserve assets, what you could think of as the piggy bank or savings account for an entire country are denominated in US dollars, specifically US treasury bonds and notes are the preferred reserve asset of most central banks around the globe. So, the consequence of all this is that there's an enormous artificial demand globally for US dollars. We don't need Swiss francs of the United States because they're not used in the United States, but the Swiss do need US dollars in Switzerland because they're needed both as a reserve asset and to settle international trade. So, in order for the global financial system to function, there has to be some kind of balance, there has to be enough US dollars to support the global financial system or else everything breaks. By the same token, I suppose you could argue that there can't be too many US dollars.

Now if I understand it correctly Jeff, almost all of the work that you do centers on analyzing the health of the global financial system based on whether or not there's a shortage or excess of US dollars available to meet the requirements of the global financial system. The Eurodollar market, which we'll talk about in just a minute, is the primary analytical tool that you use to gauge the health and well-being of the overall global financial system with respect to whether or not the need for US dollars can be satisfied by the available supply. But before we move on to Eurodollars, how am I doing with the basic concepts so far?

Jeffrey: Erik, you have it mostly correct, I mean that's the basic need for dollars around the world- is that in the beginning, we have to focus on international trade and how international trade works, and the way it works is, as you pointed out in this dollar need, in this dollar supply, in all of the mechanics related to either the supply of them or the demand of them and how they all interact.

Erik: Okay, cool. So, let's move on to Eurodollars next. Normally, bank deposits are made in the national currency wherever the deposit is being made, so if you deposit money in your bank account in Toronto, you're going to do that in Canadian dollars. If you deposit money in a bank account Paris, it's going to be in euros, in Thailand, it's in Thai baht, and so forth, but in countries other than the United States, it's normal and usual for individuals, businesses, and governments to also own a local bank account that's denominated in US dollars. So, for example, most Mexican businesses have duel currency bank accounts, so that they can keep most of their savings in US dollars and only maintain a balance of Mexican pesos necessary to meet their working capital requirements for their operations.

Now, the phrase "Eurodollar" was originally coined to refer to US dollars on deposit in non-US banks someplace in Europe, but the name Eurodollar is really historical at this point- if you have US dollars that are on deposit in Hong Kong, those are Eurodollars. If you have US dollars in your Mexican bank account, those too are Eurodollars. So, in other words, Eurodollar is just finance slang for US dollars that are on deposit at the bank other than inside the US banking system.

The next point that I took away from your prior interviews was that Eurodollars in an offshore bank work just like US dollars in a US bank. In other words, when you deposit those US dollars, the bank just doesn't sit on them, they loan them out to somebody else who wants to borrow them and is willing to pay interest because that borrower needs US dollars for whatever reason- perhaps they're running an import/export business or whatever it might be. Now before we move on to the Eurodollar futures market and what

it can tell us about the health of the global financial system, how am I doing so far with the understanding of how Eurodollars play into the story?

Jeffrey: So far, you got it pretty much correct. You're absolutely right that there is a global connection of banks and all sorts of locations all around the world transacting business in denominated US dollars. But where it really gets mind-bending, where it really takes a turn into the more complex stuff, and we'll get to that a little bit later is that, you know, that bank in the Cayman Islands that's doing offshore trade with that Mexican bank, you referenced, in dollars doesn't actually need to wait for somebody to deposit dollars into that Cayman Island location in order to create them. So, what actually happened is the system had moved over the decades away from the deposit-centered monetary system into one where the Eurodollar banks in wherever they are simply creates them out of thin air, and so that has a number of implications for, not just the global economy, but also the global markets and the way global money behaves.

Erik: Well, and I think it's very fascinating to me too that your view about how Eurodollars play into this system has such an impact on very fundamental things like the value of the dollar itself, because we've had a lot of guests in this program recently who have articulated a fairly consistent secular bullish viewpoint on the US dollar versus other currencies, and to very briefly summarize the views of several of our guests- they basically think that the US economy is healthier than other economies around the world. They think that interest-rate differentials will attract capital away from negative-yielding European sovereigns into US treasuries, and they think that Donald Trump's policies pressuring multinational corporations to repatriate assets into the United States are all dollar bullish factors and that these are going to lead to a massive dollar rally that maybe is only half over at this point, despite the recent downside in terms of short-term tape action that we've seen this week in the dollar index.

Now, if I understand your view correctly, Jeff, ironically you think that these bullish predictions these other guests have made are going to be proven true in the sense of the US dollar appreciating, but you think that they have the story completely totally wrong. You think that the reasons that the dollar is really going to appreciate have nothing to do with those fundamentals and everything to do with this global euro dollar shortage, which is the center of your analytical work at Alhambra Partners. Am I right to say that, or am I overstating your view?

Jeffrey: No, I think that's exactly right. The other thing to realize, of course, is that the appreciation of the dollar isn't a straight line event, it doesn't happen all at once, nor does it go consistently day after day, so there are fits and starts like any market, but essentially the story is exactly that- if we're talking about global Eurodollar banks who simply have the ability to create dollars

out of thin air but then are no longer really willing to do that, what happens in that situation where the system get acclimated to a global Eurodollar bank being able to do that and willing to do that on a consistent basis? That's where you run into all these problems, and that's where you run into, as you described as a global Eurodollar shortage.

Erik: Well, that's fascinating to me, you know, the whole world of macro-investing, it's actually possible to have a thesis, make money on it, pat yourself on the back for maybe a period of years for being so proud of yourself for getting it right, and I've been through this before in other markets and other trades and realized wait a minute, I had no idea what I was doing- I got lucky and actually went in my direction for reasons that I never even understood, so it's very fascinating…

Jeffrey: Better to be lucky than good.

Erik: Yeah that's right! So, I wanted to start with that review because I know that once you dive into your chart book, the facts and figures are going to be flying at a mile a minute, and I want to take a quick time out here to let our listeners know- Jeff and I talked about this off the air because he gets this a lot- where he dives into the nitty-gritty of this and people get lost, so we're actually talking about maybe producing a full hour-long primer, an introduction on the Eurodollar system- how it works and why it's important to the global financial system, in other words, something akin to the quick review that we just did now expanded to a full hour podcast interview- "Eurodollar University," so to speak. Folks, if you like that idea let us know on Twitter, because we're thinking about doing it as part of our summer program lineup, and we need your feedback as to whether it's necessary. As for today's interview, I want to let Jeff go deep as he's so good at doing, because I know a lot of you were waiting for that. So, this particular chart book of 50 some-odd slides, which again, you got the download link in your research roundup email folks. If you're not already subscribed, look for the instructions on how to get it next to Jeff's picture on our homepage at Macrovoices.com. This one is titled "To Disappoint Again." Now, I'm guessing that's a reference to the so-called reflation trade, and I'm guessing that you're not buying that it's going to save the today, so please elaborate, as we get started with your book here.

Jeffrey: You're exactly right, and the idea about reflation is that something different has happened where the global economy has gotten past all of the financial and economic storms of the past few years and finally put itself in a better place, and that better place is actually meaningfully different so that we can start getting back to the business of "normal" again. You know, it's been ten years since the economic crisis started, and it's about time that we actually go back to something more like normal, even if we don't ever get to normal, at least something more like it. I think that potential has captured the

imagination of quite a many people and quite a many investors, and I think there's, again, a big mistake or some flawed premises behind that.

Erik: Okay, as I look at the next few slides in your presentation, you've got a quote from Ray Dalio here saying that it's unusual for social and political tensions to be so bad when the economic conditions are so good, but then you kind of point out quite a few slides saying maybe they're not so fantastic after all. Looking at crude oil, looking at copper, looking at 10 year treasuries, we're not going to have time to pour over every single one of the slides, so give us an overview of the next several slides- what's the big picture story here?

Jeffrey: Ok, in fairness to Mr. Dalio, what he was really saying is that we have all sorts of long-term issues that we need to be concerned about, but at this particular moment things do appear to be moving in the right direction and in some places maybe even downright good, and what he was saying is that despite the evident contradictions included in that analysis, that that must be the case, that tings must be good because, you know, whether you look at oil prices being up sharply, commodity prices in general, you know, the US treasury market is acting as if things are going to be better because, you know, normalcy would mean rising nominal interest-rates and a steepening yield curve, and those things did happen at the end of last year.

So, it does seem to be a contradiction where the world does seem to be in a better place, but yet, we've noticed that things aren't right, you know, whether it's social or political tension, or even just general dissatisfaction in the way that we hadn't observed, and maybe since the 1970's. It doesn't seem to be the case; there has to be something wrong here, and so what are we missing? What is it about the current economic climate that doesn't subscribe to the idea that things are good and the long-term concerns will eventually become something we have to worry about?

Erik: I want to move on to slide seven next Jeff, because I noticed something that we are moving for the first time in this interview to an environment where we're looking at a positive swap spread, and I know you have emphasized the importance of this and anticipated in our past interview. So, let's take a quick step back, when we look at slide seven- "Swap Spreads." Swap of what? 10 year what for 10 year what, and what is the significance of that turning positive in recent months?

Jeffrey: Well, the swap spread refers to the quoted price of an interest rate swap in US dollars above the US treasury yield, and so what it tends to measure is the amount of risk contained in that swap price, because obviously, people treat the US treasury yield as a risk-free rate. Therefore, in order for a counterparty to engage in an interest rate swap, they are going to need some kind of premium to do so, because when you enter an interest rate swap with a counterparty, there are some risks to doing so. So, there should be a

positive spread between the interest rate swap price and the US treasury, but what we have seen since 2008 is, intermittently, swap spreads have turned negative, and what a negative swap spread actually means is nothing, it's a complete nonsense idea.

The market is not saying that the US treasury is more risky than the bank counterparty on the other end of the swap. What it tells us is that there is something wrong in the money dealing capacity, the systemic money dealing capacity of the availability of balance sheet capacity across the entire dealer network to essentially keep the system from becoming nonsense, to keep the swap spreads positive, and so one of the things that has happened during this reflation that maybe made it seem like things were turning back to normal was the 10 year swap spread, which had been negative for a couple years consistently, had turned positive in late February and then into March, and so, again, it was another indication that, hey, maybe things are actually improving, that if the swap spread turned positive, even at the reported 10 year maturity, then maybe, you know, balance sheet capacity is coming back online. Therefore, the rest of the markets will behave as if things are improving and that eventually the economy will improve from that, and so there does seem to be at least in this narrow view, in this narrow focus, some basis for the reflation idea.

Erik: So, it seems to be very consistent with the narrative we've seen across Macro in general, which is since the election, or some people would say before the election, there has been some kind of upturn, and whether it's Donald Trump or it's another case of us attributing something to Donald Trump that really was just happening anyway is anybody's guess, but a lot of people have noticed that this reflation trade is either out of steam, or about to run out of steam, or already run of steam, or something, and I just want to get your view correctly, because you are saying there's a ray of hope here on slide seven, but as I look forward on slides 8, 9, 10, and so forth, it looks like your overall view is still that something is very wrong. Is that correct?

Jeffrey: Yea, and I think we're making a lot out of what is actually very little. The fact that the 10 year swap spread turned slightly positive is in no way, shape, or form indicative of anything other than it's just not as bad as it was last year, and I think that's kind of the theme of this reflation, is that people are trying to make too much out of this, you know, yes, the economy has improved this year, market conditions whether swap spreads or basis swaps or any other kind of Eurodollar activity are indications that they are slightly better this year than they were last year, but that's such a low bar to surpass that it's ultimately meaningless, and I think that one of the ways that became, you know, almost hyperbolic, too much exuberance, was the inflation, the PCE deflator in the US finally hit 2% in February for the first time in almost five years, so you had the Federal Reserve so you had the Federal Reserves target

of 2% inflation, which they are supposed to enforce, I mean, it's an explicit target now, and they did an extra couple QE's to make sure that they would hit the 2% target, and yet it didn't happen until February 2017. Yet people are focusing on the fact that it did happen and the fact that the PCE deflator and the CPI are above 2% as if that is meaningful in a way that denotes actual improvement as Mr. Dalio said in the quote that we provided at the outset of the presentation, that things must be good, because things look like they are normalized.

Erik: Well, and that's been a theme we've heard from other guests, is that some people have said, look, a return to secular inflation is a good sign. It indicates that, you know, in a healthy economy the Fed has to fight inflation not deflation. Do you think that we've actually seen a turnaround, or is this a flash in the pan that's not going to last?

Jeffrey: No, it's a flash in the pan, and inflation is probably the most prominent example of that because there's nothing more than the base effect of oil prices, so you know, in the interest of overall analyzing the climate they were in, you know we also have to account for Federal Reserve policy. It's not a loss on people that the Fed is raising rates at the moment. They've done three rate heights in the Federal Reserve, which is now a band. They've done three rate heights over the last couple years and so it sinks into this narrative that, ok, we've got 2% inflation, the Fed is raising rates, things look positive, you know, the 10-year swap spread went to above 0% for the first time. It does seem like things are, even officially, progressing in the right direction.

The Fed, for its part, hasn't actually acted to try to put the brakes on it, because, why would they? I mean, it's in their interests to get people feeling happy about the way the world is, and so in several instances, they have, what I would call, refused to clarify this situation, and so they've highlighted all of these positives, and then later on, whether it be in official statements or speeches, they've actually stated the world as it actually is, as they actually view it at this point, but for now, it appears to be in their interest, and explicitly what they are doing is to allow people to think this, that this reflation is real and therefore the hope is that is becomes real.

Erik: So, if I summarize slides 1-12 in the chart book here, what you're really saying is that there are a lot of reasons to think that things are fixed and getting better and a lot of indications are showing us that, hey it's better than last year, maybe we've seen a turning and it's all going to get better from here, but then in slide 13, I wonder if that's coincidence, that it's unlucky number 13, you kind of say, wait a minute, there's some context needed to understand all this, and I think that context is going to explain why you don't think everything is really turning rosy after all. So, why don't you walk us through the next several slides.

Jeffrey: Yea, you're right Erik, and I think what we're witnessing here is that those initial slides are almost like a slight-of-hand, they're a magic trick, a bit of an illusion where I think, again, people are making a lot out of what really isn't very much, and so I think what we need to do then is step back and take a look at the, whether it's the markets or the economy from a much wider perspective and to examine again, you know, the internals and the monetary system and the global financial condition that's behind all of this, and to actually try to analyze and unpack whether that... has anything actually meaningfully changed in 2017 as compared to 2016? And the more we do that, the less we find reasons to be hopeful about the current state of affairs, not just the long-term state of affairs, which remain frustratingly unchanged.

Erik: Ok, you so point out on slide 14 that the 2011 crisis was mostly about Europe. Please explain what you're talking about here, and then starting on page 15, you've got several graphs and charts that show us some of the treasury international capital data and please explain what it's telling us about the US dollar.

Jeffrey: Sure, and one of the most important parts of the Eurodollar system, especially from its basic construct from its initial founding in the 1950's and the 1960's, you know, the way that you talk about it at the beginning, where there were these Eurodollar deposits, particularly Cayman Islands and Bahama's banks. Now the Caribbean banks have played a central role in the Eurodollar system all throughout its history until 2011, and so what we find in 2011 is that the Caribbean banks who had completely ignored the 2008 crisis for whatever reason decided they didn't want to do it anymore. I'm sure there's any number of reasons, you could probably call the individual Cayman Island banks and ask them why, but I think mostly it was because of their long-standing relationships with European banks that were doing dollar business with them, because the 2011 crisis was very European centric, it had a lot to do with the inequalities and inconsistencies in Europe that Caribbean banks in this Caribbean part of the Eurodollar system judged their European counterparts as too risky to continue doing dollar-based business with them. So, what you find is in May 2011, there was an abrupt withdrawal, and it hasn't abated since that, so despite the passage of, you know, almost six years now, or more than six year, the Caribbean part of the Eurodollar system is not restoring that lost capacity.

Now, I want to say something about the treasury international capital data too, and this is not a just positive, comprehensive view of the Eurodollar system, it's only a limited picture of it from a particular angle. What the treasury department captures is reported dollar liability, so the kind that you described at the outset. These deposit liabilities between US banks and their offshore counterparts, and so what we're witnessing by the tick data is one angle of the Eurodollar system that we can use in concert with other angles

to try to piece together an overall view of the whole system, which remains completely obscure.

You know, we talked about in 2008 very briefly the idea of shadow banks and shadow capacity, and that was a very particularly good term to use because what happens in the Eurodollar system is it all occurs, or mostly occurs, way beyond our view, and so we can only get at it through indirect means, this is one way of trying to be able to piece together what's going on out there in the shadows and if we use that as a basis to, again, corroborate other different views, we can start to put together a comprehensive view that tells us something meaningful about the system, and so what this particular piece of data says is that in 2011, the Caribbean part of the Eurodollar system decided they didn't want to do it anymore.

Erik: You know, I can't help but notice that there's a striking similarity, if I just look at this chart, I wish I had a Bloomberg or I could overlay the gold price on top of it, because everything is just up and up and up and away until May of 2011, and then it falls off a cliff. Is there a connection to what happened to the gold price to this chart, or is that just coincidence?

Jeffrey: No, there is definitely a connection. I know it's not a direct connection, obviously, but there is definitely an intricate relationship between this part of the Eurodollar system and the behavior of gold prices, because gold is a reflection, in several different ways, of the global financial system, and I think that that gold price did note, quite correctly, as is according to all the text books, that in 2011 there was a monetary problem that wasn't going to be fixed, and then that's why I think you see gold prices that peaked around that time and only went lower from there because it was a, essentially, a deflation statement.

Erik: So, we've been talking of course about slide 15, which is "Claims on Caribbean Banking System," but as I see on pages 16 and 17, you've got essentially the same chart for Europe and for Asia. The charts are very different shapes, so what story are these charts telling us about how what happened in Europe and in Asia was different from the Caribbean, and how does that flow into slide 18, which I think aggregates all of this?

Jeffrey: Slide 16 is the European banks and it's the proxy for cross-border dollar transactions with US banks and European banks. What it tells us is that European banks or American banks stopped doing dollar business with European banks as early as 2007, so where the Caribbean banks exited in 2011, European business took a hit in 2008/07, and as those two regions, banks in those two regions were exiting at various points in the early recovery period, behind them were Asian banks, which is on slide 17, where banks in Asia decided that they were going to continue to do the dollar business that the other banks were not willing to do for various reasons,

primarily what is tells us is that this Eurodollar system, over the last couple years, has become more Asian in nature, and when we get to slide 18, what it tells us is that the Asian banks that were picking up the dollar slack were not doing so with enough capacity to offset the shrinkage in Caribbean or European banks. Marginally, as the overall system contracted, it was becoming more Asian in its characteristics, and what slide 19 shows us is that, of those Asian banks, they've been primarily Japanese, and so the Japanese banks are sort of the bedrock marginal capacity that's been added to an overall shrinking system.

Erik: Japan has its share of economic problems right now, so what does that portend for the future of Japan's ability to essentially, you know, if you think of the central bank as the lender of last resort, it sounds like Japan is the Eurodollar creator of last resort. What happens when they run out of resort and don't have the capacity to create more Eurodollars?

Jeffrey: Yea, and that's kind of an interesting way to put it, and I think it's kind of right along the lines of what's happened, and it's very much related to fact that the Japanese economy has been a mess for so long. I mean, we think about something like the Yen carry trade- I think people think about it in the wrong way. The Yen carry trade, as it really is, is the basis behind it is not that people borrow Yen cheaply and then find dollar uses or higher yielding assets to invest in, it's the fact that Japanese banks have all of this Yen that they have nothing to do with because they don't want to invest it in Japan, so what they really need to do is to swap that Yen into dollars or some other kind of currency, but primarily dollars to do something useful with it, because they're not going to deploy them in Japan.

And so, you're right, I think in a sense, Japanese banks have been the one outlet for Euro dollar capacity in the system willing to undertake these kind of money dealing activities where clearly the Caribbean banks don't want to and clearly European banks don't want to. That's one of the ways in which the Eurodollar system has become more of an Asian dollar systems behind them all being Japanese banks doing whatever Japanese banks do.

Erik: On page 20, you're showing this Eurodollar money supply reference the various phases of quantitative easing, and there's a pretty clear pattern there, that after QE3 ended, it seems like, you know, all these lines are starting to turn down if they weren't already pointed down. So, is that telling us that without quantitative easing creating more base currency around the world, that that has exacerbated the Eurodollar system? And I guess the question that begs from me is, a lot of us think that eventually, not in the immediate short-term, but eventually, the Fed will probably do another round of quantitative easing- is that going to provide relief in the Eurodollar shortage when that happens?

Jeffrey: The most effect that we had out of QE was simply in sentiment, in other words, for brief periods of time certain banks took quantitative easing to being positive, when in fact in truth, it really didn't have much affect at all. And what slide 20 is telling us is another angle to observe and analyze the Eurodollar system. Now we had to tick that as it tells us one facet, and all we had was the OCC data, which is the Office of Control of the Currency, who compiles call reports from the various money dealing banks in derivatives. What we see from this data, what it tells us about the Eurodollar system as a whole, what we can infer from it, is that as the Eurodollar system became more Asian over time, it also became more derivative over time, because, again, you know Japanese banks who had enormous quantities of Yen looking to swap them into dollars needed to be able to swap them. So quite literally, it was a derivative issue, and that's why you see in the post crisis era, you see rising gross notion of volumes of Forex derivatives as compared to shrinking volume of interest rate derivatives, or you know, credit swap and fall swap, because the character of the Eurodollar system has evolved over the last 10 year, as you would expect it to. Nothing ever stands still, and so from 2011 forward it became more Asian and more FX related, and that tells us a lot about the irregularities over the last couple years and what they actually mean.

Erik: I'm looking at the next several slides, and there's quite a story to be told here, starting with reflation. So, please walk us through the next several slides in the deck here.

Jeffrey: Sure, and you know, we're talking about more of an Asian dollar that's more FX in nature. But what we're really talking about is what is the Japanese banks doing at the margins of the Eurodollar system that is overall shrinking, and what they're doing primarily, or what we can anticipate that they've been doing, is they've been supplying Chinese banks with dollars that the Chinese banks need. Again, referring to your opening statement about who needs dollars and why, the Chinese banks and the Chinese corporate sector need dollars just as much as everybody else does. And from what I can piece together, they've been supplied with those dollars from the Japanese banks. And that's also consistent with the Chinese monetary system as it actually is and has been since its reform in the 1990's.

If you take a look at the PBOC's balance sheet, which is on slide 24, the bulk of the asset side is made up of foreign assets, which is primarily, not necessarily completely US dollars, denominated assets, but primarily the Eurodollar type assets that are un-deposited or that are stored at Eurodollar banks around various jurisdictions around the world. And so, with that dollar basis, or that Eurodollar basis on the PBOC's balance sheet, what that really means is that the Chinese monetary system is dollarized. It has a dollar basis, just like in the old days- now currencies used to be backed by gold, in the modern era, the Chinese monetary system is backed by Eurodollars. And so

that presented a major problem for the Chinese authorities, especially in late 2013/early 2014, when they started to experience the direct effects of this Eurodollar retreat.

Now, even though they had been supplied by the marginal increase in Japanese banking capacity for dollars, overall, Japanese banks appeared to have gotten cold feet too for reasons that are, either specifically related to China- the risks of Chinese economy, as well as the reform agenda. They created possibilities of defaults among, at least the corporate sector, perhaps even some of the smaller banking systems, especially the shadow banking systems in China.

But overall what happened in terms of Chinese money supply in bank reserves, which are the bedrock of the RMB system, is that the dollar retreat from even Japanese banks starting in 2014 created enormous pressure on the Chinese system, because if your asset side is shrinking as a central bank, you can either offset it in internal RMB programs, printing RMB and using it for various liquidity and various needs, or you can allow the liability side, which is the money side of your balance sheet, to contract with the assets, and that's what the Chinese actually chose to do in 2015. There was actually a contraction in their bank reserves from March 2015 until February 2016, and the way in which they chose to offset that initially was presented in slide 26. In other words, they used a traditional monetary stimulus means. They cut interest rates. They cut the reserve requirement, thinking that by doing so, they would allow Chinese banks who built up a tremendous amount of RMB reserves but then deployed them so that the PBOC wouldn't have to adjust to its shrinking assets side. What they found out was that was a horrible choice to make, and it was the wrong choice to make because Chinese banks ended up hoarding RMB rather than supplying the system with it, and so you had the parallel contractions in banks reserves along with the hoarding, and the result was, obviously, the global turmoil that presented itself all throughout 2015 and early 2016.

So, starting in February 2016, the dollar system didn't change. There was still a dollar problem on the asset side of the PBOC's balance sheet, but they decided instead that they were going to not allow that to contract the bank reserves, and so they went from February 2016 forward. The PBOC, who has gone on an essentially enormous RMB expansion, but that also creates a problem too, because we know they've gotten bankers that growing again, which is presented on slide 27, it's not growing at nearly the rate it needs to, and it's not growing anywhere near enough to offset the contraction in 2015, and the reason for it is because as they add RMB through these various programs, what you see on slide 28, the result of which is that they de-dollarize the PBOC balance sheet, which means RMB, Chinese currency, has been de-dollarized, and so the PBOC has a very hard balance to choose from, whether or not they want to continue to allow the monetary system internal

to China to continue to contract or whether or not they want to just go for it and print as much RMB as possible, and I think what they've tried to do is tried to balance those risks in a way that, I guess, made sense to them, but in a way that has caused all sorts of other problems that maybe they anticipated and may they didn't.

And that's where we get into slide 30 and 31, which is that as they have allowed bank reserves to grow but in a constrictive fashion, they have essentially placed a liquidity ceiling on their largest banks, and because there's a liquidity ceiling on the largest banks, those banks then have an option, which is to either continue their activities in internal Chinese money markets, or to lend as they're supposed to, according to their lending and loan targets, and obviously they've chosen the latter, which means that the internal Chinese system is then stripped of its liquidity capacity alongside the US dollar system, and so what we get then is where we find rising Chinese money market rates, as I've shown you in slide 32, that are then an indirect and removed reflection of overall dollar systems. So, we pay attention to the Chinese monetary system because it's another way of analyzing the Eurodollar system and how its dysfunction becomes something that we can visibly observe.

Erik: So, as you're saying here Jeff, on slide 33, what we're looking at, if I try to summarize everything that we've discussed so far, is the dollar pressure that we talked about in your interview last year, it hasn't disappeared. It's a little bit less than last year, but structurally, all the factors that are leading to this, and the one that you mentioned that scares me is this de-dollarization thing, because that has the risk of turning deeply political. Sergei Glazyev in Russia is pressuring Vladimir Putin to try to partner with China to de-dollarize, to get rid of dollars, and you said that Asia has become the primary creator of Eurodollars that are needed to keep the dollar's role in the global economy working. So, it seems like a huge vulnerability, and that definitely gets my attention, but I think we're kind of changing gears here on slide 34 forward. Give us a little bit more perspective on where swap spreads come into this picture-What are swap spreads telling you? Why are they such an important part of this story?

Jeffrey: Again, when we go back to a negative swap spread, it's basically a nonsense indication, and so its only value is to tell us that something is wrong, that we can imply or infer from that, that money dealer banks that would normally be in these markets that would police and patrol them from becoming nonsense are absent. It's another form of the breakdown of covered interest parity where we used to be able to depend on a hierarchy of all these kinds of money dealing activities that made things predictable and dependable, so a negative swap spread is essentially another indication that there is a shortage of something somewhere. So, when we add it to the mix of, you know, this Asian dollar FX, FX translation of the Eurodollar system, it tells us

that there is a shortage of bank balance sheet capacity, especially among the big Eurodollar banks, who have essentially shrunk at various parts or various junctures during the recovery period. So, the swap spread, when we stand back and look at it from a historical perspective and not just over the last year, what you see is that it hasn't really improved all that much, and what I've shown on slide 34 is the 30 years swap spread, which is one of the first to go negative because a 30 year spread, or 30 year interest rate swap is much more balance sheet intensive than say, a shorter maturity, and so therefore banks that are short in balance sheet capacity are going to retreat from the 30 year space first, and that's exactly what we've observed.

And so, you know, even though there has been minor improvement over the last year, in the last couple of months it has reversed again, so what that tells us is two parts- one, that the overall system hasn't really changed and they've improved a little bit, but it hasn't really changed and the second part, and probably maybe the more important immediate part, is that even though there was some improvement, it may have started to reverse already and we're already a couple months into, maybe what we could call anti-relation, and when we look around the rest of the system, whether the swap spreads, the yield curve, even commodity prices, that's exactly what we see from a wider historical perspective, that commodity prices are not off- they're just not down as much as they were a year ago, and so the oil price it's up a pretty impressive amount from last year, but it's still 50 percent lower than it was three years ago. We can't just ignore that fact, we just can't ignore the fact that oil is not $100 again, which might indicate a normalizing economy, or that the yield curve has not completely normalized to something even close to a pre-crises.

Erik: Jeff, you mentioned CIP- Covered Interest Parity, and I just want to mention for our listeners who may be interested in that- that we covered that subject in fairly significant detail in our last interview with you. We don't have enough time to really do justice to it today, but for people who want to understand CIP- listen to Jeff's last interview on this program. Now, in the interest of time, again, I want to just summarize, if I look at slides 41 through 50 or so, what you're really doing is presenting some very very compelling data, which I would summarize to say essentially says, look, reflation is not solving the problem, and to whatever extent, it may have been partially solving the problem, its either rolling over or finished or done, and I think you've put a very good argument together here.

So, what I'd like to do is move on to what I think is the really important part of this subject, which is- What does all this tell you about the health of the Eurodollar system, that is, the availability of US dollars to support the global economy? And since it is in, I know that the short answer to that is going to be that we have a shortage, what are the implications of that both for the dollar index, and you know, if the dollar appreciates too much it could lead us

to another Plaza Accord, there could be an emerging market crises. What do you see as both the...summarize the big picture of what's wrong, but really the knock-on effects, and what the consequences of this Eurodollar situation could be?

Jeffrey: Well, when I look back at the history of the last 10 years, I think what's striking about it, especially from the perspective of 2017, is again what I said at the outset, was that the dollar bull, for lack of a better term is, I don't really like to use the term dollar bull, because that connotes a positives type of situation, and it's really not, but the rising dollar, or whatever you want to call it, doesn't happen in a straight line. It curves in these various episodes, in these discrete episodes, the panic in 2008, the re-crisis in 2011, and then the Asian change in 2014 that greatly affected China, Japan, and all the emerging markets. What it really tells us is that every time one of these things happen, every time there was this dollar event, another part of the Eurodollar system gets knocked offline. In other words, some form of capacity, whether it's geographic, whether it was the type of derivatives, whether it was, you know, whatever part of, individual parts of the Eurodollar system, after each of these crises, it comes offline, never to return. And so, the overall impact has been something like a ratchet affect, or a noose, where the global economy is further and further pressured or further and further strangled or constricted, however you want to characterize it, after each time.

There is no recover in the dollar system, which I think tells us a great deal about why there's no recovery in the economy, because if the Eurodollar system only goes in one direction, even if it's in pieces, piece by piece, the global economy suffers each of these dollar events and then never recovers from it, and that's what we're witnessing, I believe, in 2017. Yes, things are somewhat better, but relatively better to last year, and that doesn't mean a whole lot. It doesn't really tell us a lot about actual conditions. The Eurodollar system only seems to go in one direction, which, what does that portend? Well, for the dollar overall, I think it tells us that the rising dollar is still the path of least resistance, though it may not happen tomorrow, it may not happen next month, and we don't know exactly when it will happen, but overall, as a trend, that seems to be the one indicated. But, the larger implication, the larger question about the global economy and global markets is, you know, where does all this end? How does it all end? And I don't think there's enough information, and certainly not enough capacity to be able to say in 2017 exactly how that happens.

I think your reference to the Plaza Accord or even another Bretton Woods type conference would be a positive outcome, assuming that the people that attend these conferences actually know what the h*** they're talking about, which usually isn't the case, especially in the 21st century. So, we have, not only educate people about what's going on, but we have to make sure that the right people know what's going on, and so that the right people are in

positions to be able to fix this because the greatest implication out of all of this is that it acts as a passage of 10 years, a whole decade. It's pretty clear that the Eurodollar system isn't going to be fixed. It's not going to fix itself. There isn't a QE out there that's going to do it. It's a system that is broken, and therefore, a broken system that's going to need some kind of solution at some point. And really the variable is, do we do it before it breaks down in another really radical and destructive fashion?

Erik: You mentioned all of the wrong people with the wrong skills being in charge of these things, and I can't help but think like a politician here. If the problem is not enough global supply of US dollars, I could imagine a politician saying, well, that sounds like we need to run larger current account deficits, do more deficit spending, and borrow more money in order to create more monetary base in US dollars, and I don't think that that's healthy in the long run. But, to some extent, if I've understood all of your arguments, they do kind of justify that rationale of- there needs to be more dollars, and one of the ways that you create them would be as Robert Triffin described back in the 1950's, the US running larger current account deficits in order to supply more dollars to the rest of the world. Do you think that that's going to be part of what happens next?

Jeffrey: Well, I think you're right. On the surface, that seems to be what we're arguing for- if the world is short on Eurodollars, then create more Eurodollars, it seems to be that simple, but where Robert Triffin was wrong in the 1950's, it would be wrong in 2010. In other words, you don't create more of something that doesn't work, and that's the point here. The Eurodollar system is in itself, and always was, inherently unstable. Therefore, it can 't survive its own internal contradictions, and now that we're all aware of these internal contradictions, like it or not, that's the reason why all of these banks are getting out of the Eurodollar business, because they know it doesn't work. And so, somebody stepping in, whether it be a government or some other capacity to try to recreate the Eurodollar or increase the quantity of Eurodollars in the global marketplace is the exact wrong thing to do, because then you're creating more of something that doesn't work.

The solution to this is to find out what does work, what can be stable, and unfortunately, I think, you know, you're correct Erik, that most politicians don't think in that kind of depth. And so, the easy solution would be to say, you know what, if we have a shortage of the Eurodollars, let's just do more, and that would be the exact wrong thing to do. I think, by the way, that's the Japanese solution in their own internal Yen. That's why the Japanese have lost several decades, because they've just decided, well, we'll keep doing more of the same thing that doesn't work.

Erik: I could also imagine politicians saying, look, this is evidence to justify why we need to move to a global currency, which a lot of politicians would like

because it tends to centralize power, it leads to the creation of a global central bank, and it potentially allows governments to be more effective in taxing people. Do you think that a global currency would provide any relief for the kinds of structural problems that you see in the Eurodollar system?

Jeffrey: Yea, I think you're right to point that out too, where because of, you know, that it's hard to argue against what you're proposing, the centralization of a global currency is an inherently dangerous situation, but yet how do you say, no we shouldn't do that, when the current system just doesn't work and hasn't worked for so long and created such enormous cost that it is destabilizing, even in the most stable countries, like Europe or the United States, so, it's hard to argue that we don't need a global currency, because I think we do, because the Eurodollar is a global currency, whether we like it or not. It's an ad-hoc put together in a haphazard fashion over many decades, but that's exactly what it is, and so if we're arguing to replace the Eurodollar, we're essentially arguing for a different, competing global currency, and so the task is to get it right. We want to do it so that it's not something that can be too centralized, but in some ways, it has to be stable. So, it's going to be a tremendous problem with all sorts of competing factions all looking for it to do different things, where it makes a very difficult thing to solve.

Erik: Well, I cannot thank you enough, Jeff, for another fantastic interview, and I just want to describe to our listeners that what we've done here is we've gone through your book of charts that really shows us current data, what's happening this year in markets, updated graphs and charts that make this case.

But, as you and I have discussed off-the-air, another opportunity that we may explore is to do a more foundational timeless session, where we're going to talk about, not what's happening this year, but just, essentially, Eurodollar university explaining the Eurodollar system in more detail than we did in the beginning of this interview so that people can really develop a foundational understanding of how it plays into the global economy. So, please let us know on Twitter if you like that idea. You can Tweet us @ErikSTownsend and @JeffSnider_AIP. Let us know how you like that idea, because we are considering it as part of our summer lineup here on MacroVoices. Before we close, Jeff, tell us a little bit more about what you do at Alhambra Investment Partners.

Jeffrey: I'm a Research Director here and with retail investment advisors located primarily in Florida but with offices throughout the country. We do the portfolio management services that are tailored to this more high-end view of evaluating global macro and market risks.

Erik: And people can reach you through your website at www.alhambrapartners.com, and I think we've got a link to that in the research roundup email. We're going to have to leave it there, but Patrick Ceresna and I will be back as MacroVoices continues right here at Macrovoices.com