**ALLISON NATHAN:** From Goldman Sachs Research this is Allison Nathan. Welcome to Top of Mind, a podcast that explores macro economic issues on the minds of our clients.

In this episode we're focusing on what's in store for the US dollar. After the dollar surged in late March as investors rushed to its safety amid the global onset of the Corona crisis, its value has since declined sharply to the lowest level in over two years. As uncertainty about the virus trajectory and the global economic recovery continues to loom large, whether this retrenchment marks the start of a multi year dollar down cycle, and even more fundamentally an erosion of the dollars dominance in the global monetary system is top of mind.

To begin, I first asked Zach Pandl, Goldman Sachs Co-Head of Global Foreign Exchange Rates in Emerging Market Strategy Research for some context on why the dollar rallied with the onset of the pandemic earlier this year, and what explains the general weakening trend since.

**ZACH PANDL:** The most important thing to remember is that the US dollar is like two currencies. It's a domestic currency, but it's also an international currency. The dollar denominates many goods and assets outside of the US economy. And this unique global role for the dollar creates a negative correlation between the value of the currency and the health of the global economy. When the global economy is doing well and growth is high, the dollar tends to weaken. And when the global economy is doing poorly and heads into recession, the dollar tends to strengthen.

These global developments have had a bigger influence on the value of the dollar this year, and frankly in many recent years, than the performance of the US economy relative to the rest of the world. So, the dollar shot up in value during the beginning of the coronavirus recession, even though the Fed cut rates down to zero, reflecting this flight to quality or the international role of the dollar. And this is likely to be the dominant pattern as the world is still dealing with a coronavirus recession.

So, good news in terms of the global economic recover is likely to weigh on the dollar. And negative news on the global economic recovery is likely to lift the value of the dollar, almost regardless of how the US economy is performing relative to key trading partners. And I think that is an often-overlooked aspect of how the dollar tends to behave.

**ALLISON NATHAN:** Going forward, Zach has high conviction that a period of sustain dollar downside lies ahead.

**ZACH PANDL:** We think that the dollar has entered a period of trend depreciation that's likely to last a few quarters, maybe even a couple of years. And the reason is that the standard factors that we look at to inform our broad dollar views are all pointing in the same direction at the moment. The dollar is over valued, something like 10 to 15 percent. Real interest rates in the US are deeply negative and likely will be for some time. And the global economy is recovering from the coronavirus recession. We see these factors as a standard recipe for broad dollar weakness.

And I the past when the dollar has gone through periods of trends, they've tended to last, on average, five years and total 30 percent cumulative percent change. We're looking for something a little bit short of that, a 15 percent real depreciation in the dollar from the highs of this year to the end of 2023, but a depreciation in excess of 20 percent over a period of five to six years is certainly possible.

**ALLISON NATHAN:** And while Zach sees the trajectories of the pandemic and of vaccine development as risks that might affect the timing of dollar weakness, he thinks they likely won't impact the medium-term dollar outlook.

**ZACH PANDL:** With regard to the pandemic, investors should think about not just how the US is performing relative to the rest of the world, but the overall outlook for the coronavirus and the world recovery. The dollar is likely to benefit if the US economy is controlling the virus and doing much better than the rest of the world. But the dollar may also weaken if the overall world economy is recovering from the coronavirus episode.

**ALLISON NATHAN:** Goldman Sachs is relatively optimistic in its vaccine assumptions, basically assuming that we get at least one vaccine approved for emergency use by the FDA before the end of the year. And we begin to see roll-out in 2021 with substantial portions of the developed market populations receiving the vaccine at some point in the coming year. If we see a delay in the vaccine, what would be the implications for the dollar.

**ZACH PANDL:** Bad news on the vaccine is likely to be good news for the dollar, especially relative to emerging market currencies. Many emerging market countries have struggled with pre-vaccine virus control. So they will benefit disproportionately from vaccine development. That's one of the reasons that we're relatively encouraged on the outlook for EM assets.

A long vaccine delay would likely support the dollar versus a variety of emerging market currencies. But it could result in dollar weakness versus some other crosses, including the Chinese yuan and other Asian currencies which have controlled the virus well so far.

**ALLISON NATHAN:** I think spoke with Barry Eichengreen, Professor of Economics and Political Science at the University of California Berkeley who doesn't think the dollar is especially over or undervalued today. And doesn't buy into common arguments for dollar downside ahead.

**BARRY EICHENGREEN:** When I look at the real effective broad dollar, I don't see it as overvalued or undervalued. I don't see the dollar as having weakened dramatically in recent weeks or months as some people argue. And I don't necessarily see it weakening dramatically going forward.

**ALLISON NATHAN:** Some people do believe we are in a dollar weakening trend. What are they missing?

**BARRY EICHENGREEN:** When I read those arguments, I'm reminded of twin deficit logic that we used to hear about before the global financial crisis. The crux of the argument as I understand it today is the same as it was then, that we in the US are running massive budget deficits. Those translate into massive card account deficits because we're spending more than we're producing. We have to attract foreign capital in order to finance those current account deficits. And the only way we can do that is by cheapening our financial assets by depreciating the dollar, which makes purchasing them more attractive to foreign investors.

That's the logic that the Cassandras of the twin deficits predicting the dollar crash developed in the early 2000s. It turned out to be wrong then. And I think it's likely to be wrong now as budget deficits don't necessarily translate into card account deficits, one for one. The public sector in the US may be spending more. But the private sector is spending less. And there's a good argument that it will continue to spend less for a good long time.

Households have been reminded of the inadequacy of their precautionary savings. Firms are uncertain about when the post-COVID landscape will materialize and what it will look like. So there's an option value of holding off. And I think we will continue to see that for some time.

There are a variety of other factors in addition to size of the US current account deficit that determine capital flows. Capital will flow into the United States in larger amounts if foreign investors see productive investment in infrastructure that will pay off in terms of higher productivity.

**ALLISON NATHAN:** Although Eichengreen sees some merit in the argument that better global growth could weaken the dollar, this he says will depend entirely on relative growth rates between the US and the world. In his view, even if the global economy is recovering from the coronavirus recession, if US growth outpaces global growth, the dollar will remain supported.

**ALLISON NATHAN:** Do you put any weight on the global growth driver of the dollar?

**BARRY EICHENGREEN:** I do put some weight on that. I think the empirical evidence is consistent with the idea that one of the factors that influences the dollar exchange rate is the relative rate of growth of the US and world economies. But if you tell me that Goldman is looking for a stronger recovery globally starting next year, you have to also tell me what Goldman is expecting in terms of US recovery, because the exchange rate is a relative price. And it's influenced by relative growth rates in the US and aboard.

**ALLISON NATHAN:** I then turned to the broader and arguably more consequential question of whether the dollar's dominant role in the global monetary and reserve systems has been good or bad for the US and for the world, and whether this dominance is set to diminish in coming years. Here's Eichengreen on the subject.

**BARRY EICHENGREEN:** I think dollar dominance has been a mixed blessing for the United States. We have the advantage of being our own lender of last resort because we do so much of our cross-border business in our own currency. We have an automatic insurance policy in the sense that when a bad thing happens, the dollar doesn't crater automatically. If anything, the opposite is true. So, even in September of 2008 when we caused the bad thing, the dollar strengthened rather than weakening. Our banks and firms have the convenience value of being able to do cross-border business in dollars. Some will say that we can sell treasury debt more cheaply than otherwise because there's this demand by foreign central banks and corporate treasurers and others for dollars.

But with interest rates at zero anyway, it's not clear that's a consequential advantage at the moment. If the dollar is stronger than otherwise because there is this reserve army of investors abroad who want to purchase US treasuries, that's a little bit of a handicap for US exports. But exports depend, fundamentally, on our productivity and I think only incidentally on what happens to the exchange right between yesterday and today.

So, I think on balance the dollar's international currency status is a modest positive for the United States. It's also been perfectly fine for the rest of the world in the presence of a smart board of governors of the Federal Reserve system, prepared to act as the world's lender of last resort when a crisis strikes. But there's no guarantee that some future Federal Reserve will be as smart and insightful or non-isolationist. So I worry a little bit about that.

There is the fact that the US will have trouble providing safe and liquid assets to the world indefinitely all by itself because the US will comprise a shrinking share of the world economy over time. Emerging markets will emerge. And our share of global GDP will presumably decline. And I think there's the biodiversity argument for moving towards a system with multiple international currencies, that it's simply safer if something goes wrong economically, financially, or politically in the reserve currency country, having alternatives is a source of safety for the world as a whole.

**ALLISON NATHAN:** Eichengreen also believes that recent US foreign policy decisions that have led many policy makers globally to question their dependence on the dollar are likely to lead to diminished dollar dominance over time.

**ALLISON NATHAN:** United States actions in the last several years in terms of the weaponization of the dollar via sanctions and even more broadly just thinking about our retreat from alliances, has that increased the urgency to diversify away from the dollar?

**BARRY EICHENGREEN:** I think these considerations are very important for the future of the dollar. Efforts to weaponize dollar credit and use payments in dollars with US banks through SWIFT as a lever to force other countries to adopt US compliant position towards sanctions on Iran, for example, has encouraged others to look to alternatives to their dependence on the dollar in SWIFT. And that's one of China's motives, for example, for moving faster than any other central bank to creative an alternative, namely a digital renminbi. My historical work shows that central banks and governments hold the currencies of their alliance partners, not surprisingly. So the fraying of US alliances that we have seen ought to be a negative for the dollar. But it hasn't shown up yet in the numbers.

Europe has agreed to establish an alternative clearing system that doesn't utilize the dollar with which it can do business with Iran and other countries, called INSTEX. Last time I looked, INSTEX had exactly one employee. So they're not moving very fast. China and Russia have agreed to clear bilaterally without using the dollar. Again, that's a very small share of global commercial and financial transactions. So that's testimony to how deeply entrenched the dollar is and how large the shock has to be to really displace it from its dominant role.

**ALLISON NATHAN:** I asked Eichengreen if we've ever seen a currency displace the dominant currency in the past. And if he thinks that's truly possible today.

**ALLISON NATHAN:** Is there a history of a currency supplanting a dominant currency?

**BARRY EICHENGREEN:** There are historical precedents. The most recent one is the dollar supplanting the pound sterling as the leading international currency, really in two steps. First, after World War I when national banks could brand abroad for the first time and originate foreign business. And when the Federal Reserve was there as a liquidity provider and lender of last resort. And secondly, after World War II when the dollar really became dominant given the financial problems that the UK was saddled with after World War II.

So, that transition occurred the first stage in ten years between 1914 and 1924. The dollar gave back some ground in the 1930s because of our financial crisis in the US and our Great Depression. But it really solidified its dominance after World War II. So, it's happened before. And if we had more time, I could regale you with stories about the transition from the Dutch gilder to the British pound. So it can happen. And it can happen relatively quickly.

When people ask me about this, I say I've been predicting a move towards a more multipolar international monetary and financial system where the dollar shares the global stage with the euro and the Chinese renminbi for ten years now. And I'll keep predicting it until I'm right.

**ALLISON NATHAN:** Despite that prediction, Eichengreen doesn't see any currencies that are close to challenging the dollar today, including the euro and the renminbi. Here he is on the euro.

**BARRY EICHENGREEN:** Internationalizing the euro is not the official policy of the European Commission and the official policy of the European Central Bank. But the 750-billion-euro recovery fund is small potatoes relative to the trillions of US treasuries that are held by central banks and governments worldwide. And the majority of it's going to be bought up by the European Central Bank. So they're not available to corporate treasurers or central bank reserve managers worldwide.

So, there is a very real problem of an inadequate supply of safe assets, meaning government AAA rated, or European institution AAA related like the European stability mechanism. So on the supply side, I think this is a very real problem for making progress on euro internationalization. They need to unlock the supply and prove to people that they're serious about deepening the banking union, completing the capital markets union. And that the progress they've made on the fiscal side, the recovery fund, is not simply a one off, but a first step down that very long road in the direction of fiscal union.

**ALLISON NATHAN:** And here he is on the renminbi.

**BARRY EICHENGREEN:** I think China has made progress in terms of encouraging foreign counterparties with which it does business to use its currency for trade invoicing and settlement. And China is putting in place the infrastructure that will be necessary to support a currency that plays a global role. The PBOC has negotiated swap agreements with central banks in other countries, which means that central banks in other countries will feel more comfortable about letting their banks and firms use the renminbi settlements because those other central banks can act as renminbi lenders of last resort when they activate their swaps with PBOC.

China has designated commercial banks and state banks, to act as official clearing banks in foreign financial centers. And it is gradually opening up its financial markets in ways that diversify the investor population and make them more liquid. But there is also a second set of prerequisites before people will be comfortable using the renminbi for most of their cross-border transactions. And those prerequisites are political. Every true international and reserve currency in history going back to the Republican city states of Venice, Genoa, and Florence in 13th century have been the currencies of political republics or democracies. There are checks and balances on arbitrary action by the executive. There is a certain level of transparency and predictability. And those have historically been important building blocks for every true international and reserve currency.

**ALLISON NATHAN:** To dive deeper into the renminbi internationalization prospects, I turned to Eswar Prasad, Professor of Trade Policy at Cornell University. He explains that progress on a greater role for the currency has stalled in the last five years. But argues that internationalization has never been an end goal of policy makers in any case.

**ALLISON NATHAN:** Had the renminbi made progress towards playing a more prominent role in the global monetary system and as a reserve currency than you expected five years ago?

**ESWAR PRASAD:** The renminbi certainly made remarkable progress over the 2010 to 2015 period. But since then on virtually every dimension its progress as an international currency has stalled. The share of global payments, at least as measured by SWIFT, peaked at about 2.8 percent in 2015. And since then it has shrunk to just under 2 percent. Likewise if you look at the share of the renminbi in global foreign exchange reserves, it rose very sharply in the early 2010s, but that progress stalled. And recent data from the IMF suggests that the renminbi share of global foreign exchange resources has topped out at about 2 percent.

What happened in 2015 and 2016 when the renminbi faced significant depreciation pressures and the Chinese government responded with the reimposition of capital controls certainly has not helped the renminbi in its progress towards becoming a more widely used international currency.

**ALLISON NATHAN:** So, as we stand here today, is the internationalization of the RMB still a major priority for Chinese policy makers?

**ESWAR PRASAD:** I don't think Chinese policy makers see the internalization of the RMB as an end in itself, rather many of the foreminded Chinese policy makers saw RMB internationalization as the project that provided a framework for a lot of other reforms that were good for China, independent of what happened with the RMB.

So, to have an RMB that had a greater international presence, you needed a more open capital account, a more market-determined exchange rate, deeper and better regulated domestic financial markets. And all of these were seen as reforms that were important for China's balanced and sustained growth. So, the internalization of the renminbi provided a very useful slogan in that respect. But in and of itself, I don't think it ever was seen as a major policy priority. And certainly it is not the case right now.

**ALLISON NATHAN:** That said, Prasad does see meaningful progress on liberalizing reforms that could lead to a greater global role for the renminbi over time. But he believes that concerns about the credibility and durability of such reforms remain key obstacles to a greater international role for the currency.

**ESWAR PRASAD:** In the last couple of years the Chinese government and the People's Bank of China in particular do seem to be following through on their commitment of further capital account liberalization and letting the exchange rate be determined more by market forces. We've seen foreign investors get relatively unfettered access to China's fixed income markets in particular, but also Chinese equity markets. And both controls on outflows and inflows do seem to have been liberalized. And the government has certainly indicated that it is not planning to go back on those commitments.

The People's Bank of China has reduced intervention in foreign exchange markets to keep the renminbi's value stable. And this reduced intervention or, indeed, lack of intervention has been quite noticeable in the dynamics of the renminbi's exchanges relative to the dollar in the last couple of years.

But I think the real question now is not just how much liberalization we've seen in terms of reducing restrictions, but how much investors, both foreign and domestic, really view these as credible and unlikely to be rolled back? And in those dimensions, I think the Chinese government clearly has more work to do. We don't see foreign investors trying to break down the door to bring money into China because the residual questions about the credibility of the capital account opening, and also about the durability of the capital account opening still remains.

There are also persistent questions in investors' minds about whether the rule of law will be enforced in a manner that puts them at a disadvantage relative to domestic investors. Or whether foreign investors could be subject to the whims of changes in government policies, where the government can change rules and regulations without prior notice and where foreign investors can not rely on the judicial system to be protected against such changes that they may view as arbitrary and capricious. There is a long way to go still in terms of such reform.

**ALLISON NATHAN:** Finally, I asked both Eichengreen and Prasad what to make about digital currencies, especially central bank digital currencies, and their potential role in the monetary system. Here's Eichengreen.

**ALLISON NATHAN:** The digital currency trend, obviously a lot of discussion about whether that could ultimately challenge the dominance of the dollar. I think it would be interesting to hear your take on how the digitization of currencies might compare to past evaluations of currencies.

**BARRY EICHENGREEN:** So, bills of exchange and the ability to write checks on your bank account, close substitutes for central bank issued currency, we've seen developments along those lines throughout history. So, I'm not dismissing this one as totally inconsequential. But I don't think it is an order of magnitude more important than those other evolutionary changes that we've seen in the past. Digital currencies are a substitute for cash. And it's obvious that the slow movement in the direction of a cashless society that had been underway before the pandemic has been very greatly accelerated. I think those concerns will limit the freedom and the growth of private platforms over time.

One of the things central banks are responsible for is the stability and integrity of the payment system. That people can make payments and payments get where people want them to get. And I think there is a worry that the payment system will gravitate in towards some purely private unit. So, central banks are going to worry about those platforms and respond to the fear that they will lose control of the payments system. So, I think some form of central bank digital currency is coming.

**ALLISON NATHAN:** And here's Prasad.

**ESWAR PRASAD:** China's digital currency is certainly a very important step in terms of providing competition to domestic payment systems. The international ramifications of the Chinese digital currency or the DCEP, the digital currency for electronic payments, are likely to be quite limited. Most international payments are already in digital form. So having a digital form of their domestic currency is not really going to change that.

What I think is going to be far more important for the renminbi's role as an international payment currency is really the cross-border intrabank payment system, or CIPS, that has the ability not just to increase the efficiency of domestic payments, but also provides a pathway to be linked up with international payment systems. And more importantly, the CIPS can also be used as a messaging system because it has the capabilities to transmit messages related to financial transactions in the way that SWIFT currently does, but in a way that ultimately could potentially bypass SWIFT. That is going to make it a lot easier to trade directly in RMB. It is going to make it easier to, both, invoice and settle transactions in RMB rather than using the dollar as a vehicle currency. So, over time that is likely to be the game changer, rather than the DCEP.

**ALLISON NATHAN:** So while the consensus seems to be that the dollar's dominance in the global monetary and reserve systems remains intact for now, questions about the dollar's value amid developments in the pandemic and the global economy will remain top of mind.

I'll leave it there for now. We wish you good health during this difficult time. If you enjoyed the show, we hope you subscribe on Apple podcast and leave a rating or a comment. I'm Allison Nathan, thanks for listening to Top of Mind at Goldman Sachs. And I'll see you next time.