#### THE BROOKINGS INSTITUTION

# FALK AUDITORIUM

### THE FUTURE OF THE US DOLLAR: ARE ITS DAYS

# AS THE WORLD'S DOMINANT CURRENCY NUMBERED?

### Washington, D.C.

Tuesday June 7, 2022

#### PARTICIPANTS:

# Welcome and Moderator:

DAVID WESSEL Senior Fellow and Director, Hutchins Center on Fiscal and Monetary Policy Brookings Institution

### Panel Discussion:

KATHRYN M. DOMINGUEZ Professor of Public Policy and Economics University of Michigan

BARRY EICHENGREEN Professor University of California, Berkeley

DONALD KOHN Senior Fellow and Robert V. Roosa Chair in International Economics Brookings Institution

ZACH PANDL Managing Director, Global Investment Research Goldman, Sachs & Co.

ESWAR PRASAD Senior Fellow, Global Economy and Development Brookings Institution

\* \* \* \* \*

#### PROCEEDINGS

MR. WESSEL: Good morning. I'm David Wessel, director of the Hutchins Center on Fiscal and Monetary Policy at Brookings. Welcome.

The U.S. dollar has been the world's primary reserve currency, indeed the world's primary international currency for over 60 years. This is not necessarily a permanent perch as the British learned in the early part of the 20th century. Now as long as I have been paying attention there have been warnings that the dollar's primacy is ending, the dollar is doomed. These were quite loud when the euro was born 25 years ago.

More recently there's talk that China's embrace of digital currency presages the decline of the U.S. dollar or that somehow crypto is going to replace fiat currencies. And of course today there are warnings that the U.S. sanctions on Russia's dollar reserves will prompt other countries to look outside the dollar to hold their forex reserves.

Well if I were still a Wall Street Journal reporter writing about this there are a handful of experts that I'd call to talk about these questions and to speculate on the future of the dollar. The people on the panel we've assembled today are the people who would be at the top of that list. I'm going to introduce them in a moment. If you want to send a question you can use Sli.do-futureofdollar, or send an email to <u>Events@Brookings.edu</u>.

So our panel today in the order in which they are going to speak are Barry Eichengreen, who is the George Pardee and Helen Pardee professor of economics and political science at Berkeley. His most recent book is "In Defense of the Public Debt." But about a decade ago he wrote a really influential history called "Exorbitant Privilege: the Rise and Fall of the Dollar and the Future of the International Monetary System."

Eswar Prasad is my colleague at Brookings, he holds new century chair in International Economics here, and also is the Tolans senior professor of trade policy at Cornell. Before academics he was at the International Monetary Fund. Eswar's latest book, quite relevant to the discussion today, is called "The Future of Money: How the Digital Revolution is Transforming Currencies and Finance."

> ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

Zach Pandl is the co-head of the Foreign Exchange Strategy Interest Rates and Emerging Market Strategy for Goldman Sachs. I was trying to figure out if that left room for anybody else at Goldman Sachs, that seems to cover the waterfront. He's at been at Goldman most recently for seven years. Previously worked at Nomura, Lehman Brothers, Columbia, Threadneedle, and before that or somewhere along the line, at Goldman before.

Kathryn Dominguez is a Professor of Public Policy and Economics at the University of Michigan's Ford School and the author of "Exchange Rate Efficiency and the Behavior of International Asset Markets: Does Foreign Exchange Intervention Work?"

And finally but not last, my colleague at Brookings, Donald Kohn is the Robert Roosa chair in international economics, and of course former vice chair of the Federal Reserve Board.

So each of my panelists is going to speak for six to eight minutes on a question we worked out in advance, and then we'll have a conversation and invite you to join us.

So with that, Barry, I'd like to start with you to give us a little perspective on what has been actually happening to the dollar share over the time and where the money that isn't going to the dollar is going. So the floor is yours, Barry.

MR. EICHENGREEN: Thank you, David. So you drew an important distinction in your opening remarks between the dollar's reserve currency role and the dollar's international role. So I think it's important for us in the next hour and a half to be clear about that, that the dollar and other national currencies are held in reserve. They are held as foreign reserves by central banks around the world, but national currencies have other international functions as well. They are used as vehicles for other kinds of cross-border payments, so we might want to distinguish what's been happening to the dollar's share of international reserves, central bank, foreign reserves.

On the one hand from for example the currency denomination of payments instructions that go through Swift Interbank, cross-border interbank transactions for example.

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

DOLLAR-2022/06/07

We tend to focus on the reserve currency role because it's a decision of central banks and governments, an official decision. We tend to focus on it because we have relatively good data on it, courtesy of the International Monetary Fund and some of the other functions like the currency in which cross-border transactions are invoiced or denominated. But the data there tend to be a bit more fragmentary, the country coverage is less good.

I think overall what we see is a very gradual, almost glacial decline in the share of the dollar along these different dimensions, starting with the reserve currency role. If you look at the share of identified known global foreign exchange reserves held worldwide the dollar's share has declined from about 70 percent of the total two decades ago to about 60 percent of the total now. So one-half of 1 percent of the global total each year is like a glacier receding, if you will.

The question is how to interpret this. So I think we can ask whether what we're seeing is normal stabilizing behavior on the part of central banks around the world or something that we should be alarmed by destabilizing behavior.

So the stabilizing interpretation would be we are moving toward a better diversified international monetary and financial ecosystem, if you will, with multiple sources of international liquidity. The global economy runs, international economy runs on international liquidity. The U.S. as a declining share of the global economy over time. Emerging markets, emerging is the other side of that coin, if you will. The United States can't provide that liquidity, those safe assets all by itself indefinitely into the future. So we're seeing a healthy phenomenon of other national sources stepping up.

The destabilizing interpretation would be that we're beginning to see a rush away from the dollar due to loss of confidence in the greenback's stability or in the reliability and predictability of U.S. foreign economic policy where the latest version of that concern obviously focuses on U.S. sanctions on the Russian central bank.

So in that 2011 book you mentioned, David, I predicted stabilizing diversification I like to say. I'll keep predicting it until I'm right. It hasn't happened as fast as

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

many of us, as I, expected. And it hasn't moved entirely in the expected direction. So back then many of us spoke about the importance of scale economies and network effects and that consequential international currencies had to be the currencies of big economies with a big installed base. So I anticipated the euro and the Chinese renminbi would become more important over time. And the answer to the first approximation is they have not. So there's been no net movement over those decades toward the euro.

You see it in the SWIFT data, but the SWIFT data picks up a lot of crossborder interbank transactions within Europe and that's like, you know, transactions between California and New York, they're not really, they're not picked up in the SWIFT data either.

I think if you look at the data there has been modest movement toward the Chinese renminbi, but a third of renminbi reserves held worldwide are held by the Russians for obvious reasons. They had been moving their reserves into renminbi and gold even before recent events. So the renminbi hasn't become a consequential first-class international currency. China has capital controls, China has an authoritarian government, they have features that make their currency less appealing to international investors, private and official. Most of the movement has been into non-traditional reserve currencies, the Canadian dollar, the Australian dollar, the Korean yuan, the Swedish krona, and you can see that in some of the IMF data. Those currencies are easier to trade directly for one another, they have relatively attractive risk return profiles, they are often the recipients of dollar swaps from the Fed, which helps. So that's the kind of diversification we've seen. And to my mind very little of it can be explained by actual or anticipated U.S. sanctions; rather it's intelligent portfolio management by central bank reserve managers.

So to conclude, on net, I do not see an obvious threat to the dollar's exorbitant privilege, only healthier stabilizing to diversification into other non-traditional currencies.

MR. WESSEL: Thank you. I noticed that Jason Furman tweeted about this event which we had titled the "Are the Dollar's Days of Dominance Numbered." And he said

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

yes but it's in four digits of days.

Eswar, a lot has changed since Barry wrote his book in the technology of currency exchange, of payments and stuff. And you've written quite a bit about that. So tell us what you think what that means for the dollar's future.

MR. PRASAD: David, over the last couple of decades I've noticed that there are certain stories, you know, the collapse of the dollar, the collapse of the dollar system, the reserve currency, the collapse of the Chinese financial system. These are stories that seem to have a huge hold on the public imagination. And they may yet come to pass. But I think there are some forces at work here, not necessarily good ones, that might in fact entrench the dollar's role.

Now it's worth keeping in mind that as we put this issue into perspective, you know, the U.S. now accounts for about 25 percent of global GDP. And this is a number that has been declining over the last few years. And the U.S. of course has the world's largest fixed income markets, which is relevant for reserve managers and people looking for safe assets.

Part of this of course is thanks to the profligacy of the U.S. government. But overall debt markets in the U.S. if you add in government debt and corporate debt is by far the biggest in the world but it's not necessarily anywhere near 60 percent of global bond market capitalization.

So it's worth keeping in mind that even when we talk about small declines in the dollar share of global reserves and so on, the U.S. is still punching far above its weight in global finance.

And there are some factors that I think could potentially undermine this. And there are forces at work that are related to the technological changes that you referred to, David. But in addition there are a number of geopolitical forces at work. So how does all of this stack up?

Now the dollar's role in different guises is very important to keep in mind, as

DOLLAR-2022/06/07

Barry has correctly pointed out, where the dollar as of now it remains the dominant currency as a unit of account in denominating international transactions, as a payment currency, that is as a medium of exchange, and as a store of value as a reserve currency. But there are technological forces that could reduce the dollar's role, especially as the payment currency, but also as a unit of account. It's not obvious why we should continue living in a world where all major commodity contracts, for instance, continue to be denominated and settled in U.S. dollars.

There are many forces already at play in developing countries which are accounting for a larger faction of global trade, global GDP. These economies are beginning to have better developed financial markets and that is also going to have an effect. Because in addition to better developed financial markets they're developing payment systems that can more directly communicate with payment systems of other countries. China is developing the cross-border interbank payment system that could, once other countries, other emerging market countries payment systems match up with it, enable China to trade with Russia, with India, directly the currency of those countries without having to use the dollar as a vehicle currency.

So the dollar's role as a medium of exchange, whether you need to exchange them in rupees for dollars and then dollars for rupees or the other way around, might become much less pressing. So it's certainly feasible, plausible, that the dollar's role as a payment currency could decline over time.

And certainly the fact that the U.S. still has a chokehold over the Swift system, although the Swift messaging system still claims to be, you know, not muddy, bipartisan, or political waters, it's still very much subject to U.S. influence because after all most of the major banks operating to the Swift messaging system are still U.S. banks and the dominance of the dollar gives the U.S. a lot of traction in terms of its primary and secondary sanctions.

So countries around the world certainly have taken note and are trying to

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

get around this. The Chinese cross-border interbank payment system cannot only conduct payment in settlement but can also conduct messaging of transactions.

So one might argue that the dollar's role as a payment currency might decline over time. But then there are other technological changes as you suggested, David, including the rise of other payment technologies, especially stable coins. These are cryptocurrencies that allow for payments to be undertaken both domestically and across national borders. But these are backed up by stores of reserve currencies. And as you look around the world, the stable coins that seem to have the most fraction, especially in terms of international payments, are ones that are backed up by U.S. dollars, not by other reserve currencies.

So it turns out that in fact these technological changes that are under way might in fact reinforce the dollar's role as a payment currency, although indirectly rather than directly. As a reserve currency the dollar's share has certainly been declining but a lot of this decline, as Barry has pointed out in some of his very influential work, has come from the rise of other currencies besides the euros. The renminbi has started playing a somewhat more important role in global FX reserves, all that account for less than 3 percent of global FX reserves. But some of the smaller currencies, the Canadian dollar, the Aussie dollar, have started playing somewhat more important roles.

But this has meant, especially with the decline in the euro share over the last decade or so, that in fact the distance between the top tier currency, which is the dollar, and all the rest, has if anything increased. So what I see is actually a battle for second place status, possibly intensifying when the dollar's role remains dominant.

Certainly there are diversification reasons why we should see countries trying to move away from the dollar, and certainly the U.S. freezing Russia's reserves might have a role to play in this as well. But the reality is that if you think about a country like Russia, or for that matter China, it's very hard to see where else they would go.

One of the interesting things about the Russia sanctions of course was that

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

all the Western countries, the major safe haven currency issuers, all acted in concert. So it's not obvious where one could go. And ultimately but definitely, liquidity of financial markets makes it very hard to envision any obvious alternatives. One can think about gold, one can perhaps think about bitcoin as alternatives to reserve managers. But these are not realistic in terms of the quantities of safe assets that reserve managers around the world are looking for.

So I'm looking for some changes in the dollar share. And this would be good, as Barry pointed out, for diversification reasons. But in every dimensions of payment currency, perhaps lesser of denomination currency, but especially as a reserve currency, I see the dollar remaining dominant for the foreseeable future, which could be in four digits or perhaps in two or three digits.

MR. WESSEL: Eswar, we're going to talk a little bit later about the macroeconomic consequences if the dollar loses share. But let me ask you two questions. One is, is there any change in the Chinese behavior of late in where they put their reserves?

MR. PRASAD: China has actually started accumulating foreign reserves as it used to, it's had a fairly level effective reserve position. I'm sure the Chinese are eager to diversify at the margin. But the reality is that if you think about their \$3.1 trillion worth of FX reserves and the possibility that about 55 to 60 percent of them are held in U.S. dollar denominated assets, it's not obvious where else they could go with them. So possibly diversification the margin, but the existing stock of reserves, I don't think they are going to be able to shift out of the dollar.

MR. WESSEL: And when you talked about the fact that in the payment side I don't have as much as I used to go from dollars to yuan and then back to dollars, all that stuff, without cutting the dollar out of it or the South Koreans can trade with the Indians without the dollar being in the middle. Is that a benefit to the world economy? Is that more efficient, does it reduce the forex risk for people who trade in between those countries?

MR. PRASAD: The ability to hedge in those currencies and in those pairs of

currencies, and as the increase in the depth of those markets increases, that certainly means that they are getting developments in financial markets in those countries, both direct and secondary. And in addition it means that their markets are working better plus their payment systems are able to integrate better with those of other countries. So this is all a net plus I think.

MR. WESSEL: I see. So, Zach, you look at the world from a place very different from Cornell and Berkeley and the University of Michigan or Brookings, so we're interested in your perspective. But I'm particularly interested in whether you think the recent move by the U.S. government to basically freeze Russia's reserves in the U.S. is going to be seen as a significant inflection point in the dollar's role, and also where do you see this going over time?

MR. PANDL: Right. Thanks, David, thanks for having me on, and I will echo some of the points that both Barry and Eswar made. I just want to say at the outset, before sort of tackling a question like this, you know, as a professional currency forecaster I have developed a lot of humility about the range of possible things that can happen in the future. And so I think we need to think probabilistically about a question like this, about the dollar's international role.

And so I'd like to make the case that, you know, while the future is of course uncertain, there is a lot of forces pointing in the same direction, putting downward pressure on the dollar's international role and its variety of dimensions. And so I don't know exactly what's going to happen in the future, but I do think that, you know, investors, policymakers, should be preparing for that eventuality and thinking about what it means for assets or for policymaking.

So what are these sort of forces? I'll put them in three buckets. The first is China's own development goals. The second is the reaction to U.S. sanctions, financial sanctions through the dollar base payments network. And the third is new technology, as Eswar was discussing.

Starting with China, so the Chinese economy and the U.S. economy, the two largest economies in the world, are going through a kind of slow-motion economic divorce. Both of these economies have, you know, both nations think that there is unacceptably high vulnerabilities to each other. On the United States side that maybe includes things like medical equipment, you know, maybe should be produced onshore, other sort of essential goods should not be imported, for example.

In China's case it also has vulnerabilities to the United States. And one of the big ones is the dollar's role in international trade and finance. China is the world's largest trading nation and most, you know, trade occurs in U.S. dollars. Hong Kong does not have the renminbi, has its own currency, and operates a currency board tied to the U.S. dollar. Most, 85 percent of Chinese equities, are still each shares, Hong Kong based shares. So the Hong Kong economy is central to the Chinese economy, of course, still has an important reliance on the U.S. dollars, as Eswar pointed out, one of China's main financial assets are U.S. dollar denominated treasury.

So the Chinese, China is going through a development process and through that process it is, you know, running into this issue that it is surrounded by the U.S. dollar in a lot of ways. And so with that development process in mind, the Chinese policymakers have been going through a long process of working to internationalize the RMB, developing their own cross-border payment system, getting added to the SDR basket, developing a digital yuan, rolling up swap lines to other central banks, opening up the bond market to foreign investors. And that last one, you know, just a sea change in the last couple of years, you know, for the kind of clients that we would deal with on a regular basis.

So in terms of the dollar's international role I think that, you know, the strongest argument for a smaller share for the dollar and sort of changing proportions in international markets is just that is China's development goal. That China is on a development path, taking steps to internationalize its own currency and is likely to displace the dollar in aspects of the dollar's international role within China's sphere of influence, you

> ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

know, take something like the Belt and Road countries, for an example. So that's I think sort of the first argument.

The second is on sanctions to your opening question, David. There of course has been a reaction to sanctions and people are aware that, you know, the Russian government after the Crimea invasion, took some steps to diversify away from the dollars and is doing some other things. And that's fairly obvious.

But it's important to stress that this is not just about Russia. The European Commission as of course a friendly, you know, an ally of the United States, has an explicit goal to work to internationalize the euro, which is thought to be punching below its weight, you know, in the mirror image of the dollar, punching above its weight, the euro has failed to internationalize as much as anticipated. And prior to COVID the European Commission adopted an explicit goal to internationalize the currency. And the rationale was what again in the European Commission's own terms was the wakeup call created by the U.S.'s use of extraterritorial sanctions on Iran.

With COVID and other recent events, we have arguably taken some steps towards internationalization of the euro, or at least some things are changing that could support internationalization of the euro over time, starting with the Recovery Fund, which is not billed as an effort to internationalize the euro but creates more EU level shared resources and a bigger EU level bond market. And those are the kind of foundational things that will be needed to internationalize the euro over time.

And then we'll see what is the fallout from the Russia-Ukraine war, whether we see changes to European security policy, whether we see changes to European energy policy that, you know, change the nature of the euro as a currency and allow it to internationalize further. That is what the European Commission would like to see. We'll see whether European policymakers can get us in that direction.

And then lastly on this sort of technological side of things. I am not going to argue that bitcoin will displace the dollar, don't worry. But I do think that recent events

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

highlight something that is happening in crypto or some aspects of what is happening in crypto. In a way this is what blockchain technology is all about, it's how do you transact value in a digital economy with people that you don't know or don't trust.

And so I think this is very early-stage technology and I think it's a little bit premature to say what the international payment system could look like in the future. But sort of echoing Eswar's comments, I think it's quite plausible that international payments could look a lot different in the future than they do today, and maybe with less reliance on a single country's banking system and therefore less vulnerability to foreign policy goals of any one particular country applied through currency markets.

So what I'm thinking about the dollar's sort of international role and risk to the dollar's value in markets, it sort of thinking about these three things sort of added up, you know, China's development, the European's efforts to internationalize the euro, and the other sort of reactions to use of financial sanctions through the dollar-based banking system and these technological things. Add it all together, I personally see a lot of avenues through which the dollar could lose dominance over time. And so I want to be, you know, making sure that our clients are well aware of that possible risk.

MR. WESSEL: Thank you. All right. So now we're going to come to the part of the conversation where we ask the "so what" question. It sounds terrible that the U.S. is losing its primary, the U.S. dollar is losing its primacy, it's I think there's sometimes a macho thing about this. Like we must be losing our vigor or something. But as we have talked about this with both Don and Kathryn, it's not obvious that this would actually matter very much for the American economy, for its workers, consumers, and businesses.

So we're going to start with Kathryn on this question and she's taking part of it and then we'll follow up with Don. So, Kathryn.

MS. DOMINGUEZ: Sure. So what I'd like to do is first kind of list the benefits of having a dominant currency, then talk about some of the reasons that some of these benefits might be fading, kind of along the lines of what David just introduced. And

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

also introduce some costs of having a dominant currency, which again might make it easier for the possibility that the dollar does become less dominant although I'm going to side with Barry and Eswar on it seems that maybe we're looking at the end too soon.

But when a country has a currency where there's a strong demand like for the dollar and a strong demand for dollar backed securities like U.S. Treasury Bonds, that country faces lower financing costs for borrowers in domestic currency. So U.S. can borrow more cheaply and that might increase fiscal capacity, investors are less concerned about rollover risk. I'm going to talk a little bit about whether or not that still is a good argument, but that's certainly a key argument for why a dominant currency is useful for a country.

Second off, a country with a dominant currency has lower exchange rate risk. They're less sensitive to global economic fluctuations. Value, the U.S. borrowers in dollars and therefore the value of that debt does not depend on fluctuations and exchange rates, which is certainly not the case for many other countries, especially emerging markets where their debt levels can change dramatically with changes in exchange rates.

Third, lower transactions cost. So Eswar sort of talked a little bit about this but for domestic consumers and firms engaged in international trade, everything's done in dollars, so exchange rates are less important.

Probably slightly less important, but something that people always list is higher seigniorage. So the dollar is used widely across the world and that's basically an interest free loan to the U.S. government. So the more the dollars are around, the higher is seigniorage, which is still a very, very small percentage of GDP.

A slightly more kind of speculative benefit of having a dominant currency is it gives you more leverage for geopolitical interests. And presumably one of the reasons that the sanctions were put in place and are thought to have some effects is because the dollar is still widely used.

It may also means debt policy, debt monetary policy more powerful internationally because of the use of the dollar across the world. So those are kind of the

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

typical list of benefits for countries that have dominant currencies.

And then just a little bit back in history and this is Barry's world, but, you know, the term "exorbitant privilege" really came out of the Bretton Woods system where the dollar had a very asymmetric role. So the U.S. had total freedom to decide its policies, the rest of the world had to follow, and it had the ability to run sustained current account deficit.

Since the breakdown of Bretton Woods, where many people also predicted the end of the dollar – and if ever there was a really big global shock, it was the breakdown of the Bretton Wood system – but since that time the international monetary policy or system is decentralized. Each country sets its own exchange rate framework and currencies are largely market determined. Decisions about what currencies to invoice in are made by the firms that do make the contracts in countries that trade across borders.

So there's nothing enforcing the dominant role of the dollar as was the case in the Bretton Woods system. But the fact that the dollar is heavily used provides these network externalities that I think both Barry and Eswar have already mentioned.

So what are the signs of fading privilege? Well I started off with this idea of lower financing costs. So U.S. interest rates on treasury securities, which we usually think of as safe assets, they're not much lower than interest rates in other industrialized countries. So presumably kind of the benefit for the United States in terms of interest is not as high as it might once have been.

And there's also some beginning evidence to suggest that foreign investors are less willing to buy U.S. treasuries given low returns. And we already heard about reserves, so that's a different story but also a similar story. Countries are moving, possibly slightly glacially, away from holding dollar reserves but it also seems to be the case that sort of more broadly holding of U.S. treasury securities has diminished relative to its recent past. So in terms of quantities during COVID the foreign investors were net sellers of U.S. treasury securities which was obviously not the case during the global financial crisis, so that's a change. And also looks like previously we saw a pretty stark bad timing on the part

> ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

of foreign investors where they purchased treasury sort of at the worst possible time. And it looks like that kind of bad timing has been corrected and so again this idea that the U.S. can issue debt with no problem may be slightly glacially eroding.

And let me just say that some of this feeding of exorbitant privilege, if we have it, may not be all bad. So the safe haven aspect of the dollar is a negative cost for U.S. exporters. So exporters are less competitive when the dollar is stronger, and the dollar is typically stronger during times of global economic crisis. So those are the times that when the economic circumstances are most difficult and yet those are the times when U.S. exporters are facing a strong dollar.

Another possible negative of being a dominant currency country is those low borrowing costs, which may be fading, lead to accumulation of debt. And those funds borrowed may not be channeled in the most productive investment. So again, kind of provides the U.S. with the ability to do things that maybe aren't always in their best interest.

Let me then just say one last thing. Even given all that I've said and all that we've said, I think the main reason the dollar is likely to maintain its dominance is because the U.S. is a net debtor to the rest of the world. The rest of the world loses when the dollar falls. And the U.S. is not affected in the same way as the rest of the world. So, yes, China is moving, stabilizing, not having as much of a reserve accumulation, but they have a lot of dollar reserves, as do the rest of the world. So if the dollar falls that has a very negative effect on many countries around the world. So they're not going to be eager for the dollar to fall.

And on the U.S. side, if foreign currencies rise, our assets rise in value. So there are reasons where the U.S. would actually benefit from a less strong dollar, and the rest of the world would in fact be harmed.

I would say one of the main reasons that the dollar has maintained its dollar status as well, is the policies that the Federal Reserve has put in place both during the global financial crisis and the latest pandemic crisis in providing currency swaps. So

> ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

governments around the world that needed dollar, basically the Fed provided international lender of last resort type facility that allowed them access to those dollars.

So again, others have talked about the fact that there might be less confidence in China or Russia or even Europe in times of crisis, the U.S. has shown that in times of crisis it is there providing dollars where dollars are needed. And that I think is yet another reason that the dollar is likely to stay in its dominant role.

MR. WESSEL: I'll ask you to -- I want to make sure I understand what you're saying. You're suggesting that the foreign exchange value of the dollar, the number of euros or British pounds that we can buy with the dollar, is connected to the size of the U.S. dollar's market share. There are lots of things that influence foreign exchange rates, but you're thinking that in general to the extent that the dollar is a dominant currency, the dollar is going to be slightly more valuable in foreign exchange terms than it would be otherwise, everything, as economists like to say, held constant.

MS. DOMINGUEZ: And the fact that though many assets currently are held abroad in dollars. So again that means that the loss of the value of the dollar would be the loss in the value of those assets. So it's kind of hysteresis where we are currently as well as the role of the dollar.

MR. WESSEL: I'm going to let Don continue and then, Zach, I'd like you to talk about that point.

But, Don, Kathy didn't leave you a lot of maneuvering room, but she left you a little bit.

MR. KOHN: Well, thank you, David. Yeah, I think your question was "so what?" I'm going to concentrate a little bit on some of the negatives Kathryn brought up and the implication here is that if the dollar loses some of its dominance gradually over time, the negatives will turn less negative. But I want to stress ahead of time that I think these are negatives that the U.S. needs to deal with now and continuing and for a while.

So what were these negatives? So the positive here basically, as Kathryn

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

was stressing, is that we can trade claims on financial assets for goods and services. And that's the exorbitant privilege. And that presumably makes the American public better off. You're sending out pieces of paper or electronic signals in exchange for stuff that you can consume and use in capital.

But the problems I think, the negatives, just toamplifying a few things Kathryn said. One is she talked about U.S. exporters suffering from the stronger dollar because of the demand for U.S. assets. But think about import competition. And I think what we've seen here in the U.S. is that we have done a very poor job of helping the workers and industries that have been hurt by import competition that results at least in part, not wholly, but at least in part, from the strength of the dollar. And that backlash against foreign trade that we've seen over the past five or six or seven years or even longer, is partly a result of the fact that we don't do a good job in compensating people for the jobs they might have lost because of international trade and the reserve currency status of the dollar contributes to that a little bit on the margin.

I think the other negative that Kathryn mentioned that I want to pick up on is the financial stability side. So as she noted, presumably the demand for U.S. financial assets drive interest rates a little lower, means credit is readily available from foreign sources as well as U.S. sources. It implies a current account deficit, a persistent current account deficit, implies growing debt in the U.S., growing debt relative to GDP, raising financial stability concerns and U.S. has not been very good at managing those financial stability concerns.

One concern would be it does encourage borrowing by both households and businesses and governments. And then particularly thinking about households and businesses, as they accumulate debt relative to their ability to repay that debt, then if a negative shock happens, they could amplify that shock by having to cut back consumption, cut back capital spending much more than they would if they hadn't accumulated all that debt that they needed to service.

> ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

But it's also true that we have experience with foreign flows encouraging fragile financial structures that link borrowers and lenders. And the problems here were illustrated nicely in the run-up to the 2008 financial crisis, and Ricardo Caballero has pointed this out, that the demand for safe assets, which Barry mentioned, in the early 2000s exceeded the amount of treasuries and safe assets at that time anyhow, with smaller deficits that were being generated. And challenged the private sector in the U.S. to come up with safe assets that international investors wanted to hold. One of the ways they met this challenge was to take unsafe assets, subprime mortgages, bundle them together, tranche them, break them up into bits, have one of those bits called the triple A or rated by the rating agencies at a triple A rated security and so the demand, in that really encouraged, one of the things that encouraged the growth of subprime mortgages and also made the financial system very fragile. Because once house prices started to fall, those subprime, those triple-A-rated tranches of mortgage-backed securities became junk very, very quickly. They were so-called cliff effects, and they fell very quickly. And that contributed to doubts about other financial institutions, etcetera.

Now we've taken care of a lot of that issue in post-global financial crisis, that particular issue. But I think the general point is still valid, that the inflows, that running a current account deficit inflows of assets can, if we're not careful, can encourage unsafe financial conditions. And the U.S. simply isn't very good at policing those. We have a fragmented regulatory system that's not well suited to dealing with systemic stability issues.

We've made some reforms and Dodd-Frank setting up a Financial Stability Oversight Council, but it has limited powers and it hasn't even exercised those powers very strongly. Most regulators in the U.S. don't have a financial stability mandate. So I think there are things that the U.S. could do, and I'll advertise here a Brookings Chicago Booth Taskforce on Financial Stability report that had a number of suggestions for strengthening the financial stability system, the regulatory system for monitoring and dealing with financial stability issues in the U.S. But for the most part those reforms have not been implemented.

MR. WESSEL: All right. So let me get this straight, Kathryn and Don. You're basically saying that the role of the dollar in the global economy makes it easier for us to borrow, and you both express concerns that maybe we don't use that borrowing power wisely. And secondly it allows us to essentially live beyond our means in the sense that we can invest more than we save because we import savings from the rest of the world.

But if I told you that Barry were writing his book in 2052 and the dollars share of reserves and payments had fallen substantially, say 20 percentage points or something, do you think that the U.S. economy would be better off, worse off, or it wouldn't make much difference. Don.

MR. KOHN: I was hoping you'd call on Kathryn. So I think there's on the one hand on the other situation. And I'm sorry --

MR. WESSEL: I should have called on Kathryn.

MS. DOMINGUEZ: I would have said the same thing.

MR. KOHN: So we do, the strength of the dollar, as Bob Rubin had and Larry Summers used to say, a strong dollar is in the national interest. And I think it is in the sense that as Kathryn pointed out, there are a number of advantages for being a reserve currency.

But it has negatives, and we haven't dealt with the negatives very well. So I don't know on balance where we come out. I guess I suppose we'd lose a little something on balance that the benefits probably exceed the costs right now, but the benefits aren't as great as Giscard d'Estaing thought they were when he talked about exorbitant privilege.

MR. WESSEL: Kathryn.

MS. DOMINGUEZ: And another way to think about what you just asked is who has risen to being able to take the U.S. role. And I think one of the things that we're all kind of talking about kind of in different ways is there isn't really a great competitor out there, at least that I see.

Now it would be very interesting, what was the year, 2053? I would be very

interested in if the U.S., kind of the U.S.'s dollar role is eroded, who's taking up that. And right now I think Barry's research suggests that kind of a wide array of smaller countries, that it's not China or Europe, it's kind of a more widely disbursed role for many other currencies.

But then I think what you've got is that no country really has, I'm not sure that we have exorbitant privilege currently, but then if things keep moving in the way that they seem to be maybe if there's more equality across more countries and so each country gets some of the benefits and some of the costs of that.

But I don't see a lot of benefit currently for the U.S. So if the dominance falls it's harder to see what the costs are.

MR. WESSEL: Zach, both Don and Kathryn link the foreign exchange value of the dollar to the dollar's market share in both payments and reserves. Obviously, there are lots of things that determine the foreign exchange value of the currency, including savings behavior and interest rate differential. I'm just curious how much.

Would you buy this idea that the dollar is higher than it would otherwise be because of our market share? And how much of a role do the big picture issues we're discussing here play in foreign rates, or they just sort of like a minor access?

MR. PANDL: Very good questions. So from a sort of academic perspective the way that I would maybe frame this is that interest rate differentials are extremely important for currencies and maybe the most important fundamental, but they only get you about halfway there. And so the remaining half is, you know, I use the analysis around capital flows of some kind maybe to use the framing that Don Kohn used, do international investors want to hold the assets of this country or not.

In terms of foreign exchange markets, today really private capital flows are the bigger issue than official de-dollarization. Those are sort of two big themes at the moment. First is that Europe is exiting negative rates after eight years. And so cash instruments, short-dated money market instruments may have a zero or positive yield for the first time in almost a decade, and that is likely to change the behavior of international

> ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

investors in some way.

And then the other is that U.S. stocks are underperforming now. And so we're going through a period of where, you know, technology equities have been extremely highly valued and that has meant U.S. outperformance versus other markets and that process is unwinding. And as we saw after the NASDAC bubble burst in the late 90s, this may eventually resolve in some capital outflow from the United States.

So these two private issues I think are the big drivers, higher rates in Europe, tech underperformance. And I usually add this sort of official de-dollarization issue to the list and consider it an incremental tail risk to the dollar. So, you know, I think we're much more likely to see, you know, exchange rates move because investors are putting fixed income capital back in Europe or diversifying away from U.S. equities over say the next 12 months. But over a longer-term horizon I think official de-dollarization is an additional downside factor and it would just mean that international investors want to hold fewer U.S. assets that should put dollar pressure on the exchange rate.

MR. WESSEL: Thanks. Barry, there's a question here that only you could answer. Which is, were British economists asking about the sustainability of the pound sterling as the primary international currency at the beginning of the 20th Century? Did they worry about this? Did they even have the kind of data that we have now?

MR. EICHENGREEN: So central banks certainly publish balance sheets generally once a year. So it's possible to reconstruct the international reserve system. There are lots of estimates of net capital flows derived from the trade balance, which governments similarly publish statistics on. But the order flow and the foreign exchange market are gross capital flows are the other things Zach looks at, were not readily available.

Then there was not a sense of doom and gloom about the future of the pound sterling before World War I. I think that's a really interesting case. So when I heard this discussion about the future of the dollar and the coming dollar crash, I was reminded of what the late, great Rudi Dornbusch always said about crises, "They take longer to arrive

than you ever thought, and then they are more violent when they finally erupt than you ever thought."

So the United States overtook Britain as the largest economy in the world in -- wait for it -- 1870. And it took another 45 years before the dollar began to gain an international role. But then it overtook the pound sterling in like five years. There was a big shift. So Rudi's crash did take place, but the profound changes were World War I and the founding of the Fed.

So you have to think of, I think, changes on that scale to imagine say, the Chinese renminbi overtaking the dollar. And when people talk about China's alternative to Swift and the New York Clearing House, the cross-border interbank payment system, I will remind you they've been trying to build it now for seven years. It has 10 percent the participating banks of chips in the U.S. It does 3 percent the transactions across borders by value, that the New York Clearing House does. So we're not seeing changes on that magnitude, and the question is, at what point in the future might those discontinuous changes occur?

MR. WESSEL: Eswar, a number of people have asked a form of this question. How can a digital dollar survive and thrive without providing the same privacy and anonymity that you get by having a hundred-dollar bill?

MR. PRASAD: That opens up a whole new set of questions, David. I'm going to take that question in a couple of directions.

Number one, you had referred to this earlier, just the fact of the U.S. seems to be not quite leaning into a digital dollar when the Chinese and some other countries are leaning into digital versions of their own currencies. Is that going to make a difference to the dollar's dominance?

I don't think, you know, availability of a digital version of the yuan is going to fundamentally alter anything in international finance. Most international payments are already digital. At the margin you can easily get access to a digital and maybe some of

> ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

these small countries in Africa and Asia that have very strong economic and financial ties with China might start using that. But it's not going to be a fundamental game changer.

Now as for the digital dollar itself, I think the Fed has taken the wise approach of saying that there is no huge rush, we need to think very hard about what the user cases for the digital dollar. I personally think that there are some valuable benefits that could be gained from a digital dollar. But there are questions about whether we could obtain better domestic payments, better international payments without necessarily having a digitized version of the dollar.

And if we do move down that road there would be some important questions to be addressed. Does it have implications for the structure of financial markets and institutions? In particular is there any risk of this intermediation of the banking system if we could all hold money in digital dollar, digital wallet, so to speak. Would it affect private sector innovation in terms of payments? And will it have any implications for privacy?

There are technological solutions that can mitigate if not entirely eliminate some of these problems. So for instance there are cartography tools called Zero Knowledge tools that make a lot of people to have their bonafides verified while providing transactional privacy, at least for low value transactions. But would a central bank really want any digital version of its money to be used without auditability and verifiability of those transactions? And if so, can we really count on privacy if there were to be a digital dollar that displaced paper currency? I think the answer is probably not.

MR. WESSEL: Interesting. Zach, someone asked if we should take the Europeans seriously about wanting to become a more important reserve currency if one of the costs of that is a higher exchange rate, which is something that they generally seem to want to avoid?

MR. PANDL: They have wanted to avoid that over the last decade in which Europe was dealing with fragmentation and deflation risk. Europe is going through a lot of change now. Exactly where we're going to land on the other side, I'm not entirely sure.

> ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

And, you know, policymaking in Europe of course is unique because it is a consensus process among a variety of nation states. So, you know, it tends to be forged, progress seems to be made during crisis and comes through negotiations. So I think it's difficult to know exactly where we're going to land.

But to me, like, you know, I would argue that the outlook for Europe over the next five years looks very different from what we looked at over the last five years of negative rates and fragmentation and deflation risk. We're talking about rate hikes, high inflation, fiscal spending including on defense, green transition, you know, we will see.

So should we take this process seriously? I think forceful steps to deliberately internationalize the currency would be somewhat surprising in the European context to see the kind of deliberate planning process that the Chinese have gone through. That being said, I do think the macro environment in Europe and institutional environment could look different enough that the euro could play a stronger role as international currency over time than it has in the past.

MR. WESSEL: Kathryn, somebody asked questions kind of a little bit about what you were talking about. The test case is what people do when there's a crisis and do people rush to the dollar in a crisis?

And I'm not sure how familiar you are with this, but Don and I looked a little at the March 2020 period when we had a lot of dysfunction in the treasury market and one of the things that's notable is that there was a lot of selling by foreign investors of U.S. treasuries, and not a lot of people rushing to the safe haven.

I think in a book we did called "Recession Remedies," Robin Brooks and Jonathan Kinkel basically argue that's true, but it doesn't reflect any lack of confidence in the U.S., it had to do with what they needed to do for their economy. I'm just curious whether you see any weakening of the U.S. dollar as the safe haven when the world goes crazy?

MS. DOMINGUEZ: I don't see a weakening mostly because again, there isn't sort of another place for people to go. But it is interesting that the usual pattern that we

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

certainly saw in the financial crisis is typically that people want to get into the dollar and into U.S. treasuries and as you say, the evidence goes in the opposite direction at the beginning of the pandemic.

And so that is interesting, but I don't know that it says that much about the feeding of a safe asset and more that there was no place else for investors to go so it remained safe but there were reasons that they wanted to get out of those kinds of securities. So I don't think, it's interesting, but I'm not sure that it's kind of a turning point or a pivoting event, yeah.

MR. WESSEL: Eswar, you want to make a point about the longer-term implications of the change in the dollar call?

MR. PRASAD: First of all I'm already looking to preorder Barry's 2052 highly influential book. Maybe by some grand symmetry, by that time the dollar share of global FX will be 52 percent.

So as you pointed, or does it matter, I think actually it has two, it says two things about what is happening in the international monetary system and about the U.S. economy. You know, if we move to a world where the overall level of FX reserves in the world is lower, if the dollar share of reserves is lower, that might actually be a good thing. It might mean for instance in emerging markets that they've solved some of the fundamental problems in the international monetary system, not that I'm counting on it mind you.

It might mean that emerging markets need to hold less reserves and maybe the other financial markets around the world are developing to the extent that there are safe assets being provided by other economies so that can countries can in fact diversify. That might actually be a more stable world that would be good for the U.S. and the rest of the world.

The other question is about the U.S. economy itself. You know if you think about the U.S. dollar share declining, that could be a signal that finally, finally the U.S. public deficit share of GDP is beginning to be seen as unsustainable and on a negative scale that

> ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

there are some issues related to the institutional framework in the U.S. that are beginning to get chipped away. So that might signal in fact that there is a lot of things that are happening in the U.S. economy that are not necessarily very positive.

So if we reach this world with much less reserve holdings in dollars, it could mean good things for the international monetary system, it could mean bad things for the U.S. economy, although not necessarily so.

MR. WESSEL: So let me get this straight. You're basically saying on one hand it might mean that the rest of the world is developing a functional financial systems and people are feeling comfortable buying bonds of African currencies and so forth. On the other hand if it were reflects a decay of our democracy and lack of trust in American institutions that would be a bad thing. So it really depends what is happening that causes the market share to decline; is that fair?

MR. PRASAD: That's exactly right. And it could be a combination of the two.

MR. WESSEL: Sure. Don, somebody asked, you were referring to the negative effects of having a strong dollar on American manufacturers and the related effect on workers that we haven't protected them against as well as we should have. So the questioner asks, so does that mean you think we should turn to a weak dollar, the opposite of what Bob Rubin and Larry Summers used to talk about?

MR. KOHN: No. I think it means that we should fix the systems we use to reeducate people, train them for the new jobs that are opening up as the economy evolves. And I think the net gain to the U.S. from having a strong dollar may be not be huge the way Kathryn was saying, but I think it's still a net gain and from having dollar reserve currency is probably still a plus. But we just need to take care of these negatives without throwing away the system.

And I think one or two other comments on things have people have said. MR. WESSEL: Please.

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

MR. KOHN: So I thought Eswar's point about overall reserve levels was interesting because remember Ben Bernanke talked about why are equilibrium interest rates so low. This was in the early 2000s, it was party because countries were building up reserves so there was excess saving in the world. And if things evolve the way Eswar hopes they will, then perhaps the equilibrium interest rate would be a little bit higher, and I think central bank's monetary policymaking would be better off.

And on that monetary policy theme, I thought Kathryn made an interesting point about that if there were a material decline in the dollar, that would mean that Fed policy power was less than otherwise. And I think there I'd like to distinguish between certain types of power. So it's certainly true right now that because the dollar is dominant what the Fed does drives interest rates all over the world.

And I can tell you from personal experience, we get complaints from central bankers and finance ministers all over the world when the Fed either raises or lowers rates if it's not what handy for them. So I think in some sense reducing that power would be helpful to the Fed, at least there would be less feedback from Fed policy on other countries feeding back on the U.S. Not that the Fed alters policy all that much because of that, but maybe it would make the world more stable.

But the second point I thought Kathryn was, Fed policy power comes in part through an exchange rate channel. And if more transactions are denominated in other currencies, the domestic effect of U.S. monetary policy would be greater than it is now. That would be a more powerful channel.

MR. WESSEL: That kind of feeds into a question we got. I don't know if anybody can take this. So the tone in general, we don't quite everybody see it this way, is that the dollar's dominance is a net disadvantage to the world. That's of course the exorbitant privilege point. And the questioner asks, is there some net global benefit to the universal role of the dollar as there is with use of English by airline pilots? For those who know, that was a Ted Truman question.

> ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

Does anybody want to take that?

MR. PRASAD: Actually there might be some advantage to having one global provider of liquidity that everybody trusts in a moment of crisis. Again, the fact that we may be led to that moment of crisis might suggest some defects in the international monetary system.

But there is an academic work in fact suggesting that if you had a bipolar world with two dominators of currency that could actually lead to instability at times of great crisis. Now one might again take the opposite position and argue that maybe we would never arrive at that moment of crisis if we did not have the sort of incentives that Don talked about for people to invest in the U.S. keeping interest rates low here and leading to a search for yield and financially engineering.

But given where we are right now, I think it's not obvious that switching away from unipolar world it's going to be hugely beneficial. So having the Fed there to provide liquidly in the currency that the world needs and demands might actually not be a bad thing. It could prevent a bad situation from becoming even worse.

MR. KOHN: What about, Eswar, on the payment side. So I think what Ted's probably referring to is if all the payments are denominated in dollars, they're probably some increase in transparency and savings in costs or not. I mean what do you think?

MR. PRASAD: That to me is less obvious, Don. I don't think necessarily having, as Kathryn corrected point out, for the U.S. it's a good benefit to have most of our trade and other transactions denominated in the U.S. currency but for the rest of the world I don't see that it's necessarily being a net positive because it means that other financial markets are not going to develop. If there was some other reason why it made sense to focus in on one currency that served to denominate and settle transactions and make for efficiency gains that would help. But that's not obvious to me at all. I think that really reflects the weakness in the international payment system and various kinds of frictions. MR. EICHENGREEN: I would add that I think those arguments are less

compelling today than they were in the past. You know, today everybody has in their purse or pocket a device called a Smartphone that they can use to convert prices denominated in different currencies into their preferred unit of account.

MR. PANDL: Can I make one other point in this conversation. Just in terms of the cost and benefits issue, because I don't think it's been mentioned, but the ability to apply sanctions is a dimension of the power that the U.S. obtains through the dollar's international role. So if you want to enforce your interests, your foreign policy interests, you know, and the dollar loses its dominant international role, then you'll need to use other tools.

So I think that's an important issue that U.S. policymakers have highlighted, that overuse of sanctions could potentially diminish their effectiveness if you encourage other countries to figure out ways to avoid them.

And so I would say my view would be a key cost would be that loss of the ability to apply your foreign policy goals through the financial system.

MR. WESSEL: Right. In other words if you overuse your power, you might lose it.

MR. KOHN: Correct.

MR. WESSEL: Eswar, given the tension between the U.S. and China, one of the listeners asks, isn't Beijing going to be trying even harder to diversify out of its dollar forex reserves, and do you think that's the biggest single factor in the U.S. dollar's dominant reserve currency thing?

MR. PRASAD: No, that is not the dominant factor by any means but certainly it's played an important role. But I think the Chinese are bowing to the reality that if you want to look for a place where you can stash away hundreds or trillions of dollars' worth of, you know, your rainy-day reserves, there really isn't much other place to go.

Yes, the Chinese have increased their holdings of gold enormously, but, you know, you buy a thousand tons of gold, that at current market price is about 60, \$70 billion compared to \$3.1 trillion of reserves that they have. If you look at the euro zone, Japanese

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

and so on bond markets, those are not trivial by any means. But remember if you look at the providers of net safe assets the U.S. dominates by far. Because when money starts flowing into the euro bond markets, into the Swiss franc markets, into the Japanese markets, that leads to appreciation of those currencies. And for those countries with economies, currency appreciation is quite damaging because they're much more open economies, more in lines of trade, so they turn around and buy reserves, which turns into an increase in dollar reserve, it's the opposite.

So at the moment there really isn't much of an alternative. So if you think about, you know, China taking \$100 billion worth of reserves and trying to put it in the market that is liquid, that is relatively safe, there really isn't much a face to hid.

MR. WESSEL: Yeah, I often tell people when they ask me this question that I imagine I worked for the Chinese foreign reserve fund and my boss said those Americans are crazy, we gotta get out of dollars, put them in something else. And then five minutes later you come back and say well there's only a couple markets big enough. Japan is like a shrinking society, Europe you never quite know whether the euro is going to hold together, the U.S. is the world's tallest midget.

Somebody asked, Barry, this came up with what Eswar said but maybe you can elaborate on it. And basically it's the question of whether a multipolar international monetary system is more or less stable than one dominated by a single currency like the dollar, or in the old days the pound.

MR. EICHENGREEN: Obviously it depends on the underlying policies of the central banks and governments concerned. So in the hypothetical world where there exists meaningful alternatives to the dollar, there exists the possibility of sharp shifts from dollar holdings to holding other currencies, which then lead to changes in relative prices in financial markets. And potentially wrong-footing investors for more exchange rate volatility than otherwise.

But there's no necessary reason for those sharp shifts between currencies if

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

the underlying policies of the international currency issuers are sound and stable. So this domain is no different than any other domain, it depends on the policies.

MR. WESSEL: Eswar, somebody asked earlier about what this special drawing rights that IMF's currency has to do with all this. And does it? I mean was there hope that the SDR would become an alternative to the dollar and that never happened, or what's the deal with that?

MR. PRASAD: So Barry is the authority on this issue but let me take a stab at it.

MR. WESSEL: Well you answer the question, and we'll have Barry correct it.

MR. PRASAD: Okay, he can correct it. So the SDR is really a unit of account that the IMF has created as a sort of, when you think about it, as a sort of synthetic currency whose value is based on what used to be four currencies, although the Chinese renminbi added to the basket of full prominent currencies back in 2016.

So the SDR is created by the IMF and essentially it acts as a mechanism whereby a country that gets allocated some SDRs by the IMF can essentially exchange that for real money like U.S. dollars, euros, Chinese renminbi, and so on that they can then go out and use in international transactions. So when the IMF creates new SDRs it essentially creates a form of liquidity in the sense that countries can use their SDR allocations to go out and get, you know, real currencies, seed currencies so they can then go out and use in international transactions.

So it does create liquidity but there are lots of issues about whether the SDR is a true safe asset in the sense that it can be liquidated in very large quantities. And in addition there are questions about whether the trust in the IMF essentially because the trust in the IMF is backed up by the governance system, which is still dominated by the voting part of the advanced economies, whether that is going to be trustworthy enough for the SDR to act as a safe asset in any serious way challenges the existing configuration of reserve

> ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

currencies.

MR. WESSEL: How'd he do, Barry?

MR. EICHENGREEN: A-plus. I would only add that, you know, a true firstclass international currency needs a lender and liquidity provider of last resort. The dollar qualifies because the Fed can provide sufficient liquidity for the markets to open on Monday morning.

Do we think that those powers will be delegated to the International Monetary Fund in our lifetimes such that it will be authorized to issue large amounts of SDR over a weekend without prior authorization by national governments? I think the question answers itself.

> MR. WESSEL: Zach, does any investor ever ask you about SDR? MR. PANDL: No.

MR. WESSEL: That's what I thought. I think we've come to the end of all the questions I have. Is there anything anybody wants to add, anything you think we missed in the conversation? Any warnings, any congratulations to the U.S. government for managing to hold itself together for the last 60 years?

MR. KOHN: I think I'll add one thing, and that's one of a question of sanctions and how effective they are. I think it's so important, and Kathryn stressed the lack of alternatives. It's so important that the sanctions be multilateral. I think what the real threat to the dollar would be more use of unilateral sanctions without coordinating with our allies. Then if you're worried about that then you do have alternatives that you might turn to.

So I think the Biden Administration has handled the invasion of the Ukraine and those sanctions was really to put together a coalition, was really very helpful to minimize the effect of the sanctions on other governments' willingness or ability to diversify out of dollars.

MR. WESSEL: Well let me try and summarize what I've learned. It was really an excellent conversation.

The dollar's role as the dominant reserve currency has eroded some over time. The word glacially was used often. As Barry pointed out, it hasn't been to the benefit of the euro or the RMB, it's been to the benefit of smaller countries.

Eswar points out that a dollar's share of the payments, of the world's payments, the invoices for which goods and services are traded has declined and could continue to decline, and that may not really matter very much. It may make the world's economic system more functional.

Zach points out that, and Barry did as well, that sometimes things change faster than we anticipate. And he enumerates all the reasons that the downward trend in the dollar's role should continue, particularly the Chinese and the European policy priorities. And we don't really know the speed of what should happen, but I don't think anybody would disagree on the direction.

And Kathryn and Don pointed out that there are benefits and costs to the dollar being the world's reserve currency. We can borrow more easily, we can borrow at cheaper rates, we have higher exchange rates perhaps on balance. That's good to those who want to go take trips to Paris, not so good if we're making air conditioning parts to export to the rest of the world.

But I would say on balance they think that we shouldn't be too alarmed about the decline in the dollar's role because it's not clear that the benefits are as great as somehow you'd think from popular perception.

And then finally Zach pointed out and everybody echoed, that the dollar's role as the dominant currency gives us quite a bit of clout when we employ sanctions to the rest of the world. If we overuse that or if we do it unilaterally, we could hasten the dollar's decline and that might have foreign policy implications beyond the economic ones we've been discussing today.

And finally I think everybody would agree that the dollar's role as the dominant currency is in danger if our democracy starts to fail and people begin to think that

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

the last 250 years of the U.S. are not the way the next 250 years will look and that we start to run into trouble if people can't trust us, trust our institutions, and trust us.

And I like to say that I worry a lot about that stuff in the short term, but I have long-term faith given our history that we'll pull out of the situation we're in now and I suspect the dollar's role will reflect that.

MR. PRASAD: One minor clarification, please. I didn't say the dollar's role as a payment currency has declined. There are forces at play that should cause a bit decline, but curiously over the last couple of years by some measures it has actually gone up, not down.

MR. WESSEL: Okay. Thank you. And you did point out that the rise of stablecoins could actually strengthen the role of the dollar, contrary to the common view that somehow crypto is going to chase out the other currencies.

And then I want to end on emphasizing the very wise point that Zach made at the beginning about how humble we should be about predicting any of these trends because the world has a way of surprising us and that's what happens when your life is trying to predict the forex currency three months out. For people who bet on it, I can understand why you want to be humble, Zach.

But Kathryn, Eswar, Barry, Don, and Zach, I want to thank you. I think this was really, we cleared up a lot of misconceptions and I suspect this is the kind of conversation that, if no one else, college professors will be using when these questions come up.

So thank you all, and thank my colleagues Megan Waring and Andy A. Metack (phonetic), and Stephanie Cencula for making this all work so seamlessly. Have a good day.

\* \* \* \* \*

ANDERSON COURT REPORTING 1800 Diagonal Road, Suite 600 Alexandria, VA 22314 Phone (703) 519-7180 Fax (703) 519-7190

#### CERTIFICATE OF NOTARY PUBLIC

I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

Carleton J. Anderson, III (Signature and Seal on File) Notary Public in and for the Commonwealth of Virginia Commission No. 351998 Expires: November 30, 2024