

THE BROOKINGS INSTITUTION

WEBINAR

STABILITY AND INCLUSIVITY OF STABLECOINS  
A CONVERSATION WITH CIRCLE CEO JEREMY ALLAIRE

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## P R O C E E D I N G S

MR. KLEIN: Good afternoon. I'm Aaron Klein, a senior fellow in Economic Studies at the Brookings Institution. And it's my job on behalf of the Center of Regulations and Markets to welcome you to this interesting fireside chat that we're going to have here on the future of stablecoins.

And, you know, sometimes in this policy and event and public planning world it's better to be lucky than good. And we set out to have this conversation several weeks ago with Jeremy Allaire, the CEO and co-founder of Circle, which is the second largest stablecoin issuer in the world. And when we set this up a couple weeks ago we knew that there was a lot of conversation happening in Washington as it related to future regulation of stablecoins, this had been a priority of the President's Working Group on Financial Markets.

But we had no idea that yesterday in fact, the PWG as it's called, which is the Treasury secretary, the chair of the Federal Reserve, the chair of the Securities and Exchange Commission, chair of the CFDC, and joined in this instance by the comptroller of the currency and the chair of the FDIC, would all issue a giant report focused solely on stablecoins just yesterday.

And that is really the lead issue, and I want to delve right into this with Jeremy, who first of all, thank you very much for joining us.

MR. ALLAIRE: My pleasure, thank you.

MR. KLEIN: I should note in addition to co-founding Circle in 2013, that was after you had already taken another company that you founded public on the NASDAC Exchange, you come as a veteran, not of just financial technology but a building of business and in enterprise. And, you know, we'll get into what stablecoins are and why they've blown up and why they're attracting all this attention.

But I want to delve right into the meat of the question here. Which is that just yesterday the President's Working Group on Financial Markets issued a large report dedicated solely to stablecoins. And they have three main recommendations. And I'm going to ask you to respond to each of the three. And let me read them to you.

First one "To address risks to stablecoin users and guard against stablecoin runs, legislation should require stablecoin issuers to be insured depository institutions which are subject to appropriate supervision and regulation at the depository institution and the holding company level." Do

you agree with this? Do you think that stablecoin issuers should become in essence banks, subject to bank like supervision and regulation?

MR. ALLAIRE: So, we do in fact. And in fact, multiple months ago we announced that we were preparing to file an application with the OCC for a national commercial bank charter with Fed supervision and FDIC insurance. And specifically with the goal of establishing the first national full reserve digital currency bank in the United States.

And that remains our intention and it's good that it's aligned with how the Fed and Treasury and others are thinking about this. And I think that's my very quick answer. I think at a high level of course, and we can get into this in subsequent parts of the conversation, there are many types of stablecoins in the market today. I think in particular, which I think is the focus of this report, asset backed, dollar dominated, aiming to be dollar payment system stablecoins, really belong at the Federal level and really belong under that kind of banking and payment systems regulatory framework that we have.

Now clearly, and this is I think one of the reasons why they've asked Congress to become involved here is that there's a lot of novelty, and maybe novelty's not the right word, but there are a lot of significant differences in the way this technology for money works from prior banking payment system technologies.

And so there's a lot to work through in terms of building the statutes that would provide the right set of tools to the Feds or Treasury or others to actually supervise a national scale if not international scale stablecoin issuer such as Circle. So we're supportive of that recommendation. Again, there's a lot of devil in the details obviously, but behind that and there's a lot of I think significant issues, some of which are noted in the report as well about, you know, what a full reserve dollar digital currency model like this looks like, what are the risks, how does this interact with the public internet and related technology.

So there's a lot there but I think at a high level we do think that. And maybe just as a final comment on this topic and I'm happy to drill into any details, is, you know, when we started this project and we launched this over three years ago, you know, we worked with banking regulators, payment system regulators, throughout the country to build a product that worked within the fintech laboratories of the United States, which today are at the state level. PayPal, Square, Apple Pay, so many innovations

that we take for granted in terms of digital money have really been in that fintech laboratory of state banking supervisors.

And so we've had I think good regulators, we have a framework around money transmission technologies, and I think that really was the appropriate place to start, and that is how we are regulated today. But as these go from, you know, 30 billion to 100 billion to 500 billion in circulation support, potentially tens of trillions in dollars of transaction value and become embedded in not just financial market activity but deeper in the real economy and commerce, I think the stakes are a lot higher and I think that's part of what you see in the report is a recognition that these technologies based on network effects, user bases, other things, can grow really, really fast, like other things, like messaging apps grew really fast, or transportation systems, like Uber grew really, really fast. And so I think there's a recognition of, you know, this could happen really quickly. And if that did it could really have an impact on the financial system and real world economy and so let's get out ahead of that.

So I think in some ways we're seeing a desire to kind of upgrade from the fintech laboratories of the states to the Federal level in a technology as fundamental as stablecoins.

MR. KLEIN: So I think as I read the report you could be a state chartered bank or a Federally chartered bank, an issue under IDI under the Treasury's proposed legislative framework. You could not be a credit union. So it's not really all insured depository institutions, its really all banks and thrifts because then your holding company would be regulated by the Federal Reserve.

MR. ALLAIRE: Right.

MR. KLEIN: Which would then be empowered to put in separations between banking and commerce. Which get to the core of this second recommendation that I would like you to respond to. So I have you down as yes in agreement with Recommendation Number 1, become a bank.

Two, this is the PWG report, and I quote "To address concerns about payment system risk in addition to the requirements for stablecoin issuers, legislation should require custodial wallet providers to be subject to appropriate Federal oversight. Congress should also provide that the Federal supervisor of a stablecoin issuer with the authority to require any entity that performs activities that are critical to the functioning of the stablecoin arrangement to meet appropriate risk management standards." Agree or disagree?

MR. ALLAIRE: I think there's components of that I think may make sense, and I think there's components that are very problematic. And I think part of this really, you know, kind of connects to the nature of this technical innovation.

So what's extraordinarily powerful about digital currencies like USDC and stablecoins as we talk about them, is that they exist on the public Internet. And the underlying infrastructure that they're built on top of, these block chains, are basically operating systems that exist on the public Internet. And they're operating systems that are not centrally managed and controlled.

So when you think about, you know, operating systems today, like you have an operating system on your phone, you have an operating system on your desktop computer. As a business you might put your software out in a Cloud provider like in Amazon and host your software with operating systems there.

Block chains are like a new operating system on the Internet. And they're designed to be extraordinarily tamper resistant, resilient, decentralized, much like the Internet was designed to be this resilient decentralized infrastructure.

Now that technology, when you connect something like a dollar digital currency to it, it means that that digital currency kind of exists everywhere that the Internet exists. And like the open Internet, which today is, you know, I think the power of the open Internet is something that we all take for granted as the air we breathe, which is that anyone can connect a device to the Internet and kind of connect to any other device on the Internet and conduct an incredible array of activities. These public block chain networks provide these operating systems and economy infrastructure for an incredible amount of interactions.

Now if you take something like a stablecoin and you put it on that infrastructure, the power is the open network. The fact that software makers, hardware makers, regulated financial intermediaries all around the world can connect to these stablecoin protocols, is an enormous amount of its value. It's what makes it possible for a digital currency like USDC for someone to settle a transaction at the speed of the Internet, with the reach of the Internet, at a fraction of a cent. And I think to use an overused phrase, we don't want to throw the baby out with the bathwater.

And so in a scenario where you say well, any wallet that an intermediary is responsible

for should be under like the Fed supervision. I think it's sort of like saying anyone who wants to, you know, run a mail server, should be under the SEC supervision. And that is sort of patently absurd to us today but I think if you went back in time to when the Telecommunications Act was getting passed and when people were thinking about what licenses looked to perform said communication activity, I think there was sort of we had this structure of supervision that is very country specific, very domain specific, but the open Internet kind of created a different set of expectations and capabilities.

So I think that that's challenging. I think it's challenging with how this works today and cuts against the grain of sort of the fundamental value proposition innovation here. Now I guess what I would look for is really to I think probably underneath that goal or that suggestion, is a set of concerns. And how do you address those concerns? So in the United States today, for example, we have Treasury rules for firms that are involved in being custodians of convertible virtual currencies. Those are Treasury Department rules if you are a custodial wallet in the United States you must register with FinCEN. You must have a BSA AML program, you must conduct KYs, you must do transaction monitoring and all these certain --

MR. KLEIN: Those are series of anti-money laundering laws and regulations enforced by the Financial Crimes Enforcement Network, FinCEN. Keep going, I just want to --

MR. ALLAIRE: That's right. And I think if you're providing that as a service to institutions or individuals, you may find yourself as a regulated money transmitter and therefore also have legal obligations to register with banking regulators throughout the United States. And be registered and be supervised and be licensed.

And so we have a structure today which requires custodial wallets to be regulated. They are regulated at the Federal level, by FinCEN, and IRS, and they're regulated at the state level as well. And so there is regulation there. I think, and that's effective.

Now if what they're getting at is they're say custodial wallets, you know, there should be some national license for that, that it suffered from the money transmission statutes that we have today, that's a discussion to have. But I think that the notion, the deeper notion here, which is in the comment that every entity that is involved in it should be, you know, subject to sort of indirect supervision or direct supervision sort of, I think that's very, very challenging. That's like, you know, sort of saying, you know,

I'll give a real-world example. Most consumer banking today happens through mobile apps and through Web applications on computers. And underneath that there's a lot of pieces of the ecosystem, right? There's Internet service providers, there's, you know, there are companies that run Web hosting, there are companies that issue digital certificates for securing the Web sites, there are, you know, so many technology components to delivering that. But no one is suggesting that like the Feds should supervise ISPs because banking is delivered through Internet software.

And so I think the same thing here, we have to really figure out what are we really talking about? Are we talking about here? Are we talking about financial intermediaries and their conduct, or are we talking about pieces of the technology architecture?

MR. KLEIN: Let's drill into that. Because I think what they're saying is that essentially, to use your example, the Federal regulators are empowered to look at third-party vendor management. And the exact line that the PWG says to meet appropriate risk management standards.

So it's not that the bank regulator goes into the Web host --

MR. ALLAIRE: Yeah.

MR. KLEIN: -- or goes into the third-party provider.

MR. ALLAIRE: Sure.

MR. KLEIN: But that if your vending service is to a bank that are critical to that bank's operation, then the regulator has the authority to make sure that you as the critical intermediary provider are meeting appropriate risk management standards. Your system isn't going to have an out, I mean.

MR. ALLAIRE: Yeah. I mean conceptually that all makes sense. Right. So we run, you know, fairly just as a company, right, fairly significant enterprise risk management, information security management, and as a regulated firm, have various, you know, cyber requirements and so on.

I think the tricky part here is really the fact that digital currencies, like stablecoins, run on the public Internet. They depend on the public Internet; they depend on public infrastructure that is not operated by any company. It's not operated by any government. Just like the Internet itself is not operated by a country or a government.

And it's the first time ever that fundamental economic and financial infrastructure is actually outsourced to the Internet to decentralize infrastructure on the Internet. That's not something

that, you know, the, you know, CPMI or PFMI standards, you know, these international kind of standards for payment market infrastructure and other things have ever contemplated. They've just never contemplated the fact that you could have, you know, direct peer to peer value exchange over a public Internet infrastructure.

And so my own view is I think that this is ultimately right, we're thinking about resilience, risk management, infrastructure security, reliability. And I think this is a process where banking regulators in particular, and the standards, the enterprise risk standards that they expect, will need to come up with an approach to financial institutions that are interacting with these public networks.

It's no different than saying I'm a bank that's going to provide a way for my customers to store and transmit Bitcoin. It's the exact same issue, right. Well, who runs the Bitcoin network? Well, a decentralized network of miners run the Bitcoin network. Well, how do we supervisor them, I mean you can't supervise them. So it's the same kind of issue.

MR. KLEIN: So let me say that because Neha Narula, who is an expert on this at MIT and is integratedly involved with some of the constructing that's occurring upon the Federal Reserve's potential to create a central bank digital currency. She wrote on a recent piece "The block chain itself might be at risk if a stablecoin which runs on it becomes too big, especially compared to the monetary base of a block chain's native token. stablecoin provider can have influence on the block chain's governments by only honoring the version of the stablecoin on one side of the block chain for it, for example, even if it's not the side that most block chain users prefer. Or a stablecoin issuer could chose to honor tokens on either side in different ways." She goes on to list other examples.

You know, how would you respond to Neha's concern about this very block chain nature that you raise as a reason why the regulatory structure proposed by the PWG may be problematic. She's pointing out that that very structure creates opportunities for a stablecoin issuer to engage in a way that could require greater supervision and regulation. What would be your response to Neha?

MR. ALLAIRE: Yeah. I know Neha well, I've known her for a very long time, and she's an extraordinarily bright and thoughtful, and I know she's obviously thinking about new kind of crypto money transaction architectures for the Fed as well.

So I think, you know, again, coming back to the analogy, and I actually think it's more



than an analogy, I think it's more almost factual that block chains are like operating systems. And there's a lot of intense competition for these new Internet operating systems. And these new Internet operating systems are usable for many, many types of applications. A stablecoin is one application that you can build on one of these operating systems. There are games, there are social networks, there are other fiduciary applications, there are commerce applications, there are digital intellectual property applications. There are so many different applications. And we haven't even thought of the 500 that have not yet been, you know, developed.

So really important infrastructure and it is a Web 3 kind of concept, this new infrastructure layer of the Internet is what we're building on. Now we have chosen to take a multi block chain approach because there is this competition and my sort of philosophy, and our philosophy is, and if you have a protocol for dollars on the Internet, like USDC, that you want your digital dollars to be cross platform. It would be like saying you can only use your music on an Apple device. You want to be able, you know, use your media or conduct your communications whether you're on a personal computer, on a Web browser, on an Apple device, on a Sony device, whatever that is. You want cross platform, it's a concept that I think consumers intuitively understand today. And I think the same thing holds for digital money and for digital currency.

And so being multi block chain is essentially that kind of being multi-platform. Now it may be, and I think it would be totally appropriate, for, you know, when a stablecoin becomes very large in terms of its role in economic activity, to sort of say there's a whole series of requirements for what are deemed to be kind of acceptable public network infrastructures to run on top of. Or if there are newer public infrastructures that emerge that are supported, that you've got very robust risk management standards around issues that could occur, resolution, other things.

So I think there's a lot of work to do. As I like to say, you know, there's no OCC exam manual for running a digital currency on a block chain in a bank. Well, there's going to have to be. We're going to have to come up with that exam manual, we're going to have to come up with how to deal with those scenarios. And the answer can't just be it's open to the market. These are market conduct issues, these are risk issues, these are -- ultimately, I'm encouraged because I think part of what you're seeing reflected in the PWG report is an understanding that this is a new architecture for money and that this is a

new financial market architecture, and the answer is not just slam it into the old one. It's actually, no, there are some distinct entities and roles and risks, and let's get those out on the table and figure out the right way to think about risk management on it.

So I'm actually, I'm encouraged by the fact that that's thematically something that the PWG is focused on. I just think at a high level if you just take that descriptor, there's just so many devils in the detail and there's so much that has to be considered and worked through. But I think constructive engagement at an industry level and at an ecosystem level can kind of ultimately lead to good outcomes on that.

MR. KLEIN: So let's drill down because you really do tease in to the third of the three PWG recommendations, which I'll quote. "To address additional concerns about systemic risk and concentration of economic power, legislation should require stablecoin issuers to comply with activities restrictions that limit affiliations with commercial entities. Supervisors should have authority to implement standards to promote interoperability among stablecoins. In addition, Congress may wish to consider other standards for custodial wallet providers such as limitations on affiliation with commercial entities or on use of user transaction data."

So as I read that, there are three recommendations. One, enforce the separation of banking and commerce on stablecoin issuers who now have fallen under the banking side of the banking and commerce ledger, right? One of the core problems, as you point out, is the U.S. defines banking and commerce, payments is not part of the bank definition, legally, in the U.S.

MR. ALLAIRE: Right.

MR. KLEIN: But because banks have dominated payments for so long it's just simply been assumed and as fintech unbundled --

MR. ALLAIRE: Yeah.

MR. KLEIN: -- payments, they have been shown to be part of the commercial side of the ledger. So, one, separating banking and commerce in which Circle would find itself on the bank's side. Two, the authority to implement standards to promote interoperability among stablecoins, I think I heard you say yes to that.

MR. ALLAIRE: I'm going to address that, yes.

MR. KLEIN: Okay, hold on. And then three, standards for custodial wallet providers, including their affiliation with commercial entities and data usage on consumers. So these are kind of three recommendations in a third. Please respond to each of them.

MR. ALLAIRE: Yes. So if you kind of peek beneath the surface on that, clearly components of this are very specifically directed at the company formerly known as Facebook. And very, very clearly directed at that. And I'm sure the angst and the anxiety that exists with a supra national scale Internet entity kind of usurping fundamental financial market or payment infrastructure, that's obviously provoked a lot of concern in the market. And so I think pieces of that are aimed at that.

You know, I guess if you kind of break those down I think if you accept that the issuance and the kind of administration and operation of a dollar stablecoin is a banking activity, as we do accept, then being on that side of the ledger, as you say, and the separation of commerce from that, I think that makes sense. I think that component makes sense.

Now I think when you get to the next level down, which is today, you know, money transmission law in the United States in particular, and in many other parts of the world, eMoney law, payment systems law, all these things do allow non-banks to operate payment systems and can operate payment technologies and to facilitate it.

However, the underlying, you know, say core banking, the underlying money itself is not something that's allowed, so non-banks work with banks and, you know, serve as examples of that today, we work with banks to access the Fedwire system and other things, right?

So I think that clearly, and that's where I'd sort of say custodial wallet providers look. If I'm running a payment application and if I'm Google and I run Google Pay, and that's a payment application and it's a wallet, or I'm Robin Hood and I have a wallet, or I'm coin base and I have a wallet, or I'm PayPal and I have a wallet, those firms should be able to have wallets and operate services that include payments services as part of that. I think the notion that you would not allow all these different types of firms to compete in that arena would be extraordinarily anti-competitive. I think it would be extraordinarily poor for actual outcomes for society, individuals, and others. And so I don't think that's what's intended but if you read it really, really closely you'd say no, no, actually, you know, you can't be in those businesses necessarily.

So that would be like an enormous about face in the face of what has been an extraordinary amount of fintech innovation in the United States. So I think, again, devil's in the details when what are we getting at with this kind of custodial wallet separation of activities thing. And I think an attempt to, in a legislative way, I mean is it really just a carve out for Facebook, is this really just an attempt to say we really don't want Facebook to have anything to do with money at all and so we're going to have a law that says if they're dealing with stablecoins and they have a wallet and they're associated with a commercial non, you know, non-financial activity, that it's banned? I mean that's kind of absurd.

And so again, I think there's like go beneath the surface, what are we really getting at there to define that.

MR. KLEIN: One possibility is that they're laying groundwork for the adoption of a Federal Reserve digital currency but don't want to go the following step of allowing people direct access to Federal Reserve accounts, which has been proposed by Morgan Ricks, Levin Minard, some academics, bills up on the hill so there's a lot of energy around Fed accounts. And so they want the wallet intermediary to be a banking subsidiary to avoid having the central bank provide its own Fed account as it links to its own central bank digital currency. This is somewhat speculative, I don't want to get meta in my analysis, to use a bad pun, and build off of your point. You know, to build off an earlier point you made about the speed of this. I've done some research on China's payment system.

MR. ALLAIRE: Uh-huh.

MR. KLEIN: And they leapfrogged our silly cards and swipe fees and all the rest and just went straight to QR codes run by Alipay and WeChat, the Chinese Facebook, and Chinese Amazon, and which were way more efficient and faster than the very Fedwire you mentioned.

MR. ALLAIRE: Sure.

MR. KLEIN: And, frankly, gave great benefits to their consumers. And then the Chinese government is now clawing them back systemically and introducing a central bank digital currency.

You know, what's your view on all of that? CBDC, on this digital wallet question, what would happen if they took their own regulation and applied it to credit cards and Fed accounts and Visa and all this stuff, as you're kind of pointing out?

MR. ALLAIRE: Let me look. There's a lot on this topic and we should probably spend a

few minutes on it. I think, you know, first I think it's worth noting, laddering off what you shared about China, which is you're absolutely correct. The attempt or the explicit activity of creating an ECYN, which is not --

MR. KLEIN: Electronic Chinese Yuan.

MR. ALLAIRE: Yes. Electronic Chinese Yuan, right. Is a direct response to the very significant large scale market power that exists, private market power that exists in payment systems in China. That is a direct response, and the desire for there to be a third way, a defined public option so to speak. And I think also very much tied into a recentralization of power under an authoritarian regime that seeks to have missions and control and to extract value away from the private sector back to the public sector. And we can all talk about that not just across the financial system, other areas as well.

What I find incredibly disconcerting, frankly, is the degree to which policymakers in the West are enamored with what China is doing. And there's almost a, you know, how do we out-China China, how do we out-China China. And I think it's very dangerous in my view. What may seem fashionable, which is to nationalize infrastructure, put it under government administration and control and government development, and push to the side the private sector, I think is extraordinarily dangerous for the West. And it is trying to out-China China. And I think it's very problematic.

I think what's interesting about the advance of electronic money in the world is that the advance of electronic money in the world has overwhelmingly been through private sector innovation. Through consortiums, private sector actors, building new form factors, new technological form factors and building standards in interoperability and driving that at scale, whether it's the international wire messaging system, the advent of Mag stripes and card readers, and eventually the ledger system that supported what we think of as the first real scale form of electronic money, to more common advancements that we know of today, like PayPal and Apple Pay and things like that, and this is around the world.

And the private sector has played an enormous role not only in payment system innovation, but it's also played this incredibly enormous role in the issuance of money itself, right? The vast majority of electronic money we deal with today is private issued money, it's not public money, it's privately issued money, regulated privately issued money.

But I think what I've done with this is simply to say there's a set of I think ideals which I think are actually enshrined on the Internet itself. Ideals of openness, of free competition, of open intellectual property of decentralization as a value, something that pushes power and creativity and other things out further. Those are values, and those are values on the Internet, and I think Western liberal market democratic and similar ideals have actually given rise to an incredible amount, not just in market economies, but also in what the Internet is for us today. And I actually look at technologies like stablecoins and public block chains and the smart contracts and all the stuff that's happened there as incredible and beautiful examples of what happens when you embrace that set of values, of open intellectual property, of decentralization and of private sector innovation.

And I don't think we want to miss out on that because that's happening at a really fast pace. It's happening at an incredibly fast pace. And I think the importance of the PWG report is this, it's acknowledging that what's happening on the open Internet and what's happening in the private sector is growing really fast and it's going to get even bigger, and it is something that needs to be regulated.

But I think, you know, I also like to point out is people sort of say we're behind China on this. Actually, it's actually the opposite, we're way ahead of China. China's got a Beta test of a government-controlled thing that's had tens of millions of R&B, tens of billions of R&B of transactions, I think there's like \$5 trillion of stablecoin dollars, dollar, U.S. dollar stablecoin transactions and it's growing like crazy and tons of companies are connecting to it. And so we're actually winning. The West is winning the digital currency space race right now.

MR. ALLAIRE: So it's interesting you say that because you'll find no bigger proponent of the failure or arguing the failure of the Federal Reserve and the U.S. government to make money move faster in the United States for people. I mean the scariest part about Halloween for me is if you deposited a payment on Friday in your bank account, October 29th, it wasn't available until Tuesday, November 2nd.

MR. KLEIN: Right.

MR. ALLAIRE: And digital currency, you know, it's 400 milliseconds and it doesn't cost you a penny.

MR. KLEIN: That's right. Instead, it costs billions of dollars in \$35 overdraft fees, in check

cashing fees, 70 percent, my research has shown, 70 percent of check casher customers have bank accounts in the U.S. because the U.S. banking system fails to work for them. And decades of Federal Reserve studying of faster payments has led to very little benefit as the very banks the Federal Reserve and the OCC regulates makes tens of billions of dollars in fees off of that same product and there's a very real tension between the central bank as a payment operator and a payment regulator and a bank regulator.

But I can't let you off the hook, Jeremy, because you talk about all these great innovations and I see a lot of that point, but there's some pretty big spectacular failures that occur in this caveat emptor private world.

MR. ALLAIRE: Totally.

MR. KLEIN: You know, the largest stablecoin issuer, Tether, has recently had a \$1 billion bounty placed on it by a private short seller, saying show us your assets that back this coin. I know you guys have put out statements written in response to that and then people have quiveled with your statements, your definition of commercial paper, how fully dollar denominated backed you are.

You know, I don't know if you want to discuss the million dollar bounty on Tether or if you want to answer a question that says something to the effect of it every stablecoin issuer had to reveal where there money was, are you confident that every single one of them on a platform today would be fully dollar reserved, or do you think that if you opened that kimono or peered behind that curtain, you would find several stablecoin issuers who are not being fully transparent, and for whom are presenting real risks to their users.

MR. ALLAIRE: Absolutely. I mean look, I mean there's a reason why USDC is regulated and supervised by banking regulators under the same laws that supervise the balances you hold on PayPal or with Apple or with Square. Which is a full reserve, one for one redeemability, with consumer protection laws that protect you from insolvency, that specific supervise from compliance, any money laundering, information security standards, all these things. Those things have applied to us since day one. And those statutes exist so that people have confidence in these electronic payment systems. And I think that's really important.

There are absolutely other stablecoin issuers who ignore that entirely. And who we don't

know the answer. And so I think what it speaks to is in the United States for firms that are domiciled in the United States, that are operating in the stablecoin space, we're all under these regulations. And we've been under those since day one.

Now I think there are sort of philosophical discussions of what is the appropriate liquidity on a scored value of electronic money instrument, is it cash and cash equivalents, or is it something outside of that? The regulators in the United States who supervise all of the major fintechs out there have differing definitions of what is permissible for those underlying dollar denominated assets that need to be liquid for users for these payment systems. There are different definitions.

We've based on market feedback and based on really where we see things going at a federal level and from an ultimately bank charter level. We've opted for the most conservative position possible there. But it's all under a regulatory framework. It's not like we're just making these decisions in a vacuum, we have to do --

MR. KLEIN: Oh, but let me push back on this regulatory framework, right? Bernie Madoff operated in a regulatory framework. I think he was even elected to, you know, strong roles of self-governing and self-regulatory operations. A lot of people have compared stablecoins to money market mutual funds. Actually, one of the shortcomings I found in the PWG report is they don't even mention money market mutual funds in the entire report. Right? I kind of read the thing and go wow, I can't wait until these guys find out that there's a multi trillion-dollar business called money market mutual funds. What are they going to think about how they are regulated? Right? Because they're promising, in essence, a one to one, you can't lose money, but we'll give you interest.

MR. ALLAIRE: I mean clearly if you're offering an investment contract where you're saying to someone, invest your dollars and I will hold them and give you a return, that's an investment contract and that's a security and that's pretty clear. I think when you have a balance with Pay Pal, or you stored value in a USDC digital currency or you're using Apple Pay cash or you're not making an investment in that case. You're not looking at the investment and return on that investment and so on. So that's why money transmission law and the statutes around that exist.

And, you know, I mean I think if you're questioning whether the State of New York and California and Texas are effective examiners and the other statutory, you know, fiduciaries that are



involved in supervising these regulated financial institutions are not effective, that's a different question.

MR. KLEIN: So, no, I'm asking a different question. I'm going to ask a question because this kind of came up in terms of a paper Tim Massad, who was the Chairman of the CFTC.

MR. KLEIN: Yep.

MR. ALLAIRE: Another market regulator, and who published his paper on stablecoins in Brookings. And Tim writes "Although I have compared stablecoin risk to those of money market mutual funds, I do not think that is the best way to regulate them. They are fundamentally payment devices and not investments. Classifying them as securities would also appear to pre-empt the systemic importance determination as part of the payment authority given under the Dodd-Frank Law that talks about the definition of payment settlement and clearing activity for purposes of --" He goes on to write and I'm paraphrasing him here. That the financial stability oversight committee, the so-called Jedi Mind Counsel -

MR. ALLAIRE: Sure.

MR. KLEIN: -- of bank regulators who interestingly did not put out this report even though a majority of their members did under a different organization, you can guess which ones weren't included in going under A verse B. But the FSOC has an authority and the PWG report talks about their authority to do designation.

Tim is making the argument that these are not money market, that they're not really an investment vehicle and shouldn't be treated like that. And I would contrast him the question that came in from the audience, which is do you agree, and you can hashtag stablecoin to ask your own question on this. And it's do you agree with SEC Chairman Gensler's comments that a majority of stablecoins are securities and thus under SEC jurisdiction.

You have Massad over here saying that analogously you're offering something that's an analogy that money market mutual funds, particularly as it relates to run risk. And then over here you have the SEC chairman, who has jurisdiction over money market mutual funds, arguing that most of your issuances do fall under them under current law. Where do you fall on this?

MR. ALLAIRE: Look, there are actually hundreds of different stablecoin projects out in the digital assets world. And there are stablecoins issued by financial institutions in Indonesia, in Europe, you know, in Brazil, you know, in a lot of markets. There are a lot of stablecoins. There are many

stablecoins that are issued algorithmically by software that are collateralized with different crypto assets that there is no corporate issue or there is just software. They said there's a huge range of things that are out there.

I think, and I don't profess to be an expert on each and every one of those in all the different jurisdictions in which those are issued. If a financial institution's got authority from the payment and electronic money regulators in Indonesia to launch a ruby token, I would say that's an Indonesian matter.

Now if you're issuing something that is asset backed in the United States that is providing a dollar payment technology, you are either operating under the laws that exist on electronic money and payment systems in the United States or you're not. And so I think the first question is not are these securities are not, I think the first question is are these legally operating under the regulatory framework that we have in place today for payment technologies.

Now are there potentially stablecoins, dollar referenced stablecoins that are conducting investment products in some way. You know, that's an open question as well. Again, I don't profess to be an expert on every single project that is out there.

What I would say is, you know, a dollar referenced, dollar asset backed stablecoin that is trying to operate within a compliant framework that exists in the United States today and say is backed by Bitcoin loans and obligations, would not survive the statutory treatments that exist for money transmission in the United States. They wouldn't, they would be outside of that.

So I mean look, I think very clearly, you know, there's a reason why the good actors and the regulated players in the United States have been operating under well defined, you know, well defined statutes and payment systems since day one. To me there may be stablecoins that are, you know, backed by baskets of securities. There may be stablecoins that are pegged to stocks and bonds and other things that are stable against the reference price of a stock. Those things probably are securities, they look a lot like securities.

So I think there are clearly things that you could put over there in the dollar stablecoin space, you know, and certainly the space that we've been operating in for years now, you know, I think it's pretty cut and dry what these things are.

MR. KLEIN: So let's talk a little bit more about stablecoins. We only have a little bit over 10 minutes left. Talk a little bit about what your company's doing and talk a little bit about some of the innovation and potential that you have to be more inclusive. I kind of, you know, note that money market mutual funds, who pose a lot of the same run risk that the PWG report is so hyper conscious of, have been bailed out in each of the last two recessions by the Federal Reserve. And that, you know, it doesn't escape my attention that I mean a staggering amount of money market mutual fund investors are old and white. And they get bailed out repeatedly in crises.

Stablecoins, it's hard to know who's in them, to some degree. I'd love to know what information you guys have. My own observations seem to be that they skew younger than money market mutual funds. And the correlation with age and race in this country is astounding as well. One of my favorite new statistics has to do with modal age. And most people, when they remember stats, remember me, median, and mode, but we only ever talk about median average or median middle. We don't talk about mode the most frequent.

But if you put all white people in America in a room and you lined up by age and birth year, there'd be more people under the age of 57 years old than any other age. If you did the same for African Americans it would be 27, and if you did the same for Latinos it would be 11. Younger people are far browner than older people. And if you believe younger people are more into crypto currency, trading assets, have coin-based accounts or other digital wallets, are dealing in Bitcoin Ethereum, Tether, Circle, whatever, which is certainly my belief and there's some data to support that, although data is difficult to come by in this space, you can't help but notice that this is a younger crowd inherently more racially diverse.

Talk a little bit about how that is and talk about, you know, what would just, you know, what lessons if any have regulators learned from their decision repeatedly to bail money market mutual funds in the form of a crisis or a run, and what might happen, you know, if there are crisis and run in stablecoins. Would regulators treat them the same as money market mutual funds?

And so talk a little bit about that and, you know, and take a moment, I realize we've jumped straight into the policy. As a bit of a policy nerd, I haven't given you a moment to breathe and talk a little bit about the company and who you guys are reaching and what you're doing.

MR. ALLAIRE: Sure.

MR. KLEIN: So it's a little bit of a grab bag to respond to here towards the end but there's some important --

MR. KLEIN: Yeah, I appreciate that, Aaron. You know, I would start, you know, with a couple high level thoughts on this. I'll separate out the bailout question for a moment and because I think do it does kind of connect back to the earlier discussion very, very clearly.

But, you know, I think our view, and really I helped found this over eight years ago, and I think the insight that we had when we were starting this was that this new technology of cryptographic money and of the public Internet, you know, transaction and other network, block chain networks, we had the insight that those could over time, once they became scalable enough and they could handle a lot more transactions. And once they became what I call extensible, meaning like you get not just have a Bitcoin but you could have other referenceable assets and you could write code that, you know, automated transactions around them, smart contracts, things like this. That that would give way to and ultimately get to a point where we could have protocols for money on the Internet just like we have protocols for information and communications and data on the Internet.

And that could work at Internet scale. And that once that worked at Internet scale, once you had, as I call it, the HTTP of money, HTTP is the protocol that is the Web and how we do this. Once you had that the merit would unlock an incredible amount, right. It would, in our view ultimately bring the cost of storing and moving value to zero. Just like the cost of storing and moving data, it's effectively zero for almost any person or business today.

It would open up the reach to anyone in the world that could connect to the Internet. And it would bring those costs down. Now we're on our way there, we're eight years into the journey, the technology to make that possible is really arriving now. We think in the next two to three years it will be at a point where a billion plus people could interact with it, you know, safely and easily on the Internet, or more.

And that has incredible potential to obviously, from a financial inclusion perspective, be extraordinarily powerful. But also just returning value to the real economy in terms of the taxes and time delays and other things that go on with money today.

And then more importantly, we don't exist in a domestic context only, we exist in a global context. Everything we do happens in this global context. And commerce itself, as we're seeing with supply shortages and other interdependencies in the global economy, commerce itself, Internet native commerce, all this is just growing and growing.

And we need a new economic infrastructure that is built on the Internet in this age to do that. And I believe that digital currency and block chains provide for that. And I think that that's going to lead to I think very, very significant innovations in the nature of commerce on the Internet. And that will be value creating for the firms and the users and the individuals and the households and others around the world. So I really believe this is contributing to something much, much larger.

And, you know, we're making good progress there and I think if one say looks at this narrowly through the lens of payment systems, I think it's actually missing the picture because in our view it will be like kind of look at the Internet through the lens of long-distance telephone providers, which is maybe what people did in the early days of the Internet. If not, that's not a helpful way to think about what the Internet did for communications. And I think similarly if you're looking at this narrowly through the lens of payment systems, you're missing the picture of a fabric of commerce and financial activity that could happen intermediated on the Internet in these new ways.

So I think that's what I think is at stake. And actually, is coming back to the policy side for a moment. I think this is like fundamental national economic competitiveness stuff. And I think one of the really important missing pieces of the policy discussion, it's all been about the risks, the run risks, the financial crime risks, which are real and those are real so we have to deal with them, but we've got other risks, which are economic competitiveness risks, national security risks. And national security and economic competitiveness are kind of two sides to the same coin in some respects. And how does the United States ensure that the dollar and dollar digital currency and the economic infrastructure of block chains, which are a profound innovation, how does it ensure that the United States is leading in advancing that. Because that's in the interest of the country, and that's in the interest of households and firms within the country.

And so I feel like we need to really start to shape the debate a little bit of how do we take advantage of all this infrastructure that's happening and support it and build on it and make the United

States a champion for this advancement. And so there's more work to do, you know, to educate on all that.

MR. KLEIN: There's a huge mistake policymakers are making, right? Millions of children went hungry when the COVID economy shut down. Congress responded radically quickly by authorizing initial stimulus payments by the end of March. Congress passed a law putting fifteen hundred bucks out there before the unemployment numbers were even released. There are a bunch of people that want automatic policy and just let the stabilizers work. And they don't realize Congress authorized the money before even the data were available, right? Because common sense showed you that March 31 was nothing like March 1.

MR. ALLAIRE: Right.

MR. KLEIN: And there are children starving.

MR. ALLAIRE: Yeah.

MR. KLEIN: And guess how long it took that money in a pandemic emergency, to reach people, right?

MR. ALLAIRE: Yeah.

MR. KLEIN: Nobody got money before April 15th.

MR. ALLAIRE: That is awful, yeah.

MR. KLEIN: Millions of people didn't get their money until September.

MR. ALLAIRE: Yeah.

MR. KLEIN: Right? So this isn't just about economic competitiveness. Now how many policymaker's children went hungry?

MR. ALLAIRE: Right.

MR. KLEIN: How many people, you know, watching this Webcast's children went hungry? We just assumed the money was coming. To this day the child tax credit, one out of eight families is waiting on a paper check. This is the single biggest way to alleviate child poverty in America. And the U.S. Treasury Department is sending paper checks --

MR. ALLAIRE: Yeah.

MR. KLEIN: -- in the mail, you know.

MR. ALLAIRE: I wholeheartedly agree with you, and this is clearly a public/private sector opportunity, right. Not just a public sector opportunity. It's an opportunity, you know, for advancement in the private sector in support of the public policy objectives.

MR. KLEIN: I wish the U.S. Treasury Department would contract with anybody that wasn't the Federal Reserve because the Fed can't get you their money any faster.

MR. ALLAIRE: Right.

MR. KLEIN: Right? There are all these ways to get the money faster, right?

MR. ALLAIRE: Yeah.

MR. KLEIN: But we refuse to -- it isn't a public/ private, it's a public/public/public. And so, you know. And listen, I'm all for a public system. If we could have built a better system and had a better system, the UK has a better system, Singapore got their money out the same afternoon in an hour, right? It's not as if this technology doesn't exist or that only the private sector knows how to implement real-time payments. To the contrary.

We're coming up to the very, very last minute, so last question. In closing I want to ask you because, you know, I have to give my hat off to you. Eight years ago, you came up with this idea and you founded this company, and I don't think anybody would have credibly thought that eight years later there'd be the President's Working Group on Financial Markets dedicating a report to the issuance of stablecoins and all this.

Give me eight years in the future. You know, what is going to be the real change if this system is well regulated and allowed to advance. So, you know, because you can see a mistake in either direction you've laid out. It can be overly regulated, it can be underly regulated.

MR. ALLAIRE: Yeah. Yeah. So equilibrium, it's well regulated and can achieve main street scale. I mean look, I think there are a number of things. I think one is that the cost of moving money just becomes zero. And that means the cost of receiving a payment as a business, a small business, a merchant, goes to zero. It means the ability to transact internationally costs approach zero and has the speed and convenience of the Internet.

Just like we've taken for granted that we can have a video call with anyone anywhere at no cost. We will take for granted that this value moves that way, in that same kind of way. That's I think

very significant.

I think, you know, a second piece is that in particular as we think about the internationalization of this technology, it will become, you know, just as seamless as we send an email or a text message, and we don't think about what country someone is in, right. As I like to say, when is the last time that you sent a cross border email? The concept is just absurd, right, will be an anachronism and will seem silly, right? It will be like, right, well it's just the Internet. Right?

So I think things like that will occur. I think the more dramatic things though are going to come from the ability to take advantage what is often referred to as the programmability of money. Once money in the form of dollars or euros, let's just about ours for the moment, actually becomes a native type of data on the Internet that can be programmed with contracts and those contracts can be executed and enforced by machines on the Internet, aka smart contracts. Once you develop that at scale I believe it can lead to very significant transformations in what we think of as capital markets activity in access to credit, in the provisioning of lending on a global basis, I think that that will lead to not just more efficiencies and a lower cost, but it will lead to more access to these types of financial services for firms and households all around the world.

So I think there are deeper things that can happen with the nature of capital markets and what is what we think of is commercial banking and things like that today can shift into this and bring the kind of Internet scale, new and economic benefits, and access benefits that we've seen in so many other industries, it can bring that into finance.

And so I think one can see strong progress towards those in the next eight years.

MR. KLEIN: Well, some of those sound very exciting to me, particularly the allocation of credit on a much smarter system than, you know, did you get divorced or have a medical emergency six years dinging your made-up three-digit FICA score that's made up to look like an SAT to pretend like it's relevant.

MR. ALLAIRE: Right.

MR. KLEIN: On the other hand, I'm terrified about zero transaction costs, because then how am I going to get my credit card rewards?

MR. ALLAIRE: There are plenty of ways to build incentives and loyalty. Those aren't



necessarily tied to those.

MR. KLEIN: I mean those are mostly currently come out of large swipe fees paid by merchants and lower income people.

MR. ALLAIRE: Yeah. So, I think, again, the nature of affinity and loyalty and how that's operationalized, there's plenty of room for innovation in that. That goes beyond what we think of as, you know, these swipe fees and other things. I think crypto technology actually can be a pretty important piece of that as well.

MR. KLEIN: Well, that's a perfect note to end, and maybe bring you back for a second conversation on that because I'm really interested in that, in the future.

So, I just want to thank you very much, Jeremy Allaire, the CEO of Circle, for joining us today. And thank you all and wish everybody a wonderful afternoon.

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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.

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