

THE BROOKINGS INSTITUTION

WEBINAR

DIGITAL ASSET REGULATION: THE STATE PERSPECTIVE

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INTRODUCTION:

AARON KLEIN

Miriam K. Carliner Chair, Economic Studies

Senior Fellow, Center on Regulation and Markets, The Brookings Institution

PANEL 1:

SARAH HAMMER, Moderator

Managing Director, Wharton School, University of Pennsylvania

Adjunct Professor, University of Pennsylvania Law School

DENNIS KELLEHER

President and CEO, Better Markets

JAI MASSARI

Cofounder & CLO, Lightspark

PETE MARTON

Virtual Currency Chief, New York State Department of Financial Services

KEYNOTE SPEAKER:

ADRIENNE A. HARRIS

Superintendent, New York Department of Financial Services

PANEL 2:

KAITLIN ASROW

Executive Deputy Superintendent of Research and Innovation,

New York State Department of Financial Services

ANDREA DONKOR

SVP Global Regulatory Relations and Consumer Practices, Chief Compliance Officer, PayPal

JACK SOLOWEY

Policy Analyst, Center for Monetary and Financial Alternatives, Cato Institute

TONANTZIN CARMONA

David M. Rubenstein Fellow, Brookings Metro, The Brookings Institution

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Aaron Klein [00:06:42] Good afternoon. My name is Aaron Klein. I'm the Miriam Carliner chair and senior fellow in Economic Studies and here on behalf of Brookings in the Center on Regulation and Markets. It's my pleasure to welcome everybody in person and online to our third in our series of examining the future of crypto regulation, this time looking at it from a state perspective. For those of you who may recall, our first series looked at this from a market perspective in July with the chair of the Commodities Futures Trading Commission. Our second last month looked at this from a prudential perspective with the acting chair of the FDIC, Martin Gruenberg. And today we're going to be welcomed by the New York Department of Financial Services Superintendent Adrienne Harris to look at this from a state perspective.

A lot has changed in the last month since we were together talking about the future of crypto regulation. It goes without saying, if you tuned in, you probably kept a careful eye and if you haven't kept it a careful eye, you've probably still heard that FTX, the second largest crypto exchange in the world, blew up over the last few weeks in somewhat spectacular fashion, perhaps unexpectedly, even among the crypto critics. I think if people had been playing a parlor game as to what crypto was going to implode first, I think FTX would have been a decided underdog. But here we are, and this has changed things and it's changed things substantially. One thing it hasn't changed is Brookings's commitment to having an in-depth, high-quality conversation on these core subjects with people representing all sides of this conversation. And I think, you know, in some ways in the world of Washington and think tanks and event program, it's always better to be lucky than good. And I consider ourselves fortunate that we have not one, but two expert panels to discuss the critical issues that have been brought to light by FTX's implosion and also remain in broad daylight and sometimes a little more hidden underneath this news media onslaught about what's really going on in the space.

And the way this conversation is going to be structured in the next 2 hours we're going to spend together; we're going to start with an expert panel that's going to talk about these sets of issues from a safety and soundness and traditional regulatory perspective. Then we're going to hear directly from the superintendent, and then we're going to look at these issues from a consumer protection lens. Obviously, if the financial crisis taught us anything, it's the intricate connection between consumer protection and safety and soundness regulation. On the other hand, the way the real-world works is regulators regulate and teams of prudential regulation looking at institutions and markets from our perspective, and consumer protection from a different perspective. Some of that's even built

into our regulatory regime. It's critically important that we look at this issue from the states perspective, because the states have been at the front line of the crypto explosion in popularity.

America does not have a national money transmission license, just like we don't have a national driver's license and other services that are provided or are licensed at the state level. We have national bank charters. Thank you, President Abraham Lincoln, for that. Before that, we did not. We have a state banking system that still remains having been the only banking system in this country for many years. But we, states have been at the forefront, in part because they have the licenses and the regulatory apparatus that crypto has qualified for, in part because crypto challenges so many of the traditional boxes at the federal level that there's been pointing, partially because crypto is sought in many cases, and some states have sought in many cases to try to be the home of crypto and the home of the future. And in this conversation, I think it's critically important to ask the question of is this a good or bad thing? What is the right role of states? What's the right role of the federal government? And how is this working in the ground, particularly in light of the fact that \$35 billion company one day seems to have gone up in smoke the next?

So with that, I'm going to invite our first panel to come up. And as I introduce you, please join the stage. And we're going to start with Sarah Hammer, who's going to moderate the conversation, who's the managing director at the Wharton School and adjunct professor at the University of Pennsylvania Law School. And come on up, Sarah, and at the University of Pennsylvania and also a distinguished alumnus, having been the acting deputy assistant secretary for financial institutions policy at Treasury. Joining her will be Dennis Kelleher, the CEO of Better Markets. For those of you, Dennis is no stranger to the conversation in financial regulation on multiple fronts over multiple decades. Jai Massari will join us as co-founder and chief legal officer of Light Spark, an alumnus of the venerable Davis Polk Financial Institutions Practice Group in Washington. She's now on the front line of a company engaged very much in these kinds of conversations. And Pete Marton, the virtual currency chief from the New York State Department of Financial Services. The person at the very front line in the state of New York regulating these crypto entities. As we know, New York is the first in America with a BitLicense and has been at the forefront of leading in regulation on crypto. So with that, Sarah, let me turn it away. The floor is yours.

Sarah Hammer [00:12:19] Thank you so much, Aaron. And I'd like to say a special thank you to Aaron for having us today. It's wonderful to be back in person and to see all of you and for us to

have the chance to have a robust conversation today on a very timely topic. And thank you to the Brookings Institution and thank you to my distinguished colleagues for joining me here today. I'm very excited to have this conversation. As Aaron mentioned, there's a lot happening in the news, a lot of things to unpack and a lot of priorities on the regulatory side. So I feel sure that we'll be able to synthesize a lot of that today.

So as we all know, I think we should address the timely topic, which is the implosion, explosion, of FTX, because it fits perfectly with our subject matter today at the Brookings Institution, which is crypto— crypto regulation— and safety and soundness. And I want to acknowledge the activity and the policymaking, the thinking and the research that's been taking place over the last year and even prior to that, in the crypto space. We had an executive order on digital assets earlier this year where President Biden ordered the federal financial regulatory agencies and others to study the digital assets ecosystem. And a number of reports that have been issued and studied and are being thought about, including the recent report from the Financial Stability Oversight Council, that we'll be thinking about and putting in context today. So that report identified two primary areas of risk to the financial system related to digital assets. One is the risk of interconnections from digital assets. So, for example, the risks that digital assets infiltrated in our existing financial system may pose to the system overall, whether through banks, custodians, asset managers, insurance companies, broker dealers. And certainly that's timely as we'll talk about today in regard to FTX.

And the second being, the risks unique to digital assets, unique to crypto themselves. And so I think it behooves us to think about those two risks, but to talk about how they're interrelated as well. So that's my first question for the panel, and I'm really excited to get all of your thoughts. What are the financial stability risks of digital assets? Peter.

Pete Marton [00:14:46] Sure. Thanks for having me to the Brookings Institution. And I think it is safe to say that the BitLicense regime and the Limited Purpose Trust Charter have been somewhat validated through the events recently. I want to acknowledge first and foremost that FTX US was not operating in New York. It did not have a BitLicense or Limited Purpose Trust Company which is required for any New York entity to conduct virtual currency business activity in this, in New York State. There was very limited exposure to the FTX token, which, in order to be able to be serviced in New York, requires either the DFS to approve it on the green list or to have a DFS entity have an

approved coin listing policy that would require a self-certification of a token. In practice, no New York entity really was in that space.

So first and foremost, I just want to acknowledge that the impact, the direct impact to New Yorkers is has been in no small part mitigated through the existing controls and risk framework that New York has in place. I think more broadly, this is a moment, I think, that a lot of folks will remember for the rest of their duration in the cryptocurrency ecosystem or or perhaps less so if they choose to leave. But I would just note from a financial stability perspective, you know, this is, I think, underscoring the importance of a prudential regulatory regime.

If you look at the BitLicense enacted back in 2015, Part 200 and a lot of the same responsibilities for trust companies in New York as well, that includes capital adequacy requirements, it includes cybersecurity requirements, it requires prescriptive guardrails around anti-money laundering that were subsequently updated to the DFS 504 transaction monitoring and filtering program. That's true as well with updates to the blockchain analytics guidance we produced in April. So as we think about what are the appropriate guardrails, I just want to underscore that, you know, this is a very quickly moving space. I think New York has demonstrated its capacity to move quickly through issuance of new guidance, for example, the coin listing in 2020, Blockchain Analytics in April, the US dollar backed Stablecoin guidance in June 2022. I would note this is a very high touch space and requires that from its regulators.

To that end, you know, the virtual currency unit itself, which reports into the research and innovation division, somewhat unique structure within the regulatory apparatus. Caitlin, my boss, will be speaking later and as will be Adrienne. You know that that team now has 47 people and we're hiring aggressively and have been doing so this whole year. It includes supervision, so day to day points of contact with each of our licensees akin to kind of the risk monitoring functions you see at FINRA and other banking prudential regulators. It includes an application, a dedicated applications team that itself processes AML specialty reviews, cyber specialty reviews, detailed reviews of financial statement analyses for both our proposed applicants as well as their parent and affiliated companies, and due diligence processes for change of officers. So it's applications, supervision, and I would just underscore the importance of the on-site examination process, which itself embodies a lot of the DFS specific requirements, including, for example, customer complaints, capital adequacy standards, you

know, some of the things I mentioned around AML that really are purpose built to address some of the virtual currency specific risk, that includes market manipulation guidance in 2018.

So I think there is a track record of New York building virtual currencies, currency specific controls that includes the use of our own blockchain analytics tools and additional risk monitoring vendors. This is a space you just need to be high touch and doing this all day, every day if you want to get it right.

Sarah Hammer [00:18:17] Jai, I'm so interested to hear your opinion. I'll mention that Jai is coming from a leadership position at a large New York law firm with global perspective and a founder's position now with a blockchain related startup, and your opinion, I think will be incredibly insightful for us who are thinking about both the regulatory side of things and the innovation side of things, which is incredibly important to keep in mind.

Jai Massari [00:18:45] Yeah, and I think the way you frame the question is really important, which is how do we think about financial stability and financial stability risk for crypto? I think the FSOC report, right, in identifying interconnectedness with the traditional financial services sector as well as potential systemic risk within crypto generally got it right. Those two seem like pretty clear risks. Having now seen at least the initial impacts of the FTX collapse, like this is the third biggest exchange in the world, right? The third biggest crypto exchange in the world. Like if you want to think about it in the context of, say, traditional finance, a bank collapsed. The third biggest bank in the world has just collapsed. And we are seeing some of the risks arising from this. Right. I think what's interesting at the moment, and I say this at the moment, so far, we have not seen a ton of interconnectivity with the traditional financial services sector. I think that if there are knock on effects, for example, with a stablecoin issuer, the story will be different, and we'll see some more interconnectivity because that is really the bridge between the crypto sector and traditional financial services at the moment. I think we are seeing some contagion risk and risk within the crypto sector for sure. This is to be expected, right. This is an asset class where there are a lot of market participants operating across jurisdictional lines as well as across functional lines. Right.

So I think you could think about crypto intermediaries more like universal banks plus maybe plus a crypto exchange like a order book exchange on top. And this is not a structure that we usually see in traditional financial services. And of course, there might be some benefits to that kind of structure. There also are some kind of some additional risk to that structure. And I think you can see

that playing out within, within crypto. And to Peter's point about the, the approach that New York has taken to crypto regulation. Another point that was made in the FSOC report is crypto activities, I think, I agree are under-regulated at the moment in the United States in particular.

There is regulation at the state level, money transmission regulation plus the BitLicense regulation. But none of these regulations are designed to be market regulations. None are designed in the way, as you see, regulation is designed to regulate order book securities markets available to retail customers. And same thing on the derivatives side with the CFTC regulation of derivatives exchanges. And I think this is a pretty significant gap. And I think plugging that gap will be really, really important.

Sarah Hammer [00:21:26] That's so interesting. And for context of our audience, I'll just expand on what Jai mentioned about other protocols or stablecoins in the space, we did see price action in different tokens like Solana, for example. And as you mentioned, over the coming days and weeks, we will unpack what the whole ecosystem looks like and certainly there will be some additional concerns about contagion. I'll mention that we recently elevated some research on our website at Wharton, unpacking the ecosystem of FTX and its 130 plus entities.

So there's the market side of things, and then there's the regulatory side, bankruptcy and insolvency, which I think is also going to be very interesting to see and certainly relates to our question today about capital and liquidity and safety and soundness. Dennis, it's a pleasure to have you with us today. Dennis Kelleher from Better Markets. I'd love to hear your take as well on financial stability risks and what's currently happening.

Dennis Kelleher [00:22:28] Thanks and thanks to Aaron and Brookings for continuing these series of not just now related on crypto but financial regulation overall, which gets way too little attention, I think, by too many so-called thinkers and think tanks. So Brookings really should be applauded for that. You know, let me briefly on FTX. You know, we— meaning, me and better markets— have been warning about the risks in crypto pretty loudly for several years now. And we have been actively engaged in opposing FTX's incredibly dangerous attempt to completely change, radically change the layers of protections in the structure and operations of commodities clearinghouses that have worked for decades and decades in the United States at the CFTC. We have a vast amount of material on our website at [w, w, w dot better markets dot org](http://www.bettermarkets.org), including a fact

sheet that covered— that we put out on Sunday— that covers many of the issues that aren't even being talked about.

I'm going to talk about a little bit today because it touches on a number of things that have just been mentioned. And to me, the big question is we have one of the big, one of the big issues is in about eight months, around \$2 trillion worth of value was vaporized between Bitcoin's peak in November of 2021 to about June or July, 2 trillion with a T, gone, and that's before FTX, plus multiple failures, bankruptcies on stablecoins and elsewhere, massive illegal high risk conduct, it looks like maybe even some criminal conduct. And you have to ask yourself, with all of that happening, why is there not a financial crash? And there isn't a financial crash because federal financial regulators kept crypto out of the core of the financial and banking system. There are very minimal interconnections. You just alluded to the fact, you said the third, it's like the third largest bank in the United States collapsing, I wouldn't agree with that. I think FTX's and exchange is a tiny little ripple if you want to compare it to the activities of the third largest bank in the world.

So the third largest crypto exchange, though, it crashes, you lose all this value, you have all these injuries, you have all this crime, fraud, criminality, no financial crash, because of no kind of interconnection. Unlike the subprime crash, subprime mortgages, and this is important because the states tried to stop the predatory subprime mortgages in the early 2000s, and the federal banking regulators went to court and stopped them by claiming preemption. And it was then followed an epidemic of fraud in subprime. And then what happened is the big financial firms on Wall Street decided to create derivatives and derivatives on top of derivatives that they not only distributed around the world, but they put on their balance sheets. So when the housing market crashed and the subprime bubble exploded, it blew up the biggest financial institutions in the world. Because of deep interconnection leverage in derivatives. We don't have that because crypto was forced against its will to act in a parallel path to the core of the banking system. Because the banking regulators, by the way, on a bipartisan basis, which doesn't get enough credit and attention, this predated Biden's people at the banking regulators, it happened under Trump's people at the regulators, same thing at the SEC. Gensler's policies and actions on crypto are a continuation of Trump's SEC chairman when he was at the SEC. So you have these two parallel universes and crypto is kept out of the core of the banking system.

So when it all imploded, even before FTX but certainly now that you have FTX, we don't have a crash, we don't have bailouts because of that. And that's, point highlights and I'll stop, and we can talk about this, but that really highlights the importance of systemic stability and drawing the line at systemic stability. It's incredibly bad that millions, if not tens of millions of people, investors and customers have lost trillions of dollars. That's bad, but it'd be a heck of a lot worse if that happened and we had a crash and we had bailouts. And that's what would have happened if the crypto industry had got its way in the last two years, if the Wall Street banks who wanted to get into the crypto business had their way in the last two years, and if elected officials largely greased with hundreds of millions of dollars of crypto dollars buying political access and influence, had any of the bills that are being proposed been in law in the summer of 2021, which would have given them Fed access, master accounts, access to the payment system, etc. Then right now, that's what you would be seeing: crash and bailouts, just like '08, and it's not happening because of regulators and because of prioritizing systemic stability.

Sarah Hammer [00:27:20] So I want to move on and talk a bit about the capital and liquidity framework. But before I do that, Dennis, I can't resist. Can I just clarify, when you say crypto was kept out by the banking regulators, do you mean because we didn't pass those bills? Or is it partly because the industry was just not ready yet to clear and settle transactions and to manage digital payments in all of that? What is it that we did—.

Dennis Kelleher [00:27:46] Both—

Dennis Kelleher [00:27:47] What is it that we did that kept it out?

Dennis Kelleher [00:27:48] It's both that the legislation did not get passed, if you read the legislation, it was going to not just give access to the core of the banking system, one of those bills mandated the master accounts and access to the payment system, mandated it. Right. Also, by the way, did a bunch of other things like preempted state law as drafted, New York's Bitcoin program would have been shut down. California. Okay. You know, ultimately the governor vetoed the bill, but it would have been prohibited. Massive preemption in there, among other bad things like gutting the SEC's ability to police the securities laws.

So it's, on the one hand, it's because those bills weren't passed. But on the regulatory side, what you had were the banking regulators at the Fed, the FCC, the FDIC and the OCC, as you know, not acting on the, the master account requests, not enabling other overlaps, not warning the banks

about the risks of moving this crypto and crypto related products onto their balance sheets. So it was a combination of both. It certainly wasn't because the crypto industry didn't want it. The crypto industry has been banging on the door using their political allies as battering rams to smash the regulators. I mean, the abuse of Gensler at the SEC and even the banking regulators have been pretty extreme. That's what you get when you spend a couple of hundred million dollars buying influence in this town, let's face it. And the regulators, it's a story that hasn't been told. Stood up to that pressure and kept crypto out of the core of the banking system.

Jai Massari [00:29:25] Sarah, I'd love to make a few comments if I can—

Sarah Hammer [00:29:26] I would, I would love to get a robust debate going—

Dennis Kelleher [00:29:30] Are you gonna agree?

Jai Massari [00:29:30] I was gonna agree, actually—

Sarah Hammer [00:29:31] Yes, I would love to get a debate going on that. And then I do, I do want to, the academic in me wants to further examine the capital liquidity regime, but Jai it would be great to get your views on that.

Jai Massari [00:29:40] Yeah, I mean, I agree, Dennis, with, with a lot of what you're saying. Right. So I think it's exactly right that we have a separate system for crypto activities, a separate system for traditional finance activities, whether that's banking or whether it's markets activities. Right. So far, the regulators have made a decision to keep the activities separate and 100% agree that that limits contagion between the two. Right. I wonder if it's worth, we're thinking about there what the costs of that decision are. Right. So, one, consumers don't get the protection of regulated financial institutions when they want to hold crypto assets. Crypto assets, I think are unusual, frankly, to the financial services world. Started off as a retail product, right? They didn't, they weren't developed by large institutions and then sort of trickled down to retail customers like we more often see. Instead, crypto starting from the bottom up. So there already is this vibrant retail market in crypto assets. People are holding them in 401k plans. They're holding them through crypto intermediaries. It's my own view that holders of crypto assets would prefer to hold them through their own traditional financial institutions, whether it's their E-Trade or Schwab account or through a bank.

And I think the kinds of, frankly, pretty terrible activities that you've seen coming out of the reports on FTX could have been prevented by a comprehensive regulatory and supervision regime and wasn't. And we have real consumer harm there. And I don't, I'm not sure that that's that's the right

trade off. And, and I also think bank regulation, including Sarah, this is for you, liquidity and capital regulation of these entities similar to bank regulation and supervision of these entities would also prevent some of the worst aspects of financial instability coming from crypto assets. I mean, banks and bank affiliates deal with volatile assets all the time and they are required to hold capital against those assets and more capital because they're volatile. And supervisors pay attention to risk management controls and other controls for those volatile assets. I'm not so sure why crypto's all that radically different.

Pete Marton [00:31:55] Yeah, I would just add, if you think about, from a consumer protection at a very high level, what would, what would good look like? And I think good would look like companies subjects to capital requirements, subject to routine financial statement reviews. They have cybersecurity standards. If you look at the New York TFS Part 500 regime requiring business continuity planning, disaster recovery, penetration testing, vulnerability assessments, audits beyond just the SOC 2 certifications. So that's just cyber, but it's so pervasive across what an appropriate custodial architecture set up would look like for a crypto firm. If you think about market manipulation and fraud, there's a ton of it in this space.

So the choice to put, not put it within the regulatory perimeter is a choice in itself. So how would you solve for that? TFS produced the market manipulation guidance in 2018 and in the time since we're onboarding risk monitoring tools for us to have from a regtech perspective and have that same expectation for our license and chartered entities. So how do you think about front running? How do you think about wash trading and spoofing from a markets perspective and coordinating with different agencies to that end? You know, I think the elephant in the room in a lot of industry conferences is anti-money laundering. So what are the appropriate safeguards you have if you're going to have intermediaries operating in the space? We require annual independent tests, require annual AML risk assessments, we require annual certifications by senior officers on the success, on the efficacy and effectiveness of the transaction monitoring and sanctions screening programs. This is a very young space and I think to move it out of the regulatory perimeter is a mistake instead we should be building safeguards to kind of usher that in.

Dennis Kelleher [00:33:30] Well, let's be clear about what's happening here. Okay. That all sounds great. And I'd agree with it. That ain't happening in the real world. In fact, what's happening in the real world is the legislation that's being filed is being written by the crypto industry to get the

lightest touch, least regulation, they're trying to buy the primary regulator to be the smallest, least funded, most capturable regulator possible. So they have the form of regulation without the substance of regulation. And nothing proves that more than the bills that are filed to preempt New York's actual tough, real legislation that really polices the industry, creates a level playing field between banks and financial institutions and shadow banks and crypto banks and subjects them all to rigorous, specific regulation that actually would protect customers, investors and financial stability. That's not what crypto has spent a couple of hundred million dollars on in the last couple of years to buy. That's not the bills that we saw being filed in Congress. And that's very unlikely to be the bills that get out of Congress because they're in a couple of hundred million dollars on the other side of the crypto written bills.

If crypto is serious about regulation and serious about customer protection, they wouldn't be trying to buy the weakest regulator that they can capture by hiring as many revolving door former officials to get inside access to strategically target the legislation in the agencies to make sure they get the most favorable treatment. And that's a huge problem. You're not going to get the legislation you're talking about. And, you know, in terms of you or anybody else who've been trying to, not you, I'm doing you, generally, nothing personal—

Jai Massari [00:35:10] People who are not here.

Sarah Hammer [00:35:11] People in the universe.

Dennis Kelleher [00:35:13] Stuff Americans retirement accounts with Bitcoin, which they were trying to do in 2021 with the 2020 and 2021 with DOL that said no held the lines. What do you think would be going on if those retirement accounts were stuffed with Bitcoin, Bitcoin from November of 2021 at \$70,000 and it's now 16. Let's not jeopardize the financial security and future of Americans, including retirees, over a highly volatile product that has thus far has no valid use case.

Jai Massari [00:35:47] Sorry, I can't help but—

Sarah Hammer [00:35:48] (laughs)

Dennis Kelleher [00:35:49] Come on.

Jai Massari [00:35:51] Look, I think I mean, it's, it's really interesting because I think there are, there's a lot of actual agreement about the need for additional regulation. I mean, we have a dual banking regulatory system in the United States. A national bank isn't subject to state licensing because there's preemption. Again, this is not some crazy novel thing that's being proposed. And, you

know, to my mind, it's not, it's not clear why crypto regulation should be all that different from other types of financial services regulation. I take your point on the CFTC versus SEC debate. Now, that is clearly a point for Congress to decide. And I think it's a fair question about where, where regulation should be in in that sense. But I think it's really, it's a challenge to say that on the one hand, crypto assets are too dangerous and therefore shouldn't be regulated and then be shocked by what happens when—

Dennis Kelleher [00:36:45] I didn't say that, though.

Jai Massari [00:36:45] —the activities are not regulated.

Dennis Kelleher [00:36:46] So let's be clear. I mean, the problem we really have is crypto is a lawless industry currently by choice. About 80% of crypto tokens comfortably fall within longstanding black letter law of what is a security and should be regulated by the SEC. The other 20% fit comfortably within the definition of commodities that's been around since 1936, and if the industry was so serious about complying with the law, then they would be registering their tokens as a commodity with the CFTC. They'd be registering the tokens with the SEC as a security. The exchanges would be regulated, and the only reason they're not is because they decided that they were not going to do that. They were not going to comply with the law. They were instead going to buy favorable laws from Congress to get special treatment for their special interest.

Sarah Hammer [00:37:34] Okay, Dennis, I hate to interrupt you.

Dennis Kelleher [00:37:36] And I'm not saying, what she said, what I said, it shouldn't be regulated—

Sarah Hammer [00:37:39] I appreciate your view. I just want to move us to an analytical viewpoint of the safety and soundness regime. And we've discussed many regulatory issues today, and we certainly don't have time to unpack all of it. But I'd like to get your view on that as well. Dennis We've discussed money laundering, we've discussed capital and liquidity. Certainly we haven't even touched on issues around investment advisors. And we have this esteemed second panel today that will be talking about consumer protection and then their issue of, a key issue, which we're here today to talk about, which is states and federal. But I want to focus us for a moment on capital and liquidity. And in my class at Penn Law, I often talk with students about our different business models. So we have sort of at least three basic business models. We have the banking business model, a principal investment business model, and that is the model for which we've designed capital liquidity. We have

an asset management business model, an agency-based business model, and for that we have capital markets regulation and investment adviser regulation, and then we have insurance in the crypto space. Certainly we have a lot of different kinds of business models, but focusing specifically on capital liquidity, let's talk about that in the context of all of this and financial stability. So thinking about our existing capital and liquidity requirements for principle-based business models, for example, how would that relate to what's happening with FTX, and if you could make one tweak to the existing regime, whether federal or state, what would that be? Jai I'm going to comment first because you can.

Jai Massari [00:39:19] It's like a law school exam question.

Sarah Hammer [00:39:20] Yes, welcome to my class.

Dennis Kelleher [00:39:23] Three financial firm models.

Jai Massari [00:39:24] Yes, exactly. So. So, look, maybe I'll take a step back and talk about what's going on with the bank, bank capital model at least. So the Basel Committee has put out now two consultations, two consultative drafts on the treatment of crypto asset activities for banks. The Basel Committee's answer pretty clearly is that these activities are sufficiently different— principal activities are sufficiently different— and according to the SEC, even agency activities like custody are sufficiently different to warrant a different kind of capital treatment. Right. And so to me, there's a lot there's a lot of really important thinking going on in the Basel consultation as well as what U.S. banking regulators are thinking, including something that I don't think gets enough discussion. Right. So I think we focus a lot on asset prices because I don't know, it's more entertaining, it's more exciting, what's the price of Bitcoin?

But equally important is the idea that there are different operational risks associated with crypto assets than there are with traditional financial types of traditional financial technology, whether it's bank ledgers or something else. And among blockchain activities or crypto activities, there's different risk levels for different types of blockchains, ranging from fully permissioned blockchains, permissioned and private blockchains to public permissionless blockchains. To my mind, I think there's still a lot of work to be done by regulators in understanding those operational risks and then in turn translating those into sort of sensible capital requirements. I am encouraged on, you know, on one narrow front, on the stablecoin front, of a sort of growing recognition among bank regulators that, you know, an entity that operates essentially like a narrow bank maybe doesn't need to hold capital the same way that a, a bank engaging in maturity and liquidity transformation might need to hold. So

that was a lot. And only one, I only answered part of your exam question so, that, but I think that's a good start in thinking about at least where regulators are.

Sarah Hammer [00:41:27] You can have extra time later.

Jai Massari [00:41:28] Thank you. I appreciate it.

Sarah Hammer [00:41:31] Yes. Peter, I'd love to hear your thoughts on this, both in terms of New York, but then in the context of something that we touched on earlier, which is the New York BitLicense and the federal regime. So if you have a New York BitLicense, for example, you may not necessarily have FDIC insurance. So what are your thoughts?

Pete Marton [00:41:52] So a few things. I think the first I would say is I think we've been treating crypto and the crypto industry as this monolithic thing and it just isn't. So I think that's an important takeaway from this discussion. There's a lot of different actors within the space. I think on the capital side, I would note, you know, it's been public for seven years, go to New York TFS part 200 dot 8. We have capital adequacy requirements that require 1 to 1 backing as well as specific, you know, net worth minimums that take into account the specific business model architecture. So for example, if you're holding a Bitcoin on behalf of a customer in deep cold storage, you have less in the way of network minimums than you are using hot wallets, which presents if you're really into the space, you know, what do you do about multi-party computation? What do you do in a space where we're going to see specie insurance coming online and different forms of mitigating controls in that space? But I would just note any capital and liquidity regimes should be considering this virtual currency specific nuances that underpin the actual technology.

So from a custody architecture perspective, what are the actual products and services being offered? Who are the customers being served? What does wind down look like for different business model types? So I would say, you know, we do that through supervisory agreements. I think the, you know, some of the later panels will discuss some of that in practice. You know, you can see from the US dollar backed Stablecoin guidance we produced June that was in no small part a product of multiple supervisory agreements addenda with our existing stablecoin issuers. So you'll hear more from New York with respect to the guidance. But just note, like these are virtual currency specific considerations and I think, you know, that needs to be accounted for as we develop, you know, via loss or otherwise.

Sarah Hammer [00:43:25] And it's a great point, Peter, and acknowledging that there are different functions as well as different business models. So we've been grouping Stablecoins in with other types of crypto and we haven't even begun to talk about, you know, some of the other forms and we don't have time today, but I'm looking forward to having that debate later. Dennis, I see you taking notes. I'd love to hear your thoughts as well.

Dennis Kelleher [00:43:45] I think we'd all be better off if Congress would just adopt the New York Department of Financial Services regime and be done with it. And we could have customer protection. It's that systemic stability taking care of all at once. I mean, we should applaud Director Harris, her predecessors in the staff there to do really an incredible job and be way out front leading on these issues. Unfortunately, that's not what we have. As I say, we have the opposite going on in Washington, D.C. If you want to know about capital and liquidity and how the banking regime should really work, I encourage you to watch the prior event here with Marty Gruenberg or read his speech. The chair of the FDIC, or the acting chairman of the FDIC. He went through these issues in a very important event that Brookings held that Aaron didn't mention, was the new vice chair for supervision at the Federal Reserve Michael Barr gave his first speech here. He also touched very importantly on these issues. The other place where you can get a lot of very important information is, as Sarah mentioned, the Biden administration had an executive order that was a whole of government approach to these issues. And they issued and I can't remember there's six or nine reports that covered all the business models—

Sarah Hammer [00:44:56] 21 reports.

Dennis Kelleher [00:44:59] —And in depth. But what that the bottom line, though, is when you're talking capital, liquidity or otherwise, we have to have like regulation for like activities. We have to get rid of the increasing, even to this day, the growing and increasing shadow banking system that is lighter regulation than the core of the banking system, which not only invites but guarantees regulatory arbitrage, and it guarantees the migration of risk from highly regulated areas to lower regulated areas. The solution to that is not to lower the regulation and the banking arena. The solution to that is to raise the regulation so there's a level playing field, and financial firms can compete over actual service in products rather than, you know, competing in an arena that's an unlevel playing field where some of these industries which crypto's been trying to buy in this city, a very light regulation and therefore much higher profits and therefore much more money moves that way. Then the banks

want to get into that business and you have a race to the regulatory bottom. And I don't, I believe not only should crypto be regulated contrary to the suggestion earlier, but I believe it's already subject to regulation. And the only reason it isn't properly regulated now is because it decided to fight the regulators and try and buy special interest legislation.

Sarah Hammer [00:46:21] So we have just a few minutes left and I'm going to add one resource to the resources that Dennis mentioned, which is our resources at the Wharton School and the Stevens Center for Innovation and Finance. As I mentioned, we just today elevated the beginning of our unpacking of the FTX debacle. But we have time, I think, for one more question, maybe 60 seconds each. I'd love to hear your thoughts.

We've talked about banking, capital liquidity. We've listed a number of regulatory issues that we'll have to unpack at a future date. But we haven't talked as much about non-banks. And we know there are more than 130 entities, for example, in the FTX bankruptcy. And that only begins to touch on what the ecosystem looks like. So going back to earlier debates that we've all had about non-bank regulation, asset management, systemic risk, etc., if you could mention one thing in the non-bank regulatory space, whether it's capital markets regulation or investment advisory regulation, what would you want to touch on?

Pete Marton [00:47:22] I mean, I think one of the obvious ones is, you know, if I think about first of all, I would say the race to the bottom hasn't happened in New York. We have a very long backlog of applications. And I think that's, that's public. I can say then—

Dennis Kelleher [00:47:33] Think I've applauded you enough already, but I'll continue. I'll do more.

Pete Marton [00:47:37] No, but I think, listen, I think we don't have direct exposure to FTX, but I think everyone in the crypto ecosystem is monitoring contagion and no shortage of lending, collateralized lending of, of altcoins that might be priced down significantly. So, you know, we have daily calls with some of our issuers, some of our custodians. And I think what we're monitoring from customer complaints and looking for spikes there at on chain activity through in no small part through our vendors, I think, you know, we won't see the, the ripple effects for quite some time. I think what we saw on Terra Luna, which I should note, was also not, did not get approved through coin listing policies that are licensees, was that was somewhat contained within the Terra Luna ecosystem. I don't think that we can make that assumption here, and I think folks need to be really vigilant. And as

part of ongoing monitoring and supervision and through our onsite examination process, you know, that is really the singular focus for a lot of the people in my team.

Jai Massari [00:48:37] Yeah, if I were to pick one area and this is a little bit back to when I was advising clients on these topics, I think what I'd really love to see is more, more and faster action by the SEC. Dennis, I know you said that, you know, crypto businesses can just go in and register. And, you know, Chairman Gensler has been long talking about, you know, crypto market participants just come in and talk to us. My experience has been quite different. I think that the SEC has been relatively clear in its statements that it thinks most crypto assets, except for Bitcoin and maybe ether, are securities, and businesses should come in and register and be regulated.

At the same time, the SEC also says, well, our rules don't really fit well with crypto businesses, and therefore there's no real way for you, for you to actually comply with the rules. And you can't really engage in activities in a regulated— SEC registered, regulated— way until that happens. For example, I know that there are many, many broker dealer applications that are waiting for review by the SEC until they can show broker dealers how to comply with 15c through 3, their custody rule. That's just one example among many. And so I think it sounds really good to say come in and register. I think the reality is much more complicated. And I think the world would be a lot a lot better if, if broker dealers could engage in these activities in a regulated way.

Dennis Kelleher [00:50:00] I mean, I think one of the problems now is that everybody can criticize the SEC, and the SEC can't say anything in connection with pending applications. They can only say what they are saying. And it appears to me that the real problem is that there are companies engaged in the illegal sale of securities that aren't registered and they don't register them because they do not want to comply with the SEC's rules. For example, on the full disclosure of material accurate information, how are you going to do that in crypto? What is the full disclosure there? How about disclosure of mitigation, of disclosure of conflicts of interest? They don't want to do that. Books, records, compliance, risk and legal. They don't want to do that.

What the problem here is that you have an industry that will not apply or comply with the laws that every other legitimate, lawful business and finance comply with. They don't want to do that. It's not that there is some backlog or problem with the SEC. What the SEC says, yes, register like everybody else who wants to sell a security, trade a security, and then comply with our customer, investor and financial stability protection rules like full disclosure, like getting rid of conflicts of interest,

like having books and records requirements, like having cyber requirements, having AML. I mean, these are just the rules that everybody else applies to, to say we're special and different and new and therefore we don't need to comply with those rules, actually, is not the perspective that responsible elected officials or regulators should take. Their job is to protect customers and investors and systemic stability, not maximize profits of a new industry that comes along with pixie dust and a couple hundred million dollars and says, treat us different because we're special.

Sarah Hammer [00:51:42] So, Dennis, Jai, Peter, thank you so much for joining me today for this very robust and healthy debate. And I want to say thank you one more time to Aaron Klein and the Brookings Institution for the honor of being here today and especially excited for Superintendent Harris's keynote. Thank you all for joining us and I look forward to continuing the discussion.

Aaron Klein [00:52:10] So we promise at these events to have a lively conversation with all sides described. And I think so far we're off to that, holding to our word. And, and it's a great honor and privilege for me to introduce Adrienne Harris, the superintendent for financial services to New York. Superintendent Harris is no stranger to Brookings. In fact, her first major Washington speech was given last February online, and it's my great pleasure to be able to welcome her here in person and to share the stage. She is on leave, or was a professor of practice at the Ford School at the University of Michigan. She was special assistant to President Obama at the National Economic Council. She has a distinguished career and served on the board of the Financial Health Network and other accomplishments. And with that, let me just welcome my friend Adrienne onto the stage and we'll sit down. And as the beauty of the microphones transmit, so, lively conversation.

Adrienne Harris [00:53:16] Yeah, no, I was, that was a good one. I should take Dennis with me to the Hill when we talk about these preemption issues.

Aaron Klein [00:53:23] Well, it's, it's interesting because, you know, here you are as the state regulator. And there are 50 states and I love my Maryland, the 42nd largest—

Adrienne Harris [00:53:32] With its first Black governor now, so, governor elect, yeah.

Aaron Klein [00:53:35] And it is, people forget, Maryland's by I think the last census was the third most African American state. And it's actually been thrilling to finally see that representation follow through. But let's be honest, you know, New York won the battle to be the financial services headquarters of America. Baltimore had a chance in the late 18th century, but we squandered it. You guys built the canal and swamped us. And so, you know, here you are in, in this situation, you know,

what, what have you observed in this space, having run, you know, being first among equals and having run this BitLicense in this system, what are your observations?

Adrienne Harris [00:54:20] Well, we need more regulation, not less. We would be delighted to have regulatory partners among other states at the federal government. We certainly do internationally, but I think there's a need for more regulation there. So the more regulation in the space, the, the better. And so we've been working very hard when we, when we go to the Hill, although we say we want there to be a state path, we would like, as Dennis said, I can just sit up and say what Dennis said. We would like for there to be a framework nationally that looks like what New York has, because I think it is proving itself to be a very robust and sustainable regime. And Pete laid it out very well, whether you're talking about capitalization requirements, AML, BSA, cybersecurity, consumer complaint, right? All of that exists in New York and should exist as well on the federal level.

And I think one thing that's, that's incredibly gratifying for, for me and the team is when we travel around the country, we travel around the world. You know, a lot of people were at the Singapore FinTech Festival and I was, I chat with our counterparts at the FCA and in the UAE and all over. And people say, we know if a company has passed New York's test that we can feel comfortable with it. And I think that really says a lot about what's been built in New York between the BitLicense and the Limited Purpose Trust. And, you know, we've seen how it's protected New Yorkers given all the calamity in the markets.

Aaron Klein [00:55:46] Well, let's get into that, because I'm going to quote from JP Konig who says, quote, New York gets tons of criticism from crypto fans for having strict crypto regulations. But in the end, it looks like it got this one right. Out of all U.S. residents, New Yorkers are the least likely to be damaged by FTX US' demise. And Pete made reference to the fact that they had not received a license. Can you explain why that's correct. What is it that that made New Yorkers more protected from Marylanders?

Adrienne Harris [00:56:17] Yeah. So in order to operate as a crypto company in New York and we don't, because we have crypto specific authority, it doesn't matter if it's in a security, a commodity, a currency, whatever you want to call it, it's virtual currency, virtual assets. We have explicit authority to regulate it. You have to be licensed by DFS, either through the BitLicense or the Limited Purpose Trust Charter to operate in New York to serve New York customers. That application process is extensive and requires us to look at the organizational structure to require us, it requires us

to do background checks and to assess the fitness of the executives of the boards of the investors, to look at the financial statements, to make sure you have an AML, KYC framework and regime that is going to catch bad actors, requires us to look at capitalization and to hold the companies to a standard to say you can't lend customers crypto assets, and that's a requirement in New York, right on and on. And so we have the licensing process. If you can't pass that bar, you can't operate in New York.

Aaron Klein [00:57:19] And FTX never passed it.

Adrienne Harris [00:57:20] And that's, and FTX had, had, and they were public. We don't talk about pending applications. They had an application pending which they noted publicly, and it was pending.

Aaron Klein [00:57:32] Well, let me, let me. And in other states, they don't have that.

Adrienne Harris [00:57:35] Well, most other states have, as you noted, money transmission licenses. And I think if you talk to other state commissioners, they will tell you that the regulatory requirements for money transmission are not sufficient for these types of—

Aaron Klein [00:57:48] Money transmissions like Western Union.

Adrienne Harris [00:57:48] It can be Western Union, it could be Apple Pay, right? All these things. And it, it accounts for parts of what we see in the crypto business model, but there's so much more to it as we're seeing every day, all the time. So having that explicit authority over virtual assets and having the ability to make the requirements that much more stringent than money transmission really sets New York apart. So without that license, you can't operate in New York. But even when you are licensed in New York, as Pete was noting, you are subject to regular exams, you have a supervisory agreement. So we put in place bespoke supervisory agreements for every company licensed in New York that are specifically tailored to their business model and the risks that they pose.

We also have approval rights over any material changes in business. So you, you're licensed in New York, you're operating, you're going through your exams, but you want to offer a new token on a new chain. You got to come to us first and get approval and we're going to kick the tires on it and say, well, does the cybersecurity framework you have in place now, does that account for the risk of this new product? And ditto on your AML and ditto on your capitalization. And so before you have that new product offered in New York, even once your license, you have to get approval from us. And that's the kind of thing that has kept New Yorkers safer than people in other parts of the country.

Aaron Klein [00:59:03] So you talk about the folks that that that, with the requirements in order to make it, one question that's come up, and it was it was it was asked as well, you know, which, which, and I think Jai made reference to the point that there's concerns about contagion, potential contagion in the market, particularly as it relates to Stablecoins. I made a more oblique reference in my opening statement than if you've been if you've been wagering in a friendly contest about which crypto entity was going to go belly up first, I think most people would not, I think that the odds-on favorite would have been would have been tether over FTX, you know and there are lots of concerns about different stablecoins. You, in the stablecoin world you've made supervisory agreements with at least one stablecoin issuer. Some people have said that should be public. I think there may be more than one that that had been reached. But you've not made those agreements public. Can you explain why?

Adrienne Harris [00:59:56] Well, so first, every one of our regulated entities has a supervisory agreement, so we've got the regs and those are there for everybody to see and went through notice and comment when they were put in place. And then companies each have a bespoke supervisory agreement to address their particular risk. Those supervisory agreements, just like supervisory agreements in the banking context, in the insurance context, are confidential supervisory information, right? They're meant to be tailored for the company to give to them the specific requirements that they have based on their business model, and so that we as a regulator can hold them to account. What we do do, have done, and Pete mentioned a couple of examples, is we've taken those supervisory agreements since I've come into this seat and turned many of them into guidance to make transparent the requirements that we have. So the Stablecoin guidance is a perfect example where we require 1 to 1 reserves with on chain and off chain assets. We have T plus two redemption requirements. We're very prescriptive about the asset mix, basically cash and cash equivalents for the reserves. That was all stuff that was in the existing supervisory agreements and that we've now put out in guidance for the world to see.

Aaron Klein [01:01:07] So if I'm a New Yorker, like my family was before me, from Queens, and I want to deal with a stablecoin that doesn't meet your 1 to 1 requirements, doesn't, doesn't show what they're reserving are, but I'm doing it on a different platform or exchange. Can I not do that?

Adrienne Harris [01:01:25] You can't do that.

Aaron Klein [01:01:27] So I couldn't trade tether in New York.

Adrienne Harris [01:01:30] You, so we have the ability to monitor and make sure companies not licensed in New York cannot reach New York.

Aaron Klein [01:01:37] Cannot get into New York. Yeah. Fascinating. So, so you've been focused on this. You know, as I mentioned, you know, we were privileged enough to have you here at Brookings last time to talk about your, you know, vision, having just started. You're entering your second year leading this agency. Right. You're down here, you got, you get a deserved victory lap on the FTX experience. But you, everybody says what's next.

Adrienne Harris [01:02:02] Yeah well, let me before, there's lots of stuff next, so I'll come back to that. But I will say you started off reading that tweet and you said there are lots of criticisms of New York, which is true and valid. And Pete made reference to them, too, which is this backlog of license, because we have, license applications, because we have seen this sort of race to the top. One thing I will say is one of the things I did when I came into the department was made the case to the state legislature, to my boss, the governor, about how under-resourced we were. And we got the department fully funded for the first time in its history. The department had never had its full cash funding and its full FTE allotment until—

Aaron Klein [01:02:45] So full FTE full time employee. So you got enough money to hire the people for whom—

Adrienne Harris [01:02:49] Right. Across the board, not just in crypto, across the board.

Aaron Klein [01:02:53] I mean, you know how government works. And for the folks that don't, sometimes they'll say, Oh, you can hire this many people, but we're only giving you money for half that. Right. And go, good luck. Do your job.

Adrienne Harris [01:03:02] Right. Exactly. So what I did is I made the case again across the board, banking, insurance, crypto. Here are our statutory mandates. Here are the risks. Here's the number of people we had. Let's compare us to, to other regulators. If New York is the financial capital of the country or maybe even the world. Right. We should, our regulators should be staffed accordingly. And we were able to get both the cash and the FTEs to match up so that we could be appropriately staffed. Now, it's a tight labor market, and it's hard to recruit crypto talent because there are other people that can pay them much more money. But we have gone from a crypto unit of three people, when I came in the door, to a unit now that's over 50, a little over a year later, and really we were only really able to start that hiring process in January of this year. So 11 months. So we're

working through, there are lots of operational issues and we've been working through the backlog because we want to be able to make decisions quickly and bring those companies that meet our standards into the regulatory perimeter more quickly. And for those that don't meet our standards, right. Often there is this, either you can't be here or there's an iterative process to get them up to speed through deficiency letters and other things that we have in the application process. So I wanted to make that point because some of the criticisms about operationalizing our framework are legitimate, but they are talent and human capital resource constraints that I think we've made a lot of headway in addressing.

Aaron Klein [01:04:32] So next year, there's more hiring coming.

Adrienne Harris [01:04:33] More hiring coming.

Aaron Klein [01:04:35] What else?

Adrienne Harris [01:04:35] This year. Since January 1 of this year, I talked about the crypto folks, but we, we've hired 160 people into the department since January 1. We've promoted about 140 existing employees in the department. And we're going to keep, we're just going to keep going. And I'm probably going to go back to the legislature this year and ask for more, because if you think about the return on investment, one thing we've done this year and then we'll come back to crypto, I promise. But this year we've returned about 130 million to New Yorkers in the form of restitution, not penalties. We've done lots of those, too, but \$130 million to New Yorkers in the, in the form of restitution. Now, if you imagine and that's through our complaint hotline and through enforcement actions that had as part of them, restitution to consumers. So if you imagine somebody manning the complaint hotline or an enforcement attorney makes \$100,000 just to pick a round number, that means, you know, we did the math earlier. They're returning almost \$1,000,000 to New Yorkers for that.

Aaron Klein [01:05:39] To consumers who were harmed.

Adrienne Harris [01:05:39] Consumers that were harmed for that hundred thousand dollars.

Aaron Klein [01:05:43] One of my great frustrations in financial regulation— and we'll see how this plays out with FTX— but if you know, the first crisis I saw was the accounting crisis when I was working on the staff of Senator Sarbanes, Enron, WorldCom. You know, I kind of make the point that, you know, it's interesting to me, I'm old enough as a Washingtonian to remember that opened as MCI Center. Right, gone, corporate implosion. Right. Enron field. Gone. Corporate implosion. FTX

arena in Miami. Right, gone. We won't discuss what happened to Citi Field in Queens. But my point being, you know, in Enron, people went to jail. Right. But a lot of more people were hurt than those who just went to jail. And the financial crisis, there was not that many people that went to jail despite widespread, spread malfeasance and illegality right. Here, there's going to be a question about who's going to go to jail. But often there are these large fines. But the fines go to whatever, not to the people that were hurt.

Adrienne Harris [01:06:41] Right.

Aaron Klein [01:06:42] When you're talking about the distinction between restitution and fines, there're going to be a lot of little people like, that lost money. It's hard for me to cry tears over venture capitalists who didn't do due diligence and invested in FTX. It's easy for me to cry tears to people who saw the Super Bowl advertisements, who people who, saw tweets that indicated that it was more regulated than it was, and invested for the little person and then wonder where they're going to get their money. How do you, you brought up this issue on guidance, on restitution versus penalties, and there's fines and then, you know, there's, there's prosecution. Right. How do you balance that?

Adrienne Harris [01:07:19] Yeah. I mean, so first, the thing that I think is particularly remarkable about DFS, we've got this whole suite of tools. So you should be writing rules because if you're talking about enforcement, the harm is already done, right? You should still enforce, you should still bring penalties, you still get restitution, but the harm is already done. So better that you should have transparent rule writing processes in place, right? Rigorous rules which we have in New York. Use your examination and supervision processes to hold companies to account. And then when they still break the law or if they still break the law, you have the enforcement tools so having that full suite of tools at DFS is incredibly powerful. We brought the first crypto action at DFS not that long ago against Robinhood it was a \$30 million penalty for cybersecurity and AML deficiencies.

But everywhere we can across the board, I say to the team, assess the penalty. Absolutely right. People people break the law, they should be penalized. Then what's the remediation that we want to require and how are we going to hold them to account on the remediation? Because it's not just enough to pay the penalty, you have to make sure it doesn't happen again. But then the restitution, right, where we can, where the law allows, let's put money back in consumers pockets.

Aaron Klein [01:08:30] The restitution is important, by the way, the penalty, though, is it paid by the people that break the law or is it paid by the shareholders of Robinhood and not the managers and people that knowingly engage in that. We'll table that because you still got to get to, not going to let you off the hot seat here—

Adrienne Harris [01:08:43] On the what's coming—

Aaron Klein [01:08:44] What's coming next year in your agenda on virtual currency and digital assets.

Adrienne Harris [01:08:48] Yeah. So I think like you've seen with blockchain analytics and the guidance and the Stablecoin guidance where we've taken what's in our individual supervisory agreements and created guidance, you'll see more, more guidance and we'll have more to say on capitalization. And that's been in the product roadmap since before FTX. You'll hear more from us on consumer protection, disclosures, advertising, a lot of those things, complaints, have, making sure these companies have an easy way for consumers to complain. And I think, you know, there's lots of things in our authority that we're going to look to, to bolster and broaden, because the world has changed already since the BitLicense framework came into being. So lots of work for us to do to make, to make clear the expectations that we have already and to make sure that the things we have on the books equip us well to keep up with this marketplace.

And I'll tell you, just an aside and an interesting anecdote. It's funny having come into this role and the complaints about operationalizing the licensing process and, you know, I talk about making clear what the expectations are, there's these rules have been on the books, but we're using guidance to make those expectations even more clear and transparent. And sometimes I get executives from these companies and they come in and they're complaining about how long something is taking. And they say, well, nobody ever held us to the standards in the regs before. I'm like, well, that's, that's not my problem. Right. It's right there in the black and white of the rules. We've made it even that much more transparent through the guidance. These are the rules. And we're holding you to these standards so, that, operationalizing this stuff and the way you do that really matters.

Aaron Klein [01:10:28] Of course. And to the extent that you have complaint data, the more you share publicly, I think one of the things that CFPB has done that's been so valuable is sharing their complaints, it's guided my work as a researcher and I saw the number two complaint at one point was this timing issue about checks looking like they'd been cleared in your account and then people

getting overdrafts because they were still processing. That helped spawn a whole line of, of research of mine into the drivers of of of overdraft and providing that information to the whole world that you just see is valuable.

Adrienne Harris [01:10:58] We also regulate health insurance, so you can imagine what those things look like.

Aaron Klein [01:11:01] Woah, okay, well, we're going to, we're going to we're going to table that one right there. Then I want to talk for a second about challenges, and we're going to turn to the audience for questions. But Dennis made a parallel between the draft federal bill that was being discussed and its preemption of state regulation and what happened in subprime, where some states were were more aggressively doing that. And they got preempted. And there's a lot of conversation in banking about preemption. You can't have a conversation about the state perspective without discussing preemption. And, you know, generally the OCC and the comptroller. What challenges do you see in the world of of this, of of this problem about potential preemption, given your high standards? And how, how has that challenged you as a as a regulator? And, you know, first, and do you agree with the parallel? Yeah.

Adrienne Harris [01:11:53] No, I think it's a, it's a great analogy. I might borrow it if Dennis gives me permission to do so. We are constantly fighting this preemption battle. And look, I get it, because if you look at states as a whole, 48 of them regulate crypto through money transmission, which is a weak framework for the space. So if you're a federal regulator or a federal legislator, you're saying, the states aren't getting it done with the exception of one. And so our push to the federal lawmakers has been there is a way for you to keep a state path, to have a federal floor, but keep a state path in those instances where a state like New York wants to be able to exceed the federal floor and indeed in the bills that we've seen, often our requirements are more stringent than what's being proposed in in those bills. So we think it's incredibly important to do that.

And as we, as we've seen, states can be more nimble. So New York is able to move much faster and keep up with what's happening in the industry and put out guidance or change our regs, I think more quickly than the federal regulators are going to be able to do that. And that's going to be to the benefit certainly of New Yorkers. But then there's the model. They're already out there for others, hopefully to, to follow suit.

Aaron Klein [01:13:08] So one concern about that is if you set a federal floor and then you get 50 different, slightly altered steps, it becomes complicated and convoluted to operate.

Adrienne Harris [01:13:20] Yes. And listen, I've had that experience myself as, as an entrepreneur. It is, it is complicated, but I think the benefits outweigh that complication.

Aaron Klein [01:13:30] Fair. You know, sometimes regulators have to make tough choices, right, in terms of costs and benefits, there aren't free lunches, so to speak.

Adrienne Harris [01:13:35] Yeah, we only get the hard problems. You know, we don't get—

Aaron Klein [01:13:38] So speaking of hard problems, I'm looking for a good, hard question. I'm going to look, Nicholas is always willing if he's, if he is, he probably came in armed and loaded, so.

Audience Member [01:13:50] Hi, thank you so much, Nicholas Veron at the Peterson Institute across the street at Google in Brussels. This conversation has been very and appropriately, maybe US centric, but this is our global assets and there is legislation in Europe which is being finalized called MICA, which I'm sure you're familiar with. So can you tell us a little bit about, you know, where the US stands compared with its international peers, is it going to be a rule taker because it's so slow in advancing legislation? How do you see that?

Adrienne Harris [01:14:20] Well. So I will speak for New York. You know, we, we talk to especially at DFS, right, because we actually regulate 80 foreign banks. So we have lots of sister regulators that we work with every day on the banking side. And so it leads us to very natural discussions about virtual currency regulation. And even with that framework or any of the others that are, that are popping up around Europe and Asia, I will say and its, that people look to New York as the model, because our standards exceed even what's been proposed there. And I think, you know, I think that's a, it's a good thing. As I said earlier, people will tell us, we know if it's passed New York standards, it's it'll be good with us.

I think then the trick for us as regulators— state and this would be true, I think, for the federal regulators, too— is and how do you have coordinated supervision? Because if you have one entity that's regulated by the FCA and one piece of an entity that's regulated by DFS, you want to make sure that the regulators together can get a view of the whole and see the risk. And we have some ability to do that at DFS, looking at affiliate structures and all of that. But that much better, right? If regulators are sharing information and making sure that they have a good overview of the risk. And we do that

quite a lot when we have shared entities with regulators, foreign and domestic, where we share information, share supervisory insights so that we're all getting a holistic view of the risk.

Aaron Klein [01:15:51] I'm looking for other questions. I'm happy to keep going. But I want to give folks here a opportunity. Mic.

Audience Member [01:16:00] Here we go. Hi, Meg Tahyar from Davis Polk. You know, it strikes me and I'd be interested in your views, that there's a really big difference between regulation and supervision. And we've got a challenge in the crypto space because we haven't sorted out federal regulation. You all sorted it out in New York. But you know. If you look at FTX, they ought to have been segregating customer assets. They had a contract that said they would segregate customer assets. They didn't. They might have been regulated in whatever jurisdiction they were licensed in, but I don't think they were supervised. And I think it's supervision that's going to make the key difference here once we get the regulatory framework in. And I just wondered what your views were on that.

Adrienne Harris [01:16:47] Yeah, I absolutely agree with that. And I think it's again, it's part of the power that we have in New York. And Pete made reference to that where we have our applications team, then we have our supervisory team and each company has their POC, so a senior member—.

Aaron Klein [01:17:00] Point of contact.

Adrienne Harris [01:17:01] Point of contact, yes. Sorry. I came back to DC and all that, all everywhere I could find an acronym, I just wanted to unleash it. Every company has their supervisory point of contact that manages their examinations and you know, and we write reports and they've got MRAs— matters requiring attention— and matters requiring immediate attention. Right. And, and it's similar with the remediation on the enforcement side, right? You have an MA, you have an MRIA, you have a clock, there's a time we expect you to fix the deficiency. We will come back and examine against that to make sure you've done so. And for those repeat offenders, you get kicked over to enforcement. So I completely agree with you. The supervision piece is incredibly important and it's sort of like what I said earlier, right, regs are great, but there are a first step they have to be operationalized well.

Aaron Klein [01:17:52] You, you know, my favorite number is 17,626, which is the number of possible three letter acronyms, 26 cubed.

Adrienne Harris [01:17:59] How many.

Aaron Klein [01:18:01] Yet, you know, I think we could all sit around here and count the number of ABA's.

Adrienne Harris [01:18:05] Yes.

Aaron Klein [01:18:07] And so we have to keep using them. And for folks, you know, one thing one question I have gotten a lot from the media about the FTX is why didn't regulators stop this? And, you know, kind of makes a point like you can write laws and police try to stop people from breaking the law. But, you know, usually it's well, you have to catch the person after.

Adrienne Harris [01:18:28] Well, and this is, this is sort of a tricky existential thing about regulation, right? If you have a licensing regime or registration regime, companies have to pass muster to be inside your regulatory perimeter. Right. And it's not that only good actors seek to be inside the regulatory perimeter, but often the worst actors will seek to be outside the regulatory perimeter. And then what happens when they, when they behave badly?

Aaron Klein [01:18:56] Well, it's a good question. I mean, there's a big distinction between license and charter.

Adrienne Harris [01:19:02] Yes.

Aaron Klein [01:19:03] And I don't think people fully think about those words. Right. A license is a permission to do something. I assume everybody in this room has a license of some sort. Right? Usually a driver's, right. But there are other different permissions. Right. If you want to cut hair. Right, there's a license you have if you want to teach, there are occupational licenses, there are all sorts of different licenses. That's a permission with a minimum threshold. A charter is the ability to do essentially a government function in perpetuity. Right. A charter can only be revoked. It's a very different threshold. Right. You charter banks? Right. You have a state chartering association there are insurance companies, are charter, right. Why banks create money, right. There's a big difference between money transmission where you're supposed to move money, and money creation, which has predominantly been a function of government.

Crypto, one of the many ways it blurs these lines is money creation as well as transmission. FTX— what limited things we know about their balance sheet— seems to be that they were hiding assets by inflating values of tokens that they had created but not issued, and marking them at an, at a mark to market rate that was implausible given the supply of amount of situation. And we don't think

about banks as creating money, but that's what they do, right? When we settle in digital currency today, we settle in digital bank dollars, not Federal Reserve dollars, not New York State dollars. Right. But digital bank dollars created by those digital banks with the chartered permission of the federal government. We have time. I want to, I want to end on one closing question. Right. You point out there are 49 other state banking commissioners out there. They're federal regulators. Yep. Right. Well, hold aside the insurance and the other folks, because not all of the states—

Adrienne Harris [01:20:56] Some of us are lucky to have all of those things in one place.

Aaron Klein [01:20:58] Most states don't have them coordinated and some insurance commissioners are elected as opposed to appointed. Very different world. What advice do you have for them? Because I have to assume that they're all getting questions about virtual currency. Many of their constituents have been harmed in either Blockfi or FTX or Terra Luna or other commercial. What would be your, you know, one, two or three pieces of advice? To close on this for the other state regulators.

Adrienne Harris [01:21:26] Yeah. So of course I would, you know, as I said at the top, we need more regulators in this space, not less. So that means state regulators, federal regulators, international regulators. So where you can get the authority, you know, you should get it. We're happy to tell you how, how we do it in New York. So I think that's important. I think the other thing I would say is— and this came up on the earlier panel— it is really hard to look at cryptocurrency virtual currency and say it fits this box. Right? The securities box, the, the commodities box, the currency boxes. In reality, a lot of this stuff sort of shapeshifts and you can pull from those frameworks. But in a lot of ways this is something a little bit different, and so requires, I think, some, some fresh thinking, too, about how to address those risks. So that's the other thing I would say.

The third thing I would say is most of these companies, executives, investors, some of them come from the traditional finance world, but most of them haven't been socialized the way those of us who sort of grew up or grew up as professionals in the wake of the financial crisis have been socialized. So there is very— and we experience this every day in New York— there is a tone reset that needs to happen even from the regulated entities. Just to say this is when you are a financial company and a regulated financial company or a company that should be regulated, there is a way that you behave, there is a way that you engage with regulators. There is a way that you engage with lawmakers. There is a way that you are expected to treat consumers in a respect you should have for

markets. And we have a long way to go in sort of that re-socialization or that socialization and that tone reset, I think, with this space.

Aaron Klein [01:23:13] Well, thank you very much. And join me in thanking Superintendent Harris for sharing your time and wisdom with us and—.

Adrienne Harris [01:23:21] Thanks for having me.

Aaron Klein [01:23:22] I'm going to start by calling up the next panel. There was a question that came in on Twitter, what about consumer protection, from Christopher Smith. And I thought, you know, that's exactly that the right question to be asking. So what, let's have a panel to come up to focus on nothing but that question. And in that regard, I would like to start with introducing the panel's moderator, who's the executive deputy superintendent of research and innovation at New York Department of Financial Services, where she's responsible for economic research, innovation policy and virtual currency licensing and supervising. Prior to joining DFSS, many of us know her from her great work at the Federal Reserve System, looking at financial technology and consumer protection issues. Kaitlin, the floor is yours in this panel.

Kaitlin Asrow [01:24:10] Thank you so much, Aaron, and to Brookings for having me here. Grateful to be able to close out this great event, talking about a topic near and dear to my heart. So as Aaron said, we're going to talk about consumer protection. We've been having a lot of fiery panels and discussions, but we'll try to stay focused on that issue, which is obviously very topical. And so I'm joined today by Tonantzin Carmona, Rubenstein fellow at the Brookings Institution, Jack Solowey, policy analyst for financial technology at the Cato Institute. And Andrea Donkor, SVP, senior vice president of Regulatory and Customer Compliance at PayPal. So I'm going to give a few kind of framing, opening remarks, give it to each of my panelists to introduce themselves more fully than I have done and give some opening statements, and then we can jump into the conversation.

So the first panel today was about safety and soundness. So obviously these two things are highly interrelated. I want to, as I said, focus more specifically on consumer protection, protections we have at least here in or in New York State, and what other protections we may want to put in place. And I will note in the prior panel that right, there are existing investor protections and securities in the commodity space, but that really is dependent on this classification and this determination of what a virtual currency is.

I think from my perspective, I really want to push beyond that and ask what should apply regardless of the classification so we can stop having this debate and put the protections in place. And obviously, with recent events that are top of mind for everyone, you know, real people are losing their funds. Virtual currency is being used by retail investors. And it's important for us to think about the protections that we can offer them that they have in the traditional financial space at DFS, at New York DFS, which I am responsible for the Research and Innovation Division, we have three core components of consumer protection in the BitLicense and that we carry through to our limited purpose trusts. That's a requirement for consumer disclosures, it's a requirement regarding kind of unfair and deceptive practices and marketing. And then finally, it's a consumer complaints processing system, our entities have to have a way to intake and process consumer complaints. That being said, given my background I'm very interested in expanding on this and strengthening these protections. So with that, I'll hand it over maybe to Andrea to start.

Andrea Donkor [01:26:39] Hi. Good afternoon, everyone. Pleasure to be here. As Kaitlin called out, I lead our regulatory and customer compliance function at PayPal. And talking a bit about PayPal and our foray in the crypto space, I think it's important to level set because in the context of the conversations that you've been hearing, you hear a lot about crypto as kind of a monolith as an industry. When there's a range of activities that happen in the industry. You hear about the average crypto customer also as a monolith when again there are a range of sophistication levels, if you will.

And I raise that because what drove PayPal's entry into the crypto space was about two plus years ago, we conducted a blind study of customers and prospective customers, and we found that there was a considerable interest in crypto as an asset class but two barriers really to entry. The first being not having a knowledge of what it was and how it operated. The second being not having access to what felt like an intuitive user experience that they felt they could safely engage and trust a provider to give to them. And of course, in that context, we asked them from a brand perspective, what brand would they trust to begin their crypto journey? And more than 70% of the time, they decided it was either PayPal or Venmo. And as is usual with us, the voice of the customer kind of led our journey. The second driver for us entering the space is PayPal has been for the better part of 22 plus years a payments in e-commerce company. We pride ourselves on being able to broaden financial access, create access to faster and cheaper payments. We've provided near real time

payments for hundreds of millions of customers across the world. The reality is that notwithstanding the fact that we're able to do that today, there are inherent latencies in traditional payment systems.

And so in looking at, you know, digital currencies, be it CBDCs or stablecoin or cryptocurrencies, there's tremendous potential to be able to bridge some of those latency gaps and create more efficient and cost efficient and safe payments at scale. And so bridging both what we saw as a customer desire, furthering our mission, that was our entry into the space. I start with that because we think about regulation and customer protection. It should be with those nuances in mind, what's the nature of the activity of the entity who is in the space? What is the nature of the sophistication of the customer and what you're trying to protect in the associated asset class? And with that, I'll just pause and maybe turn it over.

Jack Solowey [01:29:26] Thank you so much. Thank you so much. As Kaitlin mentioned, my name is Jack Solowey. I'm a policy analyst at the Cato Institute's Center for Monetary and Financial Alternatives. I would just like to start by thanking my co panelists, Andrea and Tonantzin, the Brookings Institution for hosting us, and Kaitlin for moderating. As a data protection lawyer before joining Cato, I had the chance to see, and why DFS is cutting edge work in terms of cybersecurity regulation. So I'm really excited to be having this conversation today at the cutting edge of digital assets. And crypto states have really been, excuse me. States have really been laboratories of democracy. And I think it's worth pausing on what this means, exactly.

So. A laboratory, for example, you run experiments. These can result in either positive or negative outcomes. And I think it's worth looking at what we've seen thus far in terms of the, the experiment of a patchwork of state regulation of cryptocurrencies. And I think thus far, while states have done an admirable job at taking up the mantle of trying to dispel some of the regulatory uncertainty in cryptocurrencies, the experiment thus far has really shown that applying a patchwork of regulations to what's a networked industry has serious drawbacks. For example, disparate requirements can create practical issues in terms of compliance across different states with different regimes. So, for example, New York State's BitLicense would require in terms of custody and customer assets, custodial assets backed by the same type and same amount of a crypto token. Whereas in Hawaii, that state's money transmitter laws, by contrast, would require platforms to hold only permissible investments to back customer assets. And that includes things like cash, but notably does not include things like crypto tokens.

So in the case of these incongruent regimes across the country, what you have is different approaches to licensing, different approaches to regulation that really lead— that can cause barriers to entry— and can lead certain organizations and projects to not be able to operate across 50 states at once. So I think it's important that when approaching the crypto ecosystem, that regulation be tailored to risks and market failures and not to the boundaries between states or between jurisdictions. And to be fair, the states are doing their best under conditions of regulatory uncertainty from Washington. Where Washington comes in, you know, we could spend the next probably 3 hours, let alone three days talking about FTX. But it really brings to the fore the question of what might federal regulation of crypto exchanges look like? And I think it's critical here, to, to do what Andrea was really talking about, which is dissect the nuances between different projects and players in the crypto ecosystem.

And it's really worth pointing out that FTX, what it was, it was a centralized custodial crypto exchange. It should be distinguished from non-custodial, decentralized crypto exchanges that have on chain transparency where users self-custody of their assets. Decentralized finance, which was not FTX, actually helps to mitigate by design, it's not risk free but helps to mitigate many of the risks that were plaguing FTX. So I think in this conversation, it's worth noting that private innovation itself can be a form of consumer protection, as we've seen with the advent of a really important innovation in terms of decentralized finance.

Tonantzin Carmona [01:33:35] Well, hello, everybody. My name is Tonantzin Carmona. I'm a Rubenstein fellow at the Brookings Institution as part of the Metro program, where typically, when I'm not talking about crypto, I focus on racial equity, wealth and inequality, public finance and civic technology. However, my most recent work has focused on the risks and drawbacks to cryptocurrencies, particularly how they impact black and Latino communities that right now are seeking avenues to build wealth or access financial services.

You know, just given everything that's in the news, the long list of priorities now that policymakers and regulators have, I think conversations like this are incredibly important because they serve to recenter the conversation around the very people that could be hurt the most by a lot of what's happening right now. They kind of highlight the high stakes for retail investors, kitchen table investors, everyday, ordinary people that, you know are looking to either, again, like access certain

services, products. And so I'm just very grateful to be part of this conversation and I'll keep it short so we can get started.

Kaitlin Asrow [01:34:46] Thank you all. So to kick us off, let's, let's start pretty broad and I guess Tonantzin I'll start with you. You know, if you had your wish list, you know, what are the consumer protections that you think need to be in this space taking into account what Andrea and Jack both mentioned, which is the diversity of the business models and the types of virtual currency in play.

Tonantzin Carmona [01:35:06] Sure. So my, my list is long, especially given all of the news. But I'll say with, I, as it so happens, the CFPB, the Consumer Financial Protection Bureau, actually came out with a complaints bulletin last week in the middle of all of the FTX hubbub that I really highly recommend you read if you haven't already, because it did a good job of highlighting what people are actually experiencing when they use these products, as well as what's leading to the rise of complaints.

So, you know, one of the top issues across all of the different categories, you know, was the category of fraud and scams. That's something that if you're reading about this space, this shouldn't be new, but it is something that is really prevalent and rising, followed by transaction issues. And then there were also examples of people experiencing hacks, people experiencing customer service issues, people experiencing the lack of avenues for redress. And so if you take all of that into account, along with the fact that there are very specific groups that might be impacted. So not just black, Latino, low income populations, but we have service members, we have older consumers that are using these products. I kind of think about it in maybe just a large view because I don't want to get into technical specifics right now.

But on the one hand, I would say consumers should have information regarding crypto. That's not just about the volatility, which they should have that and I think a lot of folks know that. But for folks that don't, they should know that. And they should also be aware that crypto is a target for scams, for fraud and for hacks. And then on the other side, you know, just even listening to like a government perspective and all of this a little bit earlier, I think it's really important to ensure that the agencies and regulatory bodies that are overseeing these spaces, that they have the resources they need to vigilantly monitor the industry and aggressively pursue bad actors.

Kaitlin Asrow [01:37:04] Jack, what about you.

Jack Solowey [01:37:05] Sure. So how I would approach this is to first ask a couple of important questions. What type of product and service are we dealing with and what's the nature of that product and service? So I think it's important to distinguish between tokens and exchanges, and it's also important to distinguish between centralized exchanges and tokens and decentralized exchanges excuse me, frog in my throat today, decentralized exchanges and tokens. When it comes to centralized tokens, for example, these really exhibit attributes like securities. And in the securities context, the classic risks that we are concerned with are managerial risks associated with a centralized body that might have material nonpublic information and create an information asymmetry between the managerial body and the prospective users of the tokens or investments, however you want to look at it. So in that context, I think it really makes sense to have a disclosure regime.

But it's important to note here and this came up on the last panel, there are some gaps between even if you wanted to subject security like crypto tokens, centralized crypto tokens to securities disclosures, those might not, the ones that we have on the books right now might not actually serve the best interests of consumers. If I was a consumer of a crypto, centralized crypto token, things that I would want to know are what is the consensus mechanism of the token? What is the governance mechanism? Is there a block explorer for exploring the transaction history of the token? Who are the developers and what stake do they have in the ecosystem? What rights might they have that others in the ecosystem might not? So I think it's important to understand that even taking conventional categories of risks, there's unique ways to try to mitigate those risks in the crypto ecosystem.

With respect to exchanges, again, taking a risk-based approach, centralized exchanges present the classic intermediary risks of how are customer assets custodied. And in the case of FTX, while theirs is a rapidly unfolding story, I think it's fair to say that customer asset custody was not necessarily up to the gold standard, to say the least. You also have questions of transparency. It's notable that Sam Bankman-Fried, in one of his profanity-laden Twitter, Twitter threads the other day, said that— and this was before he stepped down as CEO of FTX— but in the future, one way to maybe right the ship would be to have greater transparency and what he referred to as, as close to on chain transparency as possible. So in the case of a centralized exchange, absolutely. Rules and regulations that get at transparency make sense when taking a risk-based approach.

However, with respect to decentralized exchanges, one needn't get as close to on chain transparency as possible, because when transactions actually settle on the blockchain public ledger, you don't have the same risk of an intermediary not living up to their promises. And I think I'll pause there. But really distinguishing between centralized and decentralized exchanges and tokens, ascertaining the risks and asking, is there a human in the loop? Is there a figurehead like an SBF that is in the position to break promises, either explicit or implicit to users?

Kaitlin Asrow [01:40:46] Thank you. Yeah, I'll definitely put a pin in the disclosure piece because it's quite interesting to me. But just to close out, Andrea, I'd like to reframe the question slightly for you. Just because you're on the ground and have the opportunity to kind of implement consumer protections beyond even regulatory requirements. And, you know, PayPal has obviously focused so much on the user experience. So what is PayPal implementing today and how do you think about consumer protection and communication in the virtual currency space?

Andrea Donkor [01:41:13] So I'm going to continue to speak about this from the lens of recognizing the growing adoption of cryptocurrency, and that when you're thinking about the broad segments of folks who have an expectation of certain information, who deal otherwise in traditional financial services, more broadly, want to make sure that at the end of the day and what we think about is, you know, how do we disclose to them information that is material for them and their decision making? Right. And so, look, what we see in the context of FTX and more broadly in industry, things like conflict of interest. You often see that there is a non-disclosed vested interest between the exchanges and the tokens that they put forward and that's a material element of information in which a consumer can then make the judgment, well am I being steered towards this or is this an independent choice that I'm making. Or understanding basic things like restrictions around the sale or transfer. This is, you know, broadly when we think about crypto, to everyone's point about the regulatory frameworks that exists or do not exist for it, I think when you think about the consumer's view, our consumers good, bad or indifferent expect a particular safety net. And you see this every time you hearing the painful stories around these, you know, issues, whether it's FTX, whether it's other, other contexts.

And the question becomes, how do we bridge the gap? And so in the context of PayPal, we primarily offer payment services for our customers. And there are disputes rights for unauthorized transactions under Reg E. That framework does not exist explicitly for crypto, but that is something

that we do offer. Again, disputes rights for our customers for unauthorized transactions. Or account takeover and fraud, and Tonantzin, you mentioned the growing, you know, number of cases that are there highlighted in the CFPB publication last week. We extend to our customers a certain amount of protection related to account takeover. And again, because if you just do the sniff test, right, it doesn't feel right to us that if you're engaging in fiat transactions with us, you have coverage under Reg E. Right. You know, for, for disputes, if you're engaging with us for crypto, we leave you out in the cold. And we know that our customers came to our platform, again, I go back to the blind study and that trust is what drove customers to our platform. To preserve that, we have to ensure that we maintain the adequate controls.

I'll also, just for a moment, I'll go down the tirade, point around governance and operational risk and also regulatory oversight in relationships. It's critical. And it's the reason why I think we were able to extend and operationalize these types of controls. We're already in the payments sector. We already have the systems and the reporting and the metrics and the resources and tools that enable that and allow us to extend to another product vertical. If you are a new entrant into the space and you don't have the ceiling or the guardrail or requirement of having to invest in these areas, it perhaps is not a primary area of, it's not a priority for you. And so that's where we're starting to see and why we see across the industry just this very broad spectrum of consumer protections that are offered to customers in crypto.

Kaitlin Asrow [01:44:44] So going back to disclosures, you know, I tend to struggle because I don't always you know, I think of disclosures as transparency, not necessarily some of that core consumer protection they spoke about in terms of Reg E and some of the transaction protections. But just focusing on disclosures, because that is a common tool that we have, you know, I think we've heard here. Right. Materiality. We've heard about kind of, conflicts.

You know, I think, Jack, you mentioned things down into centralization versus decentralization, you know, consensus mechanisms. When does it become too complex to actually disclose? Right. Like what does transparency in the space look like when it is so complicated to communicate and maybe Tonantzin, I'll turn to you just because given again, the diversity of populations who might be investing, how do we capture all of these nuances, explain them, disclose them, and make them accessible for anyone who wants to invest?

Tonantzin Carmona [01:45:46] Yeah, I appreciate the question. And it's a tough one because it is about, you know, this, this balance you're trying to meet. There are a lot of tradeoffs because you want to give people as much information as possible. But, you know, having worked in government, when you're trying to do that and you put that all in one page, you know, it can be hard to read and decipher. And so I think a lot of it comes with intentionality, first and foremost, because things like, you know, we can talk about disclosures more broadly around like prices and fees, for example, and say you have to like disclose the fee. But the way that it works out in practice is that in actuality, a lot of people don't even recognize that there are a lot of hidden fees within crypto. So like the way that you pose something to you might have met a requirement if you're a company, but to the consumer it's not necessarily clear the amount that you were actually paying.

So, for example, a lot of folks don't realize that there's a difference between a blockchain cryptocurrency network fee versus platform fees. Platforms could encompass exchanges, Bitcoin ATMs, trading apps, all these things. And when you add them all up, it can actually be quite expensive to make a transaction. And so the way that you like require that disclosure like really matters. So it's not just saying like we need a clear price. It's like you actually have to sometimes get into like the specifics into like what you're requiring, how people should actually like post a price. And I don't know if there's a way to like make that process dynamic such that like as you taken in info and you learn from what people are experiencing, whether it is clear or not, you can maybe make adjustments to that language, but that would just kind of be an example.

And on the other side, in terms of the intentionality piece, I mean, there's so many different groups that could be impacted by crypto, crypto related products. I often think about Latino immigrants, for example. So this is a community that often gets discussed with, as it relates to crypto, either from a financial inclusion perspective or because you know, they're an immigrant population and they could potentially use these products and services for cross-border remittances. And I actually think that there's a lot that kind of gets like glossed over. There's a lot that gets conflated. There's a lot that people don't recognize in terms of the fact that there are differences between the technology's present capabilities and potential. And we have to be honest about those things. But if you're a regular, if you're a regulator and you're trying to increase awareness, for example, you're trying to be intentional about, say, disclosures or marketing, you would look at this group and say, look, there's reporting and research that is showing that in the same way that we've seen payday

lenders and check cashing services concentrate in low income neighborhoods, we are now starting to see Bitcoin ATMs in Latino grocery stores, in Latino neighborhoods and Bitcoin ATMs are notorious for having like really high fees anywhere from 7 to 20% per transaction, not to mention the fact that it's not necessarily that they are promoting stablecoins, they're promoting Bitcoin and other extremely volatile assets.

Okay, so we have this information. How do we make sure that they actually understand what's happening? You would prioritize things like language access and making sure that information is available to people in multiple languages. You would maybe want to partner with community based organizations or consumer advocates that actually have the connections to be able to reach these populations. A lot of this will require thinking outside the box. A lot of this will require extra resources, which is why I kind of in the beginning was like it kind of will take resources for folks to really be intentional about all of this.

Kaitlin Asrow [01:49:26] Yeah. Maybe Andrea, turning to you, I mean, PayPal has this ability to see what works and what doesn't with regard to consumer communication. I don't know if you have any lessons from what you've seen with disclosures and how you communicate about virtual currency.

Andrea Donkor [01:49:40] Sure. I mean, I would say in addition to, you know, your T's and C's and the disclosures that you'd see in fine print, I think that that's fine and that's acceptable. I think beginning from the premise that we're dealing with a segment of customers who are crypto curious. We recognize that education was just as important as disclosures. So even in your native in app experience, you have the opportunity, whether you're engaging in a live transaction, whether you're exploring the app to get an understanding of what is Bitcoin and you know, what are the tax implications of what I'm doing, etc.. That piece around education was paramount for us because we know we need to bring the customers, the customers along.

I think as well, being able to have in-app disclosures. Right. So in your, in your native experience, as you're making your way through the journey, understanding the fees, having that prompt for you real time as you're going through the transaction. That contextualizes for folks the relevant information they need to know in the moment. And I look, I can appreciate that there is a lot involved in the context of crypto and it's complicated. There's a lot in payments. There's a lot in banking. Right? Like financial services is not the most intuitive things for folks, but we've found ways

and frameworks that work, and I confidently think we can do so here if we continue to center folks and the intuitive experiences that they need.

Kaitlin Asrow [01:51:04] And Jack, anything to add on.

Kaitlin Asrow [01:51:05] Sure. So I think it's a great question. Obviously, there is a lot of complexity. You have the added dimension that there is both the complexity as a financial instrument and also complexity in terms of the technical implementation. But I think it's worth noting that even in the classic context of, say, a typical equity share of stock regulated by the SEC that has required disclosures from the Securities and Exchange Commission, not every consumer is necessarily parsing every jot and tittle, every line of, of a securities filing. And we have folks in the ecosystem that have fiduciary duties to function as investment advisors with respect to interpreting what can be jargon-laden, legalese laden, and financial literacy constrained, disclosures.

And I think in the crypto ecosystem, the first step is asking, well, what, what is it useful for a consumer to know? And as I was mentioning a minute ago, I think there are unique types of disclosures that are relevant in the context of specifically a centralized token, where you have a managerial body making promises of performance to users that more closely resembles a security. In that case, you had, it's relevant, as we were mentioning, what's the consensus mechanism? What is going to be the future token supply? Bitcoin, for example, is famously constrained at 21 million. Other crypto currencies are not necessarily so I think that's a relevant feature.

In addition, what is the governance mechanism say for updating the core software of a crypto token? So I mean, it's possible, in addition, the crypto ecosystem being natively on chain provides opportunities also to just promote transparent, transparency inherently. So tools like a block explorer when you, where you can view an all-time transaction history for a cryptocurrency. And I think it's relevant to— when providing a block explorer— to explain how to use it and what exactly a user might be able to discern through that tool. And I also, again, just wouldn't want to lose sight of the fact that, yes, there will be complexities in this space. And I don't think that users need to fly blind. I think there, the market can provide an ample bevy of other types of service providers and advisors with fiduciary duties that can help help folks navigate this ecosystem.

Kaitlin Asrow [01:53:51] Yeah. So moving beyond disclosures, I think, you know, Andrea, you mentioned kind of Reg E protections, thinking about safety nets broadly, you know, thinking about investment advisors or other folks who can provide context. What other kind of consumer protections

beyond disclosures do you all think should be in place? And how do we balance that? You know, I think we got some questions from the audience prior to this event, with regard to not cutting out people from exploring new alternative products through the kind of lens of consumer protection.

So, I don't know, Jack, maybe restarting with you. Beyond disclosures, are there kind of other consumer protections that we see in traditional financial spaces, such as Reg E, liability limits, transaction limits that we should have in virtual currency?

Jack Solowey [01:54:38] Sure. So in terms of tokens, I think the model of asking first, is it centralized or decentralized? Is it security or not a security more closely resembling a commodity can take us a lot of the way there. And conventionally, we have, we don't have a merit-based securities regime in the US. It's a disclosure-based regime. And I do think, frankly, that disclosure itself is a good way to balance both consumer protection that's targeted to the risks of information asymmetries, but also doesn't foreclose the ability for consumers and users to access the types of tools, instruments and tokens that they are interested in in the marketplace.

With respect to exchanges— specifically centralized exchanges— I think there is room to have requirements around, for example, disclosing an application programming interface for best price and transaction volume data, leveraging some ability of the technology itself to provide information to the public that are interested in transacting on these exchanges. With that said, I wouldn't overlook the power of disclosures to provide a signal in the marketplace. I think, for example, if it is required to disclose what an exchange's policy, a centralized exchange's policies are around consumer asset custody. Will you be re-hypothecating, will you be lending customer assets out? And if the answer is yes, I think that disclosure can signal to consumers that are just not comfortable with that level of risk that they don't want to use that exchange.

Similarly, if an exchange says, no, we will not be taking those, we will not be re-hypothecating, we will not be lending out customer assets, and it's found later that they have been engaging in fraud, they've been violating their own statements of material fact, I think the fraud authorities that we have, both common law and both under SEC Authority and CFTC authority after Dodd-Frank, provide an opportunity to really enforce against fraud and material misstatements and omissions.

Kaitlin Asrow [01:56:53] And Tonantzin, what about you.

Tonantzin Carmona [01:56:54] I guess, to add to all of the different things that were discussed today, I would say that there are a lot of opportunities with regards to like marketing and then really thinking about how cryptocurrencies are presently marketed. A lot of the language that's used, the practices that are used just can be a bit misleading. So, you know, I already brought up the example of the fact that, you know, there's differences between the technologies, present capabilities and its potential. But often the way that the products are talked about, how Crypto's talked about and touted, quite frankly, is we only really hear about the upsides, which can be incredibly seductive. But these are also a space that like, products that are rife with a host of risks and drawbacks. And so I think that's worth thinking about.

The topic of financial inclusion is one that comes up to me a lot when I think about this conflation because, you know, you'll have people make statements like, you know, crypto has financial inclusion benefits. And again, there's a difference between present capabilities which show that that that's actually not true versus potential. But if you're a person who's listening to someone say this, particularly an elected official say this, which we've had elected officials at all levels of government talk about cryptos financial inclusion benefits in such a way you could believe that it's safe, that it's regulated, all sorts of things. And so I think we have to be careful just in that little, that space alone.

And I think, I think related to this is this is a really complicated space, I think like the panelists talked about it's not impossible to figure this out, but I think part of the problem also stems from the fact that a lot of the terminology used, the phrases used, to describe crypto or crypto related products are contested, they're fluctuating, and they mean different things to different people. So, for example, you know, you mentioned decentralization a lot. I could quibble with that all day because I think there are a lot of intermediaries within the so-called distributed ledger system. You have software developers, miners who can develop a host of conflicts of interest, for example. But there's stuff that we would agree with. So I'm not just saying, you know, and so but the point is, is these things can get contested and mean different things to different people. The same could be said about terminology like trustlessness, or the way that we make associations between terms like immutability and security. You know, I see that, that associated, association made all the time, but the fact is, is like, okay, maybe we'll take for granted that it is it is immutable, which again, I would disagree with that. But if I took that at face value, there's still the fact that the space is rife with scams, with bugs. So is that

secure? And so I think that's where we have to pay attention to the terminology, the phrases, the fact that a lot of this can be misleading, the false promises that are often made in regards to potential earnings.

And so I would first study the way that all of these things are discussed among different groups. And I'm not saying this is holistically done across the industry. I think there's actually tremendous diversity within the industry. So we do have to kind of analyze it. However, this is so commonplace that I think that that could be a really great place to start to start to untangle a lot of this.

Kaitlin Asrow [02:00:12] Yeah. One just quick follow up question. Do you think that there's a place for, let's say, you've mentioned Bitcoin ATMs, like actual transaction limits, let's say you're a new customer and actually placing kind of versus just having a disclosure regime, are limits on what a consumer can engage in if they're just signed up or if there's, you know, they show some kind of activity that's concerning, like they're being scammed.

Tonantzin Carmona [02:00:35] Oh, yeah. I mean, and to, to the point of like hard limits. I think one way to even approach this is obviously a lot of folks have talked about holding crypto and crypto related products and platforms to the standard of banking, Wall Street, that same kind of like level playing field or standards that they have. But I also think one of the things that happens a lot with crypto products like Bitcoin ATMs, like others, is that they'll say they're filling a gap for traditional financial institutions. So they actually make very similar claims to industries like payday lenders and check cashers, which can be incredibly predatory. And so I think one way to approach this is to look at those industries, see what worked, what doesn't, what is still like, things, what are things that people are struggling with and kind of also approach it from that perspective.

Kaitlin Asrow [02:01:24] Yeah. Andrea, you mentioned safety nets and everything that you're layering on in PayPal. Can you speak a little bit more about kind of the protections beyond disclosures?

Andrea Donkor [02:01:33] So I think a couple of things. You made a mention a moment ago around, do you limit customer activity, or do you monitor, etc.? I think in the context of, for example, let's say transaction monitoring and operational risk monitoring, and looking at your customers, let's say standard pattern of behavior. And if all of a sudden you see explosive growth or unusual patterns of activity that indicate to you that there's fraud. Right. How do you take the requisite measures to try

and pause again, keeping in mind that the element of crypto is that real time folks need to be able to transact. And so that is a balancing act.

But this is where I come back to the controls and governance and risk management frameworks and applying them in such a way where you're able to holistically care for your customer. To that end, I think it's important that industry continues to work with law enforcement and regulators. Fraud typologies emerge all of the time. And one of the things that we spend our time doing is working with law enforcement. Sometimes we provide them insight as to the fraud typologies and vice versa. But again, having this be something that the entire ecosystem works to do helps to mitigate some of this, you know, unnecessary liability at times that the customers incur.

Kaitlin Asrow [02:02:50] Yeah. I'll also just mention, I think, you know, tying together the first panel this afternoon with safety and soundness is something that we're focused on at DFS, is things like bankruptcy remoteness that I think can obviously bridge that gap between safety and soundness and consumer protection with regard to kind of custodial architectures and making sure obviously that entities are solvent and sound and that they're holding the deposits that they say they're holding for their consumers when they come to withdraw them. So I know somehow, you know, time flies in DC, but any last kind of thoughts from any of you with regard to, you know, what regulators should be doing in this space or final kind of parting words on consumer protection.

Andrea Donkor [02:03:31] I'll start with, I know it's an incredibly turbulent time and you know, where we we are now, I know there's going to be a lot of fallout and analysis as to the events of the last week. I truly believe, though, that where we are now is we're going to see responsible players really, really have a stake. We're going to see customers generally start to appreciate that. And I think we talked a little bit earlier about the comprehensive framework that the DFS has in place. And as we think about things like cyber, which is a growing risk, when we talk about, you know, fraud, risk concerns, etc., I think the guidance and notices that regulators provide, again, the partnership with responsible players, all that can do is be a net positive for the ecosystem if we take the right actions. And so, know we're in the eye of a storm, but it could be the eternal optimist in me, I think it's going to get the industry ultimately to the right place.

Jack Solowey [02:04:32] I would like to close with what I think was a tremendous point that Tonantzin made in terms of having some type of consensus around what terms and definitions actually mean in the space. So the term decentralized is thrown around a lot. I think personally the

definition that I use is whether you have a developer and issuer making a promise of performance without which, for example, a token could not be issued, or its benefits would not be realized. That's my view. I think that there's absolutely a place for policymakers, and I think it's incumbent upon policymakers to start to grapple with these concepts before taking a heavy-handed approach to regulating the space.

So, for example, I think a great place to start in terms of federal exchange regulation, which is certainly top of mind in Washington right now, with bills like the DC CPA, is defining the differences between a decentralized exchange and a centralized exchange. I think promises of performance are a great place to start. I think technical definitions in terms of whether code is open source, whether smart contracts are permissionless and auditable, audited, auditable, are great places to start. So I'd like to thank Tonantzin for what I think is a really fabulous point and think that policymakers should really take it to heart.

Tonantzin Carmona [02:05:52] Well, I guess I would say, first of all, this is great. And what I would say to regulators, to policymakers is, you know, there's a lot that has happened and that I think will continue to unfold. So I think everyone needs to take a step back, take everything in and, you know, recognize that crypto doesn't come with pixie dust, as I said earlier. But because the technology is still, to a lot of people, incredibly opaque, there is a lack of transparency in the way that a lot of companies operate. And yet consumers deserve honesty and transparency. And so consumer protection should be strengthened with that in mind.

Tonantzin Carmona [02:06:35] Okay. Thank you so much.

Kaitlin Asrow [02:06:36] Thank you.

Aaron Klein [02:06:38] Thank you. All right. Join me in thanking this panel, our friends at New York Department of Financial Services and everyone here for a fantastic conversation on an incredibly pertinent topic. And I wish everybody a good and safe day. Be careful with your money, because ultimately you need to protect it. Have a good afternoon.