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Keynote Address:

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Discussion:

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P R O C E E D I N G S

MR. KLEIN: Good afternoon. If I could ask everybody in the room to please take their seats, and everyone online, welcome, you and our broader community. It gives me great pleasure to welcome everybody, both in-person and virtually, to this new event format in this new world. It's wonderful to be together and share this afternoon.

My name is Aaron Klein, I'm a senior fellow in economic studies at the Brookings Institution here for the Center on Regulation and Markets where we are meeting to discuss the future of cryptocurrency regulation. You know, 10 to 15 years ago, crypto was thought of as a bit of a fringe space, kind of where the Grateful Dead met the Libertarian Party. And these two kind of iconoclastic and bizarre sub-threads of predominantly white culture sat on the edge of mainstream policy economics and finance.

Today, a little more than a decade later, crypto is mainstream. The number one advertiser on the Superbowl. Some statistics show that close to one in six Americans, and even higher percentages of other groups own crypto, particularly concentrated among younger men and communities of color. Crypto has become mainstream to a larger degree than some people ever forecast, and according to others we're still in the early stages of what promises to be, in their view, a crypto revolution.

So, what to do about this? What's the role of government, what's the role of regulation, and what are the role of markets? That's what we're here to discuss today, and I can think of no one better to start us off in this conversation than the chairman of the Commodities Future Commission Ros Benham. Ros was sworn in as the CFTC's 15th chairman January of 2022, where he had been serving as a commissioner since 2017. In addition to his pioneering work in crypto, he's prioritized initiatives on climate change and diversity and inclusion. Prior to joining the CFTC, he served as senior counsel to Senator Stabenow of Michigan, a leader who served on both the Banking committee and then as chair of the Ag committee. He also worked at the Bureau of Securities within New Jersey's Office of the Attorney General.

Chairman Benham is a graduate of Georgetown University and Syracuse University law school, and like many great men, lives in Maryland with three daughters. The chairman lives in Baltimore,

I live in Silver Spring, Maryland with only two, so I'm behind you both geographically and in terms of the number of children, and you're going to be ahead of all of us in terms of speaking.

So, with that, please come and join, and enlighten us with your thoughts on the future of crypto regulation. (Applause)

MR. BENHAM: Should I start by saying I don't recommend three? All right, just leave it there. Thank you. I think, Aaron, the last time I was here at Brookings was shortly after I did some work on climate, so. And that was before the pandemic, so it's great to be here, see a lot of familiar faces. Thanks to all of you who came, and who are watching virtually. But really, as I'm sure we're all experiencing, really wonderful to be back in person and seeing folks again and talking about these important issues.

So, with that, good afternoon. Thanks again to Brookings, to Aaron Klein for sitting down with me following these remarks, and to the distinguished panelists who will follow both of us afterwards.

In 1984, in a New York Times article, astrophysicist Dr. Jeremiah Ostriker remarked, "The discrepancy between what was expected and what has been observed has grown over the years, and we're straining harder and harder to fill the gap." So, Ostriker was referring to findings that a vast majority of the mass in the universe is not detectable but consists of dark matter. While it's compelling to get into a discussion about the similarities between dark matter and digital assets, and indeed at least one author has done so, with respect to bitcoin, for me the fact that I can't actually see either is about as far down that rabbit hole as I want to go today.

What does resonate, since watching the crypto-verse develop and expand over the last several years, is that the space has not necessarily evolved in ways we may have anticipated. Neither has our regulatory approach. And we are now straining harder and harder to fill the gap.

We're here today because digital assets are trending towards becoming a part of mainstream American portfolios. As Aaron alluded to with surveys and polls demonstrating as many as one in every five adults has invested in or otherwise used cryptocurrency. This market has developed in the absence of a firmly demarcated regulatory perimeter. A massive influx of retail participants has further galvanized an industry eager to meet demand for both products and services. Each digital asset

is empowered by the free, largely unfettered flow of information, the defining characteristic of the information age we are currently occupying, and relatively low barriers to access.

The onset of the current crypto winter now blanketing the streets from both Main to Wall is further invigorating the call for technology-neutral regulatory approach, guided by the risks within the crypto ecosystem, and not by risks within the underlying technology that makes it all possible. The prior wintry mix of 2018 is attributed to a crypto mania bubble bursting, accelerated by the chilling effect of hacks, the failure of institutional support, and hard forks. The current storm is brewing from macroeconomic factors, leverage built up by the emergence of new financial products, high risk investing, and contagion.

And so, today marks yet another inflection point. We find ourselves here largely because the digital asset industry in the U.S. does not fall under a single comprehensive regulatory regime. Instead, the CFTC, other federal agencies, and state regulators are most often collectively compared to a patchwork blanket that is increasingly proving inadequate as temperatures drop and vulnerabilities lay bare.

While our oversight capabilities are generally complimentary, market regulation and financial supervision in the U.S. often relies on the development of cooperative arrangements between regulators. A challenge, given jurisdictional inexactitudes, and sometimes imprecise or nonexistent statutory authority. This is made much more difficult by the rapid emergence of development of the digital asset market, which has largely taken place on the outskirts of the traditional market structures. Each U.S. regulator is facing the challenge of melding missions, mandate, and monetary resources around products, processes, and participants, while preserving policy goals, risk principals, and ultimately the avoidance of systemic risk.

The CFTC's core responsibility is regulating the commodity derivatives markets. Our focuses on how individuals and market participants use the derivatives markets as a means for managing and assuming price risk and exposures, discovering prices, and disseminating prices through trading, and liquid, fare, and financially secure trading facilities. Our guiding statute, the Commodity Exchange Act & Regulations, create a principals-based system aimed at accomplishing execution certainty by ensuring

transparency, integrity, and security of transactions. We facilitate customer protections through intermediary oversight and a robust disclosure regime, aimed at informing customers about who they are dealing with, and providing material information so that they understand the risks of participating in our markets and prepare to accept that risk.

Towards the end of 2017, the first Bitcoin Futures contract were self-certified for trading by CME and the Cboe Futures Exchange, and the first bitcoin binary options were self-certified by the Cantor Exchange, bringing the first derivatives within an underlying digital asset commodity fully within the CFTC's direct oversight. At the time I urged for greater action to provide legal certainty, with respect to the process, for evaluating new products. Innovators and regulators alike were dealing with an emerging asset class in what was, for the most part, a regulatory vacuum.

For the CFTC, I believed it was critical that we engaged with industry in addressing risk, provide legal and regulatory certainty to the market, and educate the general public. With our highest priorities being the protection of customer property, and promotion of safe, transparent derivatives markets, our engagement and vigilance cannot wane in the face of criticism, of bureaucratic stall undermining innovation in the free market approach. About seven months later, I delivered remarks at the very first blockchain for Impact Global Summit at the U.N. By then, we were already seeing the further developments in the digital asset space. We're not necessarily going to progress positively in the straight line that the optimists and early adopters had envisioned.

The debate on crypto is just beginning, but two points were already clear. Crypto assets respect no borders, and regulation was already behind the curve. While some countries had already outlawed crypto and others had swiftly adopted strict rules to oversee them, many just paused in bewilderment, avoidance, or in abeyance, as other jurisdictions took the lead. The U.S., with our multiple regulator approach, could best be described as ad hoc. Though there was no clear direction from the administration or Congress at the time, there was also no clear and present danger to the existing economic system to warrant a coordinated collective strategy yet, because the overall size and development of the digital asset markets were still in the nascent stage.

By 2019, we were deep in contemplation, with regard to greater FinTech agenda, which

resulted in collective analysis paralysis. After reflecting on the past successive of coordinated frameworks to address technological inflection points, possible solutions started emanating. Took a few years, but I'm pleased an initiative is now underway, thanks to President Biden's executive order on ensuring responsible development of digital assets.

The COVID-19 global pandemic created an especially fertile ground for crypto development. By February this year, as I testified before Congress, there were hundreds of thousands of unique digital assets in circulation, with a combined market cap of approximately \$2 trillion.

At the center of this burgeoning industry are the trading platforms where most investors access this market. Several of these platforms operate on a global scale, and host marketplaces for both trading in the underlying digital assets and the derivative contracts referencing those assets. Since February and perhaps a bit before, crypto prices have tumbled, with the price of bitcoin down 70 percent from highs in November. The market value of the top 500 tokens has dropped to -- at least to less than \$1 trillion, down from a high of 3.2 trillion.

The May collapse of TerraUSD stablecoin, the world's fourth largest stablecoin at the time, rocked the crypto-verse, and since then we have witnessed events that demonstrated how technology alone cannot make this market failsafe, and volatility, leverage, interconnections, and contagion manifest in the crypto asset ecosystem through precisely the same channels, and in response to the exact same macroeconomic pressure as our traditional financial markets.

This crypto winter is getting anything but any icy response. And given what we have seen with the tech mania of the dot-com era or the subprime frenzy, there are no signs that the growth and progress to date will be frozen.

Washington is finding itself in a flurry of calls to action, for both international engagement and interagency action, to address the risks of digital assets.

The CFTC is ready and well-situated to address the risks in the cash markets for digital assets through direct oversight. At its core, we are a markets-focused regulator that works to ensure market integrity and vibrancy through oversight of exchanges and clearinghouses that are required to comply with well-established core principles and regulations, as well as oversight of market intermediaries

and participants. The commission's focused principles-based approach to customer protection, market integrity, price discovery, transparency, and competition have proven effective throughout the evolution of our jurisdictional markets and other related markets.

While the CFTC does not have direct statutory authority to regulate cash markets, it maintains anti-fraud, false reporting, and antimanipulation enforcement authority over commodity cash markets and interstate commerce. When the commission became aware of potential fraud or manipulation in an underlying market, we investigate and address misconduct through this enforcement authority.

In the digital asset space, since 2014, the CFTC has aggressively exercised its enforcement authority, bringing more than 50 enforcement actions. As the digital asset markets have grown in size and retail participation, so has the number of CFTC enforcement actions.

In FY 2021, the CFTC filed more than 20 actions alleging digital asset-related misconduct, including numerous cases charging retail fraud involving digital assets, and cases charging platforms with illegally offering off-exchange trading in digital assets.

Thus far in fiscal year 22, the CFTC has filed several enforcement matters involving digital assets, including an action for making untrue or misleading statements and omissions of material fact in connection with the U.S. dollar Tether token. The commission recently filed a complaint involving allegations for making false or misleading statements of material facts or omitting to state material facts to the CFTC in connection with the self-certification of a bitcoin futures product. And last month, the CFTC filed a complaint against a commodity pool fraudulently soliciting bitcoin from members of the public. The pool accepted more than 1.7 billion in bitcoin, the largest fraud scheme involving bitcoin charge in any CFTC case.

These numbers do not reflect the breadth and depth of tips, complaints, and referrals the CFTC receives daily relating to potential misconduct in the digital asset space. Our approach from triage to filing is strategic, tactical, and involves a high degree of analytical work in cooperation with our fellow regulators.

But the truth is that the existing ambiguities force hard decisions at the CFTC, as they do

with our fellow regulators. Even the strongest cooperative relationships may not yield the efficiency we need to put hard and fast stops to misconduct that increasingly has impacts beyond individual investors. Our guiding principle at the CFTC and throughout the government must be to stop fraud and manipulative conduct that harms our markets, and those who participate in them. This means that we must work closely with our local, state, and federal partners to ensure that the government uses its strongest authority to bring those who harm our markets to justice.

Where there is direct, unambiguous impact on the integrity of CFTC jurisdictional markets or members of the public, an immediate, comprehensive, enforcement-driven response from the CFTC is warranted. We will continue to use our enforcement authority to the fullest extent and leverage our cash market expertise as a function of our historical mandate over the derivatives markets, and assert essential oversight with our current statutory remit.

To be clear, the CFTC's oversight authority over all cash markets for commodities in interstate commerce is not currently at issue. However, there are several unique elements of the digital asset commodity cash market that distinguish it from other cash commodity markets, suggesting it would benefit greatly from CFTC oversight. The most notable difference between the digital asset market and other commodity markets is the level of retail participation. Most commodity derivatives, such as the agricultural and energy markets, are dominated by wholesalers, end users, and institutional investors, engaging in hedging and other risk management transactions.

However, the digital asset market is characterized by a high level of retail participants that are engaged in price speculation. Recent CFTC studies find that trading indicative of retail participants makes up approximately of 20 percent of long open interest in the bitcoin futures market, which is significantly higher than is generally observed in other futures markets, such as corn, soybeans, wheat, crude, gold, and S&P E-mini futures, where retail long open interest ranges from 5 percent to 11 percent. These studies suggest the amount of retail participation the digital asset futures market is more than double that in any other futures markets.

The barrier to entry in the digital asset space is lower than traditional financial markets, and crypto presents an opportunity to build wealth by those who have found themselves historically shut

out. However, these same groups are less likely to have the financial resources to absorb losses. Declining digital asset prices can mean significantly more severe losses for lower-income investors with knock-on effects penetrating the greater economy. Most investors in the cash market entrust their digital assets to the platforms upon which they trade, failing to differentiate this type of custody arrangement from that offered by the traditional regulated banking industry. The technical complexities around securing and transacting in digital assets, particularly issues around custody, have resulted in numerous platforms losing funds to hacks, exploits, and poor cybersecurity.

And while participants in the digital asset market may seem to be interacting with exchanges, an intermediary structured like those seen in other financial markets, the lack of a comprehensive regulatory regime applicable to businesses operating in the digital asset market has led to inconsistent practices around issues such as trade settlement, conflicts of interest, data reporting, and cybersecurity.

So, I'm very encouraged by the bipartisan, bicameral support for legislation that recognizes the need for guardrails around the burgeoning digital asset economy. While we cannot predict any legislative outcomes, the CFTC will continue to aggressively and relentlessly press forward in the digital asset commodity space with its historical remit. In so doing, we will work with our domestic counterparts to ensure that no fraud or manipulative activity falls through a gap between regulators. And I'll ensure that the CFTC continues to share our experience and expertise in support of work with our domestic and international counterparts towards a comprehensive and coordinated oversight approach.

As the new technological era has embraced our markets, the power of social media coupled with the ease and speed of access has broken down barriers. As new participants and infrastructure providers increasingly access, impact, and shape the automated aspects of our market, there is greater concern that in this environment, we can be game-like. There are built-in limits in supervision, or that there is constant monitoring for risky behaviors, and risk more generally. Regulators must be nimble, and new challenges may require us to dig deeper, take a different look into how our organic statutes promote our growth alongside the markets we regulate.

And in the absence of new legislative authority, we at the CFTC continue to look at how

we can work to protect markets and investors within the bounds of our existing authority. We have, and as I have said, we will forcefully utilize our fraud and manipulation enforcement authority. But, given the regulatory vacuum, we are also thinking creatively about how else we can use our existing regulatory authority to protect retail commodity markets and investors. Make no mistake, we will use all leverage at our disposal, and all relevant authorities to continue rooting out fraud and manipulation.

Many here may be familiar with our engagement with financial technology innovators through LabCFTC. Although less public, the CFTC's efforts related to digital assets has evolved with the market, and we are now engaged in a more proactive and comprehensive effort across the agency to regulate these markets with the tools currently available to us. For example, many digital asset companies now operate CFTC registered exchanges, and our division of market oversight is regularly reviewing new products tied to digital assets, both from these new entrants, and from more traditional registrants.

Also, the digital asset market has been at the center of numerous proposals around non-intermediated access to our markets. And the Division of Clearing and Risk, and Market Participants Division have been leading engagement with the public, as well as with internal experts, as to the impact of these novel market structures on the regulatory principals the CFTC upholds.

These and numerous other examples demonstrate that we have moved past the stage of digital assets as a research project. Our core policy divisions are now directly addressing how the CFTC can leverage our existing authority to bring important regulatory protections to this market. Through our work, we have developed a deep understanding of this novel market, and the underlying innovations that fuel it.

To that end, I'd like to take the opportunity today to announce that LabCFTC is evolving in new ways and will take on a new identity as the Office of Technology Innovation, with an updated operating model. There is now a real intersection between the financial innovations in our markets that did not exist even a few years ago, when then-chairman Giancarlo ambitiously and appropriately established LabCFTC as a means to accelerate CFTC engagement with FinTech innovators. As I testified in February of this year, we are past the incubator stage, and digital assets and decentralized

financial technologies have outgrown their sandboxes.

The issues are at the front and center of our thinking at the Commission, and with a greater acceptance of the role of regulators, innovators need no invitation to office hours to engage directly with our operating divisions and senior leadership. Our resources will be better utilized through an office of technology innovation, reporting directly to the chairman's office, and staffed by a director, a FinTech policy tech specialist, a strategic communications and education leader, and rotational opportunities for all CFTC employees. OTI will continue to lead the CFTC's effort in incorporating innovation and technology into our regulatory oversight and mission-critical functions. But OTI will also have an opportunity to evolve with its new structures, and have flexibility to meet needs, both internally at the Commission, and externally in the regulatory space, and in the markets.

Another change we are making is the realignment of the office of consumer -- customer education and outreach within the Office of Public Affairs. This strategic alignment will leverage resources and a broader understanding of the issues facing the general public towards addressing the most critical needs in the most vulnerable communities. The importance and need for this critically important responsibility of educating and protecting the public cannot be overstated. Indeed, according to the Federal Trade Commission, since the start of 2021, more than 46,000 people have reported losing over a billion dollars in crypto to scams, with the median individual reported lost at \$2,600, with the top cryptocurrencies used to pay scammers identified as bitcoin, Tether, and Ether.

At this point, I fear these remarks may have expanded further than I had anticipated, and have not only filled the gap, but have spilled over. It's the nature of the crypto-verse, I assume. There's always more to explore.

So, I choose to focus on what I believe is the most pressing in terms of the CFTC's mission, and the risks on both sides of our streets. As other government agencies consider how FinTech impacts federal policy related to payments, custody, illicit activity, national security, and a host of other issues, I anticipate they, too, will advocate for greater authority. Our individual mission should not diminish our efforts towards a coordinated federal approach in this area, and the CFTC will continue to be a proactive participant in that process. Thank you for your generous time. Thank you to Brookings. And

I look forward to the discussion with Aaron. Thank you. (Applause)

MR. KLEIN: They want me over here. Well, that was graceful. That was -- that was deep. And you covered a lot of things. So, let's work backwards.

MR. BENHAM: Yup.

MR. KLEIN: You talked about these new -- the evolvement of LabCFTC, your new realignment. Explain to people why that's not just reshuffling chairs in a large government bureaucracy, and why that's going to actually make regulation better, and maybe even make life a little better for the pretty large number of people that -- that you say were scammed in -- in bitcoin and -- and Tether and Ether. Why is that going to make a difference?

MR. BENHAM: So, I first want to give credit to -- I mentioned in my remarks, Chairman Giancarlo, for creating LabCFTC. I think at the time it was, as I mentioned, the right decision. It certainly served the Commission well for many years.

But since I took over as acting back in January of 2021, started to just observe the evolution of that group. And it's not a huge group within the agency, sort of fluctuates between, I would say, four and six to maybe four and eight people, but I mentioned office hours. And a huge driving part of that group was, we would have public engagement in our regional offices, and ask innovators to come in.

And quite frankly, as I started to observe over those first few months of my time as acting, it was not uncommon, if not very frequent, quite frankly, that folks would come in and just ask for legal advice. And that is not what we do, and that is not our responsibility. And then, as we saw the market -- and this is now 2021 and into 22 -- the digital asset space was just so much different than when this LabCFTC was first started. So, then we started to see Congress move, we've had a number of bills filed, a lot of engagement coming from the administration. So, our staff started getting pulled in different directions. And then, again, I started mentioning, you know, incumbent crypto entities buying CFTC-licensed firms and listing more futures contracts or trying to come up with new ideas in terms of market structure.

So, I felt like we just needed to evolve, and we needed to grow, and we needed to move past what, in my view, a lab sort of insinuates, right? That incubator stage, that idea of first impression,

and I felt like we were beyond that. So, this idea of an Office of Technology Innovation gets the right people involved, has them working cross-divisionally -- which, again, as I suggested in the speech, we have our Market Participants Division from an intermediary standpoint, Clearing and Risk is dealing with a lot of issues, Market Oversight from an exchange standpoint.

There are so many intersections, and this is real, this is tangible, this is no longer an idea of, hey, what if I do this? How does this intersect with the Commodity Exchange Act is, we want to do this, we want to use the existing laws and rules in this way and, you know, we have to now engage with participants, our constituency, in a traditional way, like we would with any traditional market participant.

MR. KLEIN: So, let's talk about things that are going on now. Because I have sympathy for you as a regulator. Regulators always want to say simultaneously we have enough authority, and we have these new things that are challenging the limits of our authority. And you said it in your speech, you know, in the absence of new authority, we're doing everything we can. And you mentioned some of the legislative proposals that are going out, the rumors of a markup in the House on stablecoins potentially this week, Senators Gillibrand-Lummis have legislation out there.

What new authorities do you think would be wise? I'm not going to pin you on this do you need them or not, because I understand you're in that difficult boat of saying, you know, we can handle it with what we have. But what would be beneficial? What type of legislation, or what ideas in the legislative process that you see that are out there right now, you think, wow, the system would be better if we had that in statute?

MR. BENHAM: I mean, from a CFTC standpoint, speaking for the agency myself, of course, only, we need clear market oversight over digital commodity assets. And right now, I mentioned 50-some-odd enforcement cases. Every single one of those cases has been driven by a tip, or a whistleblower, externally. So, we don't have traditional market surveillance or market oversight authority.

MR. KLEIN: So, market surveillance, market oversight.

MR. BENHAM: Those are the traditional tools we have with a regulated exchange. Having, you know, our individuals if not embedded, working with on a close day-to-day basis with the exchanges, monitoring trading activity, looking for any number of disruptive trading practices, registering

the intermediaries whether it's a broker on the front, a clearing member -- obviously they're different participants in this space. On the data side, on the post-trade side, we want to be reporting the data, you know, potentially regulating the facilities that store the data. Everything that we do now in traditional derivatives markets, we can be doing in the crypto space. And I think it would benefit customers for sure, in protecting customers and bringing transparency to the market, but ultimately, and I'm not taking opinion here necessarily, but, as we see this market continue to grow, having that credibility and having that transparency will help it grow if it continues to do so in the future.

MR. KLEIN: So, one of the questions we got online was from professor Donna Redel from Fordham Law, who says, who should regulate spot crypto exchanges?

MR. BENHAM: Well, I -- I've said this many times, that we have to work with our partners at the FCC, and with support, and help, and guidance from Congress, figure out how we decide which tokens or securities, which tokens or commodities, and regulate each respectively.

MR. KLEIN: So, you think the commodity should be regulated by you guys and the securities by the FCC?

MR. BENHAM: Yes.

MR. KLEIN: And who should figure out which is which?

MR. BENHAM: Well, I think it's important that we as regulators, it's -- I -- I feel quite uncomfortable as a chairman saying this is a commodity, this is a security. I think historically precedent will give us guidance, and we understand what constitutes a security, and what constitutes a commodity. We have a Eastern district in New York decision, with respect to bitcoin, which is, in my mind, the one very clear, sort of, decision that's given us an idea of which coins constitute commodity and security.

But there are hundreds, if not thousands of other coins that there are legal debates that can be made, policy judgments that can be made about which ones are securities and which ones are commodities. It would be very helpful from my standpoint to get a bit of a steer, and we've seen that from Senator Lummis and Senator Gillibrand, and some of the other bills that have been filed, but ultimately, we'd like to see law drawing lines. And then I do think there's certainly a role for the regulatory. At that point for us to more clearly define which coins constitute security and which coins constitute commodities.

MR. KLEIN: You made a critical observation in your speech that the share of retail investors in crypto is substantial higher than in other commodities. Corn, wheat, you can -- and you said roughly on the order of 2X.

MR. BENHAM: Yeah.

MR. KLEIN: Right? And you know, data's always hard to come by. But what does it tell you, if there's a greater retail involvement in this, what does that -- how does that change your view about how you regulate? Because there is a core philosophy, a little bit. The more money you have, the bigger -- the more institutional the investor, the more caveat, the more retail the investor, the more consumer protection, guardrails. So, that's kind of a general philosophy. What observation do -- What insight regulatorily do you draw from the observation you made about the greater retail share in these markets and other markets that you've historically regulated?

MR. BENHAM: Well, I mean, at its core it's, with more retail participations, you're going to have more vulnerable investors. And I think it's incumbent on us to educate, to inform, to disclose risks involved. Not necessarily make a decision about who -- who should invest or who shouldn't invest. That said, you pointed this out in your remarks, right? Whether it's the Superbowl or other venues for advertising. You know, you don't see that for corn contracts or WTI crude, right? This is a very -- very targeted effort to lure, in many respects, but also engage retail participation. I think a confluence of events with the pandemic, folks at home, you know, the barriers to entry, technology, disrupting financial markets, it's all gotten us to this place. And without judging whether it's right or wrong, this is a reality of where we are right now, with respect to financial markets, and I think we, collectively, as a regulatory community, need to adjust, and need to reflect that.

So, if I, as the chairman of the CFTC don't historically see large levels of retail participation in traditional commodities, that's fine, we have a very well built out disclosure regime to help inform investors about those risks, if they're investing in traditional commodities. We work with the intermediary community. We work with our SRO, the National Futures Association. But right now, with the statistics that you and I both cited, whether it's low-income communities, or just a huge -- or at least a larger percentage of retail participation, I think it only supports the idea that we have to have more of a

role in terms of regulating the market, creating transparency around the market, and created disclosures and information flow, so that these investors can make more informed decisions.

MR. KLEIN: Well, I hope whatever disclosure system is better than my iTunes contract, or my credit card privacy contract, or any of the other host of disclosure regimes that nobody on God's green Earth can read or does read. If anybody here has read their entire most recent iTunes, please raise your hand in person or online.

Let me ask you a couple of questions, then I want to turn to our -- our live audience. You said at the end of 2017 that you concluded there was not a clear and present danger to the existing economic system. Is there a clear and present danger to the existing economic system today?

MR. BENHAM: Well, I mean I -- you have to think about what metrics you can use to evaluate that, and I think, really, it's the simplest one, and the best one we have right now, largely in part because we don't have all of the data about how big the market and where the capital is flowing per se, is you think about the market cap of cryptocurrencies, right, and I mentioned that we were just above 3 trillion in November of last year. We're just below a trillion or right around there right now. We obviously saw the Terra LUNA incident and a number of other funds wind down. And by and large, we did not see an intersection with traditional finance, and a -- a correlated effect in traditional financial products, or traditional financial entities.

So, in my view, we -- we seem to have those silos pretty well-drawn right now, mostly because the size on the crypto side of the equation or ledger is not significant enough to bleed into the traditional markets, but then also probably because you don't have an intersection of participants having enough significant exposure in both sides that one will pull down the other.

That said, and this I think is extremely important, and I've said this before, we can't let that fact or those sets of facts, both in the recent past and today, create hesitation to act, right? Because I'm not going to judge what the success or failure of the -- the technology may be, that's not my job. I'm a financial market regulator, and I have to assume a number of scenarios. And one of those scenarios is that we'll continue to see the growth of this space, we'll continue to see growth and participation from both retail and institutional investors, and as you see that organic growth, then you start to have that

intersection between traditional markets and the digital asset space. And then that's when you start to see market resiliency, and more importantly financial stability issues arise.

MR. KLEIN: Well, great. Well, there are a lot of experts in the room to discuss that. I always get nervous when you talk about size, I -- you know, those of us who lived through the subprime crisis were reminded about all the people that kept telling us subprime was contained, not to worry. There was a great Wall Street Journal op-ed from then Bear Stearns Chief Economist David Malpass, telling us how, not to worry about subprime, because it was small and contained. Now obviously he was dead wrong. It took down his firm, and the global financial system. Today he's president of the world bank, so, you can be wrong with a public prognostication and go on to great things.

But I kind of take scant comfort in this argument about size alone without interconnectedness. On the other hand, you know, I -- I'm appreciative that those of us who lived through the last financial crisis see everything through that lens. And the one thing history shows us is the next financial crisis almost always looks very different than the last, because everybody's on the lookout for the last, and you don't see the next coming. What I see, what are --

MR. BENHAM: Aaron.

MR. KLEIN: Yeah.

MR. BENHAM: The lessons -- there were many lessons from 2008, right? But it was transparency -- you know, if you think about the CFTC and the ODC derivative space, and having a lens into those markets, and then not hesitating, or not thinking that a data point or statistic should drive you away from having that transparency, right? And I think that's important as we look at this space to make sure that we have the information, so that we know what's happening in the market in a transparent way, but we also don't let the smaller size relative to traditional finance be a gap between what we need to do and what we need to do now, right?

MR. KLEIN: Excellent. Questions? Oh -- please speak into the mics. This is how we handle this so that the rest of the world --

SPEAKER: Ally from Bloomberg News. I wanted to ask about the FCC's enforcement action last week. They brought insider trading charges, and in the complaint, they labelled nine different

tokens as securities. I wanted to know if the CFTC agrees that those tokens were securities, and did you have any talks with FCC Chair Gary Gensler before they filed that complaint?

MR. BENHAM: I'm not going to comment on an FCC enforcement action, or any enforcement action for that matter, so thanks for the question.

MR. KLEIN: David?

SPEAKER: Thank you for coming, chairman Rostin. So, there's a lot of discussion about stablecoins as a payment mechanism, and a lot of concern financial stability, or risk to financial stability. You defined your role, as the statute does, as protecting and consumers. So, two questions. One is, if stablecoins become a widely used form of payment, how do you think we should regulate that? And secondly, how do you think about financial stability, broadly defined, when you go about this work?

MR. BENHAM: So, thanks David. On the first question, I -- and I know a -- a debate has been going on since the PWG report was issued last year, which I supported, and in the context of that support I would say that I view stablecoins as best situated within the banking prudential system and regulated as essentially an issue of bank product.

I think -- you know, I mentioned in my speech, we brought a case, a \$40 million case against Tether. So, in the absence of a regulatory structure around the issuers or the stablecoins themselves, we certainly will leverage the authority we have. Stablecoin is a commodity as many things are. So, we will continue to do that work, but as Congress is -- as you noted, Aaron, and others as well, we're seeing a lot of progress in the stablecoin space. I -- I view them as -- as payments -- payment mechanism, and best situated within the prudential umbrella.

In terms of financial stability, it's -- it's a great question, and it's one that's very difficult to answer, and I think this goes to my point earlier, is everything is very opaque right now in terms of the lens we have into the crypto space and crypto markets. I think we can utilize some tools on the internet from very incumbent market participants about the size of -- of the digital asset space. But really this is not giving us a lens into who's participating what the exposure is across asset classes, and how it essentially bleeds into traditional -- traditional assets. So, with that opacity sort of in mind, I'd rather, almost to Aaron's point, err on the side of full caution, and do as much as we can now to regulate the

space, to create the transparency, so that we can start to observe those interconnections.

So much of it will depend on the growth of the market, and whether or not it gets big enough to pull down other parts of the market because of contagion, because of leverage, but I -- I just think with what we've seen in the past couple months, it is textbook what had happened with those stablecoins, and a few of those funds that failed. I mean, it's everything we've been talking about for decades, right? In the financial markets, and why we have the financial regulatory system and rules that we have, and I think it's just a clear example of why this -- this area is in need of sound, well-balanced regulatory regime.

And, you know, stability -- we just -- we can't take risks there as far as I'm concerned. And we have to do everything we can to prevent financial stability risks, even if the market seems miniscule compared to the size of, either our economy or our financial markets.

MR. KLEIN: Dennis?

SPEAKER: Good speech. I was particularly encouraged by what you said about the difference when you're looking at markets dominated by institutions, versus markets with, however you want to characterize, increasing retail participation. And it strikes me that the regulatory models have been grown up in a very different way, for very different purposes, based on who they're regulating.

So, the CFTC historically has been a very institution-heavy market, big players, big firms, huge financial wherewithal, sophisticated self-defense mechanisms, facilitated by the CFTC's transparency regulation, market reg, et cetera. And then -- but very literal investor protection aspects of it.

And I think when you see this FTX application is a good example of that. So, the focus, and a lot of people talking about that, is clearinghouse resiliency, perfectly appropriate. And the dominant, if not the only concern, if you're talking about big players who can protect themselves. Very different if you introduce retail, and you have to start worrying about investor protection. Very different than the FCC regulatory model. And so, it strikes me that this is a significant cultural change for the CFTC to go from regulating very big participants, sophisticated, know what they're doing, financial wherewithal, to start worrying to a significant extent about investor protection. And we do know, based on

the Superbowl ads, et cetera, that -- that retail participation on the digital side's going way up. In fact, the business projections according to some are double current retail participation. And so, I'm wondering how you're thinking about that -- what I think of as cultural change. It may not be the right word or the right characterization. But the regulatory model that's focused on big dogs who know how to protect themselves, and by the way have the wherewithal to take the losses, to a completely different model, where you've got massive retail -- however you want to -- you know, calculate that -- massive retail participation, where the -- people are vulnerable in a way that CFTC just doesn't deal with.

MR. BENHAM: So, I would -- I think you would agree that I would -- I'd take issue with the fact that the "big dogs can take care of themselves". I think we've seen enough failures from large institutions in the past that, perhaps their risk models aren't perfectly acutely aligned. I would also take strong issue with the fact that we don't have a robust customer disclosure regime. We in fact do, we have -- we have retail participants.

We certainly don't have as many retail participants as our -- our sister agency across town. But we are -- have a very well-built out, through the core principals, regulatory regime around disclosures. It's just a different type of disclosure.

And I've said this publicly. The SEC and CFTC have worked very closely and very well together for a long time, going back to 1975. And I've said this, we -- we initially had to work out differences in the security futures and commodity futures space back in the early 80s. We had to do this again after the crisis with commodity swaps and security-based swaps. And I don't view this as a different exercise. It's just another inflection point in two agencies leveraging their expertise and their existing infrastructure to protect markets and to protect customers.

Ultimately, you have to look at the underlying asset, and what are we trying to do in terms of customer protections? I don't want to get ahead of myself, I -- you know. But the security's laws are largely built around bridging a gap, an information gap between an issuer and an investor. And that's manifested through 10-K's, Q's, 8-K's, and S-1's, and everything in between. And that's important, right? Because you have that centralized body within an issuer that is making decisions about a company or a firm that will affect that price of an asset. You simply don't have that with commodities.

And I've used this example a few times now, and it's quite elementary, and nothing that this group won't appreciate. But, you know, a month or two ago, India imposed an embargo on wheat, right? And naturally, they did it because of the crisis we have with the Ukraine and Russia, and the Indian government decided they wanted to protect their wheat market and their consumers.

And as the commodity -- as the largest global commodity regular, should I put out an 8-K saying India imposed an embargo, so all those who have exposure to wheat contracts in the CBOT should take heed now? I mean, it's a -- you get where I'm going with this.

So, my -- the hardest thing that we're going to have to do is think about where the coins fall in terms of commodity and security. But I take great issue with the idea that we, the CFTC, do not have a well built out customer protection or investor disclosure regime. Quite the contrary.

If you look at our statute, if you look at the core principles, if you look at the information that we need to get to investors, those few retail participants, and the institutional ones as well, it is the information they need, and it is the best information, and we are protecting markets. And I think our history, our track record proves the fact that we do our job quite well, both on the disclosure side, on the regulatory side, and then more importantly, on the enforcement side.

SPEAKER: If you think --

MR. KLEIN: So -- hold on, I'm going to have to let the chairman get back to doing his job, which he's been doing fantastically. Thank you very much for coming here and sharing your thoughts with us today.

MR. BENHAM: Thank you.

MR. KLEIN: And we really appreciate it.

MR. BENHAM: Thanks, Aaron. I appreciate it.

MR. KLEIN: Absolutely.

MR. BENHAM: Thank you very much. (Applause)

MR. KLEIN: And let me -- we're running a little behind, that was a spirited conversation. So, the panelists, please come on up as I -- just come on up, I'll be introducing you as you come on up.

Professor Hilary Allen joined the American University Washington College of Law faculty

in 2018, after holding appointments at Suffolk University and New Orleans College of Law, has been a visiting professor at the University of Sydney, UC Davis, and Brooklyn Law School. Her recent book, *Driverless Finance: FinTech's Impact on Financial Stability* is must-read reading in crypto and FinTech worlds. In 2010, she worked with the Financial Crisis Inquiry Commission to study the cause of the financial crisis.

Michael Piwowar is the Executive Director of the Milken Institute's Center for Financial Markets. He served as commissioner at the Securities and Exchange Commission from 2013 to 18 and was acting chairman in 2017. Prior to that, he was chief economist for the U.S. Senate Committee on Banking, Housing, and Urban Affairs under then-chairman Mike Crapo and Richard Shelby. Dr. Piwowar served a one-year fixed term position at the White House as a senior economist at the President's Council of Economic Advisers.

Mark Wetjen serves as the head of policy and regulatory strategy at FTX, a leading cryptocurrency exchange, and serves on the board of directors of FTX U.S. derivatives. Prior to his current post, he held the position of CEO at MIAX Futures, from 2011 to 15 he served as commissioner, and in 2014 as acting chairman of the CFTC. Prior to joining CFTC, he worked for seven years in the U.S. Senate, a senior leadership staffer for Senator Harry Reid.

In addition, Mark, we are deeply grateful for you joining. Sheila Warren from the Crypto Council unfortunately took ill and had to cancel at the last minute, so, we really appreciate Mark joining us to provide your perspective.

And with that, since you're the last to join, and -- and out there on the hotseat, what was your reaction to the chairman's remarks? And then, everybody else can -- what was -- what was your big takeaway? What'd you think, in terms of the chairman's speech?

MR. WETJEN: Well, I guess it's the recency effect, but the chairman's final comments there, in response to the question, I thought were interesting, and were comments that we at FTX definitely endorse. Plenty of provisions in the Commodity Exchange Act, the implemented regulations that are there to ensure investors are protected adequately, including retail investors. Retail investors have been in the commodity markets for -- for as long I've been familiar with the markets.

And the other thing too, that's interesting here, the stats that were shared there about the number of participants in bitcoin futures, it is higher than some of the other traditional assets, but -- I can't be sure of this, but what I can tell you about the customer base in FTX, what we consider to be institutional, a lot of other people might define as individual investors. And by that, I mean, we have -- they're very sophisticated, well-heeled individual investors.

Here's a -- here's a common example of a typical FTX customer. Someone who worked a tech company, started early, might be an engineer, very financially savvy, and then due to some great circumstances was able to perhaps retire, and so has a lot of resources to trade with. We have -- we have a great number of users like that on the FTX platform.

So, they're individual investors, but they're not the typical individual investor that you'd normally think of, I think, when you think of the retail investor. Roughly 75 percent or so of the participants on our platform are trading more than \$100,000 in notional per day. So, it gives you a sense, these are -- these are people trading in size. There are some of the long tail retail, as Sam or CEO likes to call them, meaning people who are like me, right? Just kind of swipe in the app once in a while when you want to buy a bitcoin. That's not the predominant user on the FTX platform.

MR. KLEIN: Mike, what was your takeaway?

MR. PIWOWAR: Yeah, I think three takeaways. One was the retail participation, particularly in, you know, in the bitcoin's futures, and -- and the -- traditionally, the -- that the CFTC has not had to deal with.

Second was the -- just the breadth of retail participation, the one in five, right? And I think why that's important is that, you know, he mentioned what's going on Capitol Hill, right? So, you had, sort of two camps, sort of the crypto skeptics, or the anti-crypto folks, and then the people who are maybe, sort of, maybe pro-crypto. If you got one in five households that have interacted with crypto in some way, they're going to start hearing it from their constituents.

So, I think you're going to see, over the next few months you're going to see a lot more interest from Congress among -- among members of Congress. They're not necessarily members of the committees of jurisdiction, because they're going to start hearing from it -- from their constituents.

And the third thing was, and he mentioned this throughout his speech, the importance of coordinating with the other regulators, with the FCC, and with states and securities regulators, international counterparts, and all that stuff. But he also talked about the difficulty of doing that, and I think one thing maybe we get into in here is that, you know, I think this is another perfect example of addressing the elephant in the room, which is, why do we have two different market regulators in the United States? Why do we have a separate FCC, CFTC? Why don't we just be done with it and merge them together, and then we have one regulator that can deal with the interest of, is that a commodity, is it security? It's done with in one regulator. And I have some other ideas that we can talk about on that.

MR. KLEIN: Great. Hilary?

MS. ALLEN: I was also struck by the -- sort of, the depth of retail participation in the crypto market versus other types of commodities. But there's one comment that I want to fix on, because I think it's something that's being missed in most of the discussions on regulating crypto. And that's this idea of technological neutrality. Now, I agree with technological neutrality in the sense that, you shouldn't be able to escape security's regulation, for example, by putting something on the blockchain.

But there are differences in how crypto products and services are delivered, and they create really different operational risks. And these risks are not getting any play in any of the discussions from regulators. Like, if the blockchain's going to be critical financial infrastructure, who maintains that? That's open-source software.

I mean, you know, we've got a whole regime under Title 8 for financial market infrastructure to make sure that that's safe and sound. We've heard nothing about the operational risks that come with all of this crypto. And that really ties into another element of investor protection that we're not really getting into.

So, we talk about sort of the traditional financial risks for investors. But if you go on Twitter, you'll see all kinds of tutorials on how to read the code for your crypto product to make sure that you're not buying something that's vulnerable to hacks and scams. Like, is that something that your average investor should have to be able to do? So, you know, I'm all for not avoiding regulation through using different technologies, but I think we really need to focus in on the different types of risks that are

created by this technology.

MR. KLEIN: So, there are a lot of ways to go on the conversation. I was struck by something in the chairman's remarks where he talked about collective analysis paralysis. Where all the regulators were stuck, he said, in the past, kind of trying to figure out what they were doing. And that may actually be appropriate, right? We want to analyze before we react. On the other hand, there's a flip -- he seemed to indicate in his remarks that we've moved beyond collective analysis paralysis. He referenced the President's executive order.

There's another point which is a regulatory free-for-all, where each of the regulators is trying to grab and expand their territory, right? Stablecoins, here comes the fed, right? You know, CFTC's going to be now, potentially, regulating things that are touching retail investors at a much larger rate than ever before, right? We had a question from the audience about the FCC, and -- and is something -- insider trading regime situation. Have we moved from collective analysis paralysis to a regulatory free-for-all?

MR. WETJEN: No. No. I mean, I think -- at least at the FCC, there's still a lot of analysis paralysis, as to whether something is a security or not. I mean, a week doesn't go by, and I don't talk to people that have some sort of application from the FCC, whether it's for their token, or whether they're a trading platform that wants to trade a particular token, is something a security or not? And they're -- they're not getting answers right now from the FCC. And I think some of it is due to the fact that we have this case, you know, the Ripple case, it's sort of winding its way through the core to find out whether or not they're going to continue to apply the Howey test as to whether something is a security or not, or whether there's going to be something else going forward. But there's a lot of folks that are just simply getting tired of waiting in the United States. And then what they're doing is they're going outside the United States, and then, you know, trading on these other platforms, and -- you know, and U.S. investors, one in five households is going to want to trade these things, whether they're going to have protections from the U.S. laws or not. So, that's -- I think they're still suffering.

MR. KLEIN: The Ripple case. You're talking about the Ripple crypto, not a rippling -- a case rippling through the --

MR. WETJEN: Yeah, yeah. Ripple Labs. Their XRP token. Exactly

MR. KLEIN: Yeah. What do you think, (inaudible) or regulator?

MR. WETJEN: Yeah, I think -- I think there's definitely forward movement beyond paralysis. I understand Mike's point, but I think, just by virtue of the PWG report which you just reference and chairman referenced. You -- you also look at some of the other legislative efforts. I think there are certain features -- there's a common enough understanding about the technology, and some of the basic features of some of these specific products and how they align with traditional products, where there's a frame of reference, I think, that's been developed now, and it's -- it's gotten to the point where people feel comfortable making decisions, and we have some folks in the room, or policymakers, or staffers for policymakers.

I think there's enough of an understanding where people feel way more comfortable, in fact very comfortable, making judgments about how to treat certain products that are, let's say, blockchain-based products, at a minimum. And there might be more debate about whether the definition of a security might need to be refined, but there's a whole heck of a lot of other decisions that can be made relatively easily.

And just thinking about some of Ros's -- the chairman's points about spot digital commodity trading, something like a bitcoin. I think it's already accepted, of course I've already said that that should be treated as a commodity, not a security. Well, there's no spot market activity federal supervision of that. So, that seems like an obvious opportunity, and policymakers should just go and address that now, even if there are some thornier questions that they needed for -- for later.

MS. ALLEN: So, I think actually the executive order and many of the regulatory proposals have actually skipped the fundamental analysis question, which is, you know, what are we doing here? What is this good for? You know, you read the PWG report, and it assumes that stablecoins will be the future of payments. But it doesn't get into the fact that the technology that makes up the blockchain doesn't scale very well. So, how do you deal with that for a widely used payments mechanism? It doesn't deal with the fact that this stuff is really rife with holes that enable all kinds of scams and hacks, et cetera. You know, it doesn't consider whether there might be alternative

technological or structural developments that might be a better fit for the problems we're seeing.

I'm not defending the status quo by any shape or form. But, you know, we've got all over the world better payments mechanisms than we have in the United States. I grew up in Australia. I had never seen a check until I moved here in my 20s. I did not know what I was dealing with, I didn't know how to sign a check. Most countries have dispensed with checks, right? So, the reason we have these things here is not because of lack of technological progress. It's because of political and structural issues. And so, if we really want to fix problems, let's not default to a tech that is probably not the great solution. Let's think about these things -- instead of starting with the tech, and retrofitting that to the problem, let's start with the problems. And that's, I think, the fundamental question that's been missed.

MR. KLEIN: This weekend I learned that the Central Bank of Tanzania only took 4 years to build a real-time payment system, whereas I think the Federal Reserve is on year 12. Let me ask you a question about that fundamental issue, because we've got a question from Sunday Phillips, the CEO of Black Girls Wealth corporation online, and she said, "What is the societal benefit of crypto in America?" Hilary, how would you respond to Ms. Phillips?

MS. ALLEN: I would say that there isn't one. Basically, I think that, you know -- if you think about what people really need in terms of financial services, a lot of people who are underserved don't even have access to broadband internet, right? So, you know, anything on the blockchain is not going to be able to help them. But then if you sort of say, okay, well, what about the people that do have the internet? They're not looking for bells and whistles, right? The -- the thing about crypto, with anything built on the blockchain, it's going to be inherently complicated. Because we've developed all of this to eliminate intermediaries, to eliminate trust, to -- you know, get rid of centralization, et cetera. So, that is purposely less efficient and more complicated than a more centralized system.

Now, I understand sort of the idea behind decentralization. It would be great if we could get rid of all these intermediaries that did screw up in 2008. But the problem is it doesn't work very well. So, what you see with crypto is we're adding intermediaries back in, and they have all the same incentives and all the same structural flaws of being intermediaries you got rid of. Right, so let's not start with a complicated, convoluted blockchain. Let's say, okay, what are the financial services you actually

need? What is the quickest, simplest, and most direct way we can provide those to you, ideally without having to use the internet, but if we do use the internet, you know, how can we do it on a smartphone that most people can access? So, I think that's the way to go.

MR. PIWOWAR: I mean, I think in many ways it's -- it's too early to tell. I mean, think -- you talk about the internet, I mean think back to the -- you know, the mid 1990s. I remember the first time I, you know, I was exposed to http protocol, right? And it was this (inaudible), we had this thing called Gopher at University of Minnesota, and it's like, all right, well, who could predict all the cool stuff that came out of the internet, you know, 20, 25 years later? I think it's very early to tell, right?

I mean, right now we're talking about things like potentially using stablecoins or other types of, you know, stable tokens in terms of making things more efficient, either in clearance and settlement process within financial institutions or across financial institutions, lowering the cost of remittances across borders, faster payment systems -- which, you know, Aaron, you've written a lot about that would benefit a lot of folks domestically as well as internationally on a number of things. I think, those are like, the -- kind of the use cases we can kind of see today.

And there's a lot of people talking about what's going on, and potentially -- collectively about what people are calling Web3, right? Again, using the internet as an analogy, there's going to be a lot of Webvans and pets.com if things go to zero that are -- looking back, and you'll go, that was a really a dumb idea. But, you know, we're going to have, you know, the new generation of Amazons and Googles come out of this stuff. And I think it's just -- it's too early to tell at this point, to close the book on this technology.

MR. WETJEN: You know, there's a fair amount I disagree with from the professor, but one thing I do agree with is that I don't think public blockchains portend a future where everyone is going to be managing a self-hosted wallet, doing their own software code to figure out how to leverage a public blockchain to send assets to one person or another to a different wallet. I don't think that's the world of the future. I don't think most human beings, including myself, want to live in that kind of world. I'm perfectly happy to turn over a lot of those activities to someone else and, you know, pay them a very small fee for it.

The -- the difference here with blockchain as the underpinning means by which you can transfer value is that there are absolutely no gates to it. So -- and then that unleashes the ability for companies, frankly, like FTX -- not trying to promote the company, but. We are working on very user-friendly, easy ways to access all sorts of different financial products. And then, the company has sort of perfected the ability to leverage the payments rail of the blockchain for all the back-office activities. So, when people visit the FTX.com website, or FTX's app, it doesn't look any different from Bank of America's app, or Bank of America's website. What's different is what happens that's invisible. And so, that's the key piece of it. It sort of unleashes the ability of innovators to come in and build things on top of that network without any gate standing in the way. Anyone who wants to access it can.

MR. KLEIN: I was blown away when I was in China about how their QR code-based payment system unleashed a series of things that were so much beyond what I originally thought. The parking garage where you just take a picture of the thing when you enter, and you take a picture when you leave, and the gate just flies up and down, as opposed to fiddling for that little paper card, which is everybody's favorite pastime, and, you know. Deeply an efficient use of resources for all of us, not the least of which is the -- the printing and the magnetic stripe. But there are just lots of ways in which a world of micropayments and other things can be unleashed by different infrastructure.

Let's stick with this concept of first principles. Nick Anthony from CATO wrote, what market failure is taking place that requires the government to regulate the cryptocurrency space? Mike, you're a, you know, former -- or still conservative former regulator. You know, what is the first principle here for -- for market failure that would -- would necessitate government regulation?

MR. PIWOWAR: Yeah -- yeah, I think I -- Chairman Benham talked about, right, the -- the huge risk of fraud in this space is the number one thing that you need to worry about, right?

When I first came to the commission, we were talking about things, you know, initial coin offerings, right? Which, on the one hand is potentially a cool way to, you know, think about a new way of capital formation. But when we were there, you know, the statistics were, we were relying on outside law firms to give us -- because there were -- people were coming in and trying to do things with them, and they were trying to, you know, skirt around the rules, and we would things -- like, well, nine out of ten folks

that were coming through the door, it was outright fraud on these (inaudible). There was literally one called PonziCoin at one point. And it was like, they fully disclosed that they were a Ponzi scheme, right? And it was like, if I ever taught at a university again, I would use that -- their white paper as a way to explain what a Ponzi scheme is, right? And it was, nine out of ten were outright fraud, and then out of the one out of ten, nine out of ten of those were probably fraud, or just, like, a really bad business policy that's never going to take off anyway.

And so, you know, when Chairman Clayton was the chairman of FCC, we went very hard on -- on the enforcement cases. And I think that's, you know, we can debate, we can talk maybe about, you know, regulation by enforcement, but, you know, it's the fraud that you worry about. That's what you got to root out to make sure that, you know, that the good actors can actually, you know, root some of this stuff out. So, I think that would be the number one area for -- for the regulatory space.

MR. KLEIN: What do you think, Professor?

MS. ALLEN: I mean, I think, yes. I think investor slash consumer protection is critical here. I think there's also major environmental externalities that are coming. Now I know that these are primarily associated with the proof of work blockchain, and that proof of stake is not as environmentally problematic, but, you know, I am not holding my breath for the Ethereum shift to -- to proof of stake. They've been promising it for a very long time, and it doesn't keep -- it still keeps not happening.

So, there is environmental, and then there is financial stability issues, going back to the conversation that you had earlier with Chair Benham. You know, it's not about necessarily the size -- isn't the side, the calculation of market cap in the crypto spaces is an interesting one, right? There was a great blogpost by Molly White recently that worked through, you know, why -- what you say is market cap in crypto doesn't actually always track. So, actually, putting numbers on this stuff of 1 trillion, et cetera, that doesn't necessarily mean 1 trillion really US dollars are invested in this space. But, you know, interconnection is -- is the problem, I think.

You know, subprime was small, but it was completely, you know, tentacled all the way through the financial system and it caused a huge problem. If this gets tentacled through the banking system, we're going to have problems as well. So, we have all these negative externalities, and I think

this goes to my rebuttal of Mike's point earlier about early days, right? So, you know, sure it's nice to see where innovation goes, and we can let that sort of just happen organically, unless there are major negative externalities. And then you have to ask, you know, what are we getting from -- what are we likely to get from this innovation and experimentation, and does it justify the negative externalities we're seeing? Does it justify all this fraud? You know, does it justify, you know, bitcoin mining using up as much energy as the entire country of the Philippines? Does it justify the fact that this may be the seeds of our next financial crisis? You have to ask yourself those questions.

MR. WETJEN: Can I respond to that? Yeah, all right. So -- so, you're bringing up, you know, the interconnections in the financial system, and then you're more careful in talking about the banking system, and -- and Chairmen Benham was talking about the financial system. When you think about systemic risk, what is systemic risk? It's the risk that a federal policymaker is going to bail out of bank, either directly or indirectly, by bailing out its creditors.

Period, end of discussion. That's all it's about. Anything with systemic risk ends up with bailing out the banks. Again, either directly or indirectly through their creditors. So, to the extent that there's exposure with funds that are out there, or other things in -- in what some people call the shadow banking system, what I call markets, that's fine. We have failures of funds all the time. What -- what we really worry about is the interconnections with the bank. And I agree with you that the banking regulators, the prudential regulators, where failure is not an option, have to really, really worry about exposures --

MR. KLEIN: We don't have failures of money market mutual funds. Last time I saw any time one of those is going to break the buck, that's not allowed in this society for some reason.

MR. WETJEN: I would argue that -- that we should have allowed that, but that's whole other --

MR. PIWOWAR: Right, but we -- we --

MR. WETJEN: -- you know, we could have had -- right, that's -- right --

MR. PIWOWAR: I --

MS. ALLEN: I -- I would argue that we should allow that as well, but then suddenly you get crypto, and we have these stablecoin proposals -- or proposals for stablecoin regulation --

MR. WETJEN: When we did have a failure and it didn't get bailed out, of one -- and I would argue that the -- the -- (inaudible) wasn't about money markets --

MR. KLEIN: You're talking about -- you're talking about a stable fund, not the money market.

MR. WETJEN: No, no -- the stablecoins -- yeah, the -- no (inaudible)

MS. ALLEN: (inaudible) about Terra LUNA? Yeah.

MR. WETJEN: Yeah. Which was not a money market, that was an algorithm, that was a whole separate thing.

MS. ALLEN: No, but if you look at the regulatory proposals that are being put out, they talk about giving them the deposit insurance which they have to pay for. They're giving them all the other guarantees that they don't have to pay for, like access to the discount window. Like being able to have access to fed master accounts which comes with certain credit from the fed. Some of them are proposing special liquidation regimes which get oiled with -- with federal support. So, look, I don't want any of this being supported. If anything should be able to fail, it should be crypto, which isn't sort of funding productive economic capacity, it's self-preferential. This should be the very thing that's allowed to be -- to fail. But unfortunately, if you look at the proposals that are coming out, they're setting up in a way that it potentially is being brought into this place that isn't allowed.

MR. WETJEN: It should not be brought into the prudential banking system.

MR. KLEIN: Let me turn to the -- to the audience, see what questions folks have.

MR. BLAUER: Yeah, Brad Blauer, the National Community Reinvestment Coalition. So, our group really looks at financial inclusion for low-end moderate income and people of color. Like Aaron, I look at the crypto abyss through the lens of the last financial crisis. And like that crisis, where you found a lot of people low-moderate income, people of color, felt they were shut out of the housing market, and availed themselves of alternative mortgage products, which went south, and it hurt the economy. I worry about that here with crypto, because we're seeing a lot of data about high investment rates by low wealth investors, not just the high wealth investors, but. And -- and high participation rates by people of color. Because they had felt shut out from the banking system.

So, what are -- what are some things that we could do to make sure that those people are protected, in terms of the government approach, inoperability (inaudible) that would make the products, you know, a little more exchangeable, and people wouldn't be trapped in one ecosystem versus another. What do you see as approaches that the market could bring to bear that would help until there's government action?

MR. WETJEN: Yeah, I -- I can start. Well, again, one of the reasons that we've been calling for federal oversight is to make sure that all of the customers in the space, especially exchange operators like FTX, have the information that they need when they're accessing the trading products and the other products on the platform. So -- and again, back to what Chairman Benham said before, speaking from my own experience having served at the CFTC, there's plenty of authority that's already in place for the agency to make sure and be pretty thoughtful and relatively prescriptive, even in terms of what -- what actually should be disclosed to, particularly, retail investors, or users of a platform such as FTX. So, I think that's really the answer. I'm not sure what the role of a policymaker is beyond that.

Look, if the Congress decided that these kinds of products are not suitable for anyone to invest in in the United States, then that would be one thing. But I don't see any indication of -- of movement along those lines coming out of the Congress. In fact, I think what people seem mostly focused on is addressing the very point you said, giving people the opportunity to be involved and invest in the space that they like, but making sure that it's done with the right safeguards.

MR. PIWOWAR: Yeah, I would agree. I think -- I think, you know, Mark's firm and -- and some of his competitors have been very thoughtful in this, right? They -- they realize that if there's, you know, some bad actors in this industry, it's going to hurt everybody, and they're not going to get off the ground, and so they've been very thoughtful. I think my one suggestion is that we also see that the -- you know, this is a -- it's a very young industry, and so we see a number of trade associations that are out there, and they're almost sort of competing with one another on these things. If they could work together on some of these things and come up with sort of industry standards on things like disclosures, and customer protections, and those sorts of things, I think that would go a long way. And, you know, in the meantime while we have this sort of analysis paralysis, or until Congress kind of figures out what they

want to do, and in the industry you can kind of show what works and then -- and then policymakers can follow from them.

MS. ALLEN: Well, I mean, I'm very nervous about what is being called financial inclusion in fact being predatory inclusion, as we saw with subprime mortgages. I mean, typically you don't see lobbyists and venture capitalists, you know, falling over themselves to help out the disadvantaged, so, you know, there's definitely a lot of money to be made here, and I am concerned that it won't be a win-win. If it's a win-win that's fine. But if it's a situation where people are being taken advantage of -- and, you know, that's the thing about crypto assets. Because there's no productive capacity behind them, their value derives from finding someone else to buy them from you. And if, you know, "financial inclusion" is being used to expand the universe to purchase those assets to benefit the early movers, and the most vulnerable people in the United States and globally end up being the people who sort of hold the bag, then I am extremely nervous about that.

MR. KLEIN: David?

MR. METZNER: Thank you, Aaron. David Metzner with ACG Analytics here in Washington. Aaron, you mentioned David Malpass, and I thought I'd point out that, if you peruse the World Bank's website, you'll see one of the most interesting uses of blockchain out there. David has built a blockchain with a third token that does not use a lot of energy that is used by mining the unused power on your CPU on your computer, and it's a carbon warehouse. But Costa Rica was the first to join, it puts its carbon credits on the blockchain, and then Exxon Mobil gets to retire them if they need them. Very transparent, it's going to be hosted by the government of Singapore. So, David has redeemed himself, you know, in his latter life, by going green.

But a couple other points. Two is, we really never hit the international competitiveness issue. All right, Singapore obviously is all things digital and crypto. Are we going to miss Web3? Is that something we should care about? The third thing is, I think what's missing from a lot of debates in Washington, we're talking about the use case. You know, what happens in this town, things get done when we have good data.

You know, when the U.S. government tries putting the GSA schedule on blockchain, and

we see if, like, Coca-Cola costs less for the taxpayers and just about everything else the government buys. So, I mean, I think that's been missing. And when someone in Congress, whether it's the blockchain caucus or someone slips that into an appropriation bill, and we get data, and data sells in this town, you know, and other BS doesn't. I think that's what missing. We don't have hard data, we have speculation.

But what will blockchain do, okay, as we move -- and I come back to it -- we move the GSA schedule away from -- away from paper to, obviously, you know, some digital system? And now, it should eventually go to blockchain.

MR. KLEIN: What do you -- what do you guys think there, between the different -- the international competitiveness angle, government use -- I think Gavin Newsom from California has put out in his executive order to try and push state municipal localities to consider blockchain in California, what do you guys think of those questions?

MS. ALLEN: So, I criticize that executive order from Newsom, because what it's doing is the exact opposite of what we should be doing, which is start with the problem then fix it, whereas if you start with the technology, and try and force that, to retrofit that to get the -- to address the problem, you're not getting the best solution to that problem.

With regards to the international competitiveness argument, I find this one really interesting. Because the rhetoric around this that you see for, you know, crypto, Web3, whatever you want to call it, it's almost identical to the rhetoric we saw around swaps in the 1990s. Like, we have to be the best in this, we have to be the first in this, or else it will all go overseas, and maybe that's not a bad thing, right, you know, if we were -- you know, you don't hear us saying, like, we have to be the leader in heroin refinement innovation, or else it will go overseas, right? You need to think about what the innovation is that you're talking about. Maybe you don't want it?

MR. WETJEN: Yeah, I mean on the -- on the state side, right, so, Governor Newsom, we've also seen some cool stuff that, you know, Miami Mayor Francis Suarez is doing, and -- and turning Miami into, not just a crypto, not just a FinTech, but a really lively ecosystem there, where now you have a lot of venture cap money, and a lot of really smart people are -- are thinking through a lot of these issues

and stuff that, again, we can't sort of figure out what some of this stuff's going to do.

On the international competitiveness one -- front, again, it's related to that, thinking about, we want the best and the brightest in the United States thinking about these issues, so that we can come up with the ideas that's going to drive the next generation. You're absolutely right, David. It's not just -- it's not just Singapore, it's also -- is the Swiss financial regulators and a number of the other regulators, in the Middle East, Abu Dhabi, Dubai, are thinking about these things. And, you know, we've always had the best, you know, capital markets in the world, and, you know, we need to be the leader in the crypto markets, too.

MR. PIWOWAR: I don't have much to add, I certainly agree with the points made there, and I do think that any time there's database decisions, policy decisions, that leads to the best outcomes. There is considerable amount of easily accessible free information about the industry, I will say, and not a lot of people are always aware that it's out there, except for those living day-to-day in the industry itself. But I would encourage people to just sort of look and see what's out there and is already available to sort of ground some of these decisions, and data that is, in fact -- in some cases, yeah, not sure specifically what you had in mind, but there might be more out there than -- than you realize.

MR. KLEIN: Justin?

SPEAKER: Could you comment a bit on the legislation that's out there on this Lummis and Gillibrand for one, and particularly on the Waters McHenry one, in terms of giving stablecoin oversight to the fed, and then also, in an ideal world, what would you like to see the President's working group and FSOC do on regulation to these areas, what should they focus on, what would you like to see them recommend?

MR. KLEIN: Mark, do you want to start, and we'll work down this way?

MR. WETJEN: Yeah, my wish is that the FSOC actually recommends to the member agencies that they move on applications that are in front of them and move quickly. So -- and consider these applications from an outcomes-based perspective, and ask the question, is there a broader range of policy objectives that would be served by granting this application? And obviously we have applications before different agencies, but so do a lot of other people, and there's a long queue, I think, on

these applications. And some of the problems that have been cited here concerning vulnerabilities of investors, and customers, and the like, those can be addressed if agencies start to make some decisions.

And I know some of these decisions are thorny and difficult in some instances, but I also think sometimes they're overthought. And agencies have a lot of -- a lot of tools at their disposal, they have exemptive authority, they have no action relief. So, I think that would be really, really important, and it would address some of the biggest concerns that have been raised, not just today, but what you normally hear about the industry, things related to fraud and manipulative activity, and things of that sort.

MR. PIWOWAR: Yeah, I would agree in terms of -- of the FSOC, right, encouraging the agencies to move forward and, you know, get rid of the analysis paralysis. In terms of the legislation that's out there, we're going to see more coming out over the coming days, and I think it's -- I think there's some good ideas out there that have some concerns with some of the particular was, I'll hold back on the concerns and stuff. But I think there's -- the fact that there is interest from Congress in actually acting in this space, is a function of two thing. One, the recognition that it is going to -- there is going to be required some sort of legislation that's involved. And two, I think it's also the bubbling up from the constituents that they're actually asking for this type of clarity.

MR. KLEIN: It's no fun to hold back on the specific concerns, but let me -- let me ask, do you think we'll see a bill signed into law before a bigger explosion, right? There's this -- one philosophy says we only get legislation after an implosion. Another philosophy says sometimes you can get out ahead of this thing and there's a lot of interest. Do you think there's going to be a law signed on crypto?

MR. WETJEN: I don't see anything -- or at least, you know, looking towards the midterms -- anything -- or in the lame duck period, I don't see anything comprehensively. Right, there's -- there's potentially folks in the House and the Senate talking about potentially moving something on stablecoins. I'm not a lobbyist, I'll leave that to other folks in the room to -- to handicap that. But it seems to me that we're not going to need anything in the comprehensive space maybe potentially smaller on stablecoin.

MS. ALLEN: Yeah, so, I mean, I have a lot of issues with what's in the Lummis Gillibrand bill, and I suspect that we'll have a lot of issues on what's in the House of Financial Services committee

bill, but I'll just put forward a couple of issues that -- that I know are already there. So, with regards to stablecoin regulation, neither the Lummis Gillibrand, nor as forecast, the HSC bill deals with exchanges, right?

So, the Tether wouldn't be covered by any of those bills. Terra LUNA wouldn't be covered by any of those bills. Because the exchanges would still be free to share -- to sell them. The only person, the, you know, big player that would be covered by those bills, a circle who, from what I can tell, seems to want this regulation because of all of the benefits I talked about earlier in terms of implicit guarantees, et cetera. So, that's a gaping hole that we see in those bills. They don't deal with the exchanges, and they don't deal with the conflicts of interest. Because almost every major stablecoin that is out there is affiliated with an exchange that profits from trading in that stablecoin.

So, for example, USDC was co-launched by Coinbase and Circle. So, there's no references to exchanges, the conflicts of interest, et cetera, and that is a gaping hole in those bills. Another problem with them is that they're likely to invent -- invite regulatory arbitrage. The definition of digital asset and distributed ledger will be really important. But the thing is, a digital asset is really just a computer file. And a distributed ledger is really just a database. So, how do you define those in a way that excludes all the traditional financial services that are performed using computer files and databases, right?

So, it's really going to be a carte blanche for, you know, for example, regulated securities, to sprinkle a little blockchain dust and then become, you know, special digital assets, and take advantage of a special regime. Or -- sorry, traditional deposits to sprinkle a little crypto dust and then become regular -- unregulated or less regulated stablecoins.

MR. WETJEN: Can I just make one response to that? So, on the point of the exchanges, I think I understand the point insofar as none of the exchanges that have spot markets have federal oversight. But certainly, if you want to list derivatives on bitcoin, for example, you need a license in the United States to offer those products to U.S. persons. So, it might not be as dire a situation as was just suggested. In other words, if you're an exchange registered by the CFTC, and you're offering futures on bitcoin or Ethereum, so far, the two futures products on digital assets, although we expect more to

come, the regulators can make it very, very clear which stablecoins can be permitted for use on the platform as collateral, and which ones cannot. And again, they already have the tools in place to make sound judgments about that, and regulations and statutory authority that can guide them in how they decide that.

So, even without federal stablecoin legislation, those decisions could be made today. So, I actually do agree with the professor, I do think the exchanges are the gateways to the entire crypto space, and so oversight of them is probably most important -- This is Mark Wetjen's view, not FTX official position, but -- I personally think that is, in fact, most important policy focus, or where it should be rather, is to get the exchanges under supervision first, and then once that happens you can address some of the other particular issues, even around stablecoins.

MR. KLEIN: So, let me dig in on that, because stablecoins are hot, and that draft bill is like, supposedly, very close to circulating. If the exchanges have that authority that you said is top priority, would they be able to go in and find out where the stablecoin reserves are? Because there's a lot of debate, particularly as it relates to Tether, as to what's behind the asset.

MR. WETJEN: Aaron, it's very simple. And the answer is, if the exchanges couldn't get that information, the (inaudible) says you can't -- you can't allow them on the platform. Simple as that, not difficult. Very easy solution.

MR. KLEIN: And does that require that new authority?

MR. WETJEN: No.

MR. KLEIN: They could do -- they could do it today?

MR. WETJEN: I mean, I'm not a practicing lawyer, I used to work there. I am a trained lawyer, but I am pretty confident with the authorities I have today that can make that -- at least at the CFTC, and Mike Piwowar's an FCC expert, and he can speak to the FCC's authorities. But CFTC, I'm pretty confident of that.

MR. PIOWAR: Yeah, I mean -- I mean, putting algorithmic stablecoins -- right, so if you got dollar-backed ones -- I mean, to me it -- they just look like money market funds, right? And so, then you can solve a lot of these problems with the money market fund transparency rules and liquidity rules,

and those -- and those types of things, so.

MR. KLEIN: Well now I'm terrified, based on our experience with money market mutual funds.

MR. WETJEN: But Aaron, just to be clear, Mark Wetjen and FTX very much supports stablecoin legislation. I'm simply saying that -- I'm also agreeing with the professor -- that there's another way you could address stablecoins, at least in the interim, until the stablecoin -- more comprehensive stablecoin legislation comes.

MR. KLEIN: George, I think you're going to get the last question before we run out of time.

SPEAKER: Oh, yeah. Well, I was going to say on that -- this issue of stablecoins, it seems to me that if you -- the reason you have Tethers and you have these problems is you don't have a -- a way of having stablecoins included in the financial system in a way in which you can track their reserves, and impose restrictions that are meaningful, and that ideally what this -- these laws are trying to do, and what we hope they should do, is to make it possible to have a stablecoin issuer where you know exactly what's backing its currency, and where it consists exclusively of high-quality liquid assets. It's perfectly possible to do that, but if we don't allow it, particularly fed balances, which obviously none of these stablecoin issuers can have, unless they can have access to the fed, but if they do, it's perfectly easy for the fed to -- to know what -- what assets they -- what -- that they have the reserves.

So, you know -- if -- if -- and I'd like to hear peoples' comment on this, is, how can we have stablecoins that are safe, while at the same time we're ruling out legislation that gives them access to the conventional banking system, subject to some strict requirements?

MS. ALLEN: I don't think you can, which is why I am on the record for saying that I just, I don't think there's a place for stablecoins.

MR. WETJEN: So, George, let me ask you back, why wouldn't we just consider it to be like money market funds, and have the FCC just have the transparency and liquidity requirements, if they would have one on anything that's backed by cash, cash equivalents, and the like?

SPEAKER: Well, you know, it's -- this is getting a little bit like securities versus

commodities, but in principle, they could be managed like money market funds, but we usually don't -- the money market funds have to have banks that they work with in order for their media to be useful in interoperating with the regular banking system. So, if you give stablecoin issuer a master account, you directly can settle through the fed without having a bank correspondent.

Which is a big deal, because a lot of these stablecoins issuers, their models don't work so well if they have to partner with banks, particularly if the banks won't have anything to do with them, which is often the case.

MR. WETJEN: Yeah, I mean -- but the plain vanilla stablecoins, right? Just a plain, vanilla sort of money market -- the other esoteric is, that's -- that's a whole separate sort of discussion.

MR. PIOWAR: I mean, I think some of the banks are talking about their own stablecoins.

MR. WETJEN: Yeah, within -- within (inaudible) because they want to solve, sort of, the - - the clearance and settlement within their -- within their affiliates, it would actually be more efficient to do.

MS. ALLEN: Well, and also under the House Financial Services committee bill, they might have a way to have less regulation if they move it into a stablecoin.

SPEAKER: Only if they have better assets backing them, all of those bills. That would require them to be safer than banks in order to be less regulated.

MR. KLEIN: Mark, any final thoughts?

MR. WETJEN: Yeah, there's a lot to unpack there from the last couple minutes. I'm not familiar enough with all the specific banking laws at play here. But well, I don't think that, you know, mutual fund supervision is necessarily the right way to go, because there's a number of complex problems that that raises, too, just for definitional reasons, in terms of how it can be used and on what types of platforms, to be a little more precise about that.

But I think conceptually, I tend to agree, so long as the dollar assets, or dollar equivalents, are kept in some custodian where there's adequate transparency, adequate capital requirements, imposed on the custodian, to me that would be a terribly good to at least start, and that's separate from the oversight of the issuer.

The issuer might not be the same entity as the custodian, or even an affiliate. You can imagine an issuer, which is kind of how it works today, mostly, I think, at least for some of them, where the issuer is a separate company, and partners with some state-regulated bank in some cases.

So, I think there's a multiple number of different ways to do that, there. And based on what I understand of the stablecoin legislation that's being consider in the House, I actually think it sounds reasonably promising.

I mean, I'm sure there's some details that can be quibbled with, but I think directionally it seems like it's going to a very good place.

MR. KLEIN: Thank you all very much for this spirited conversation and thank you all for joining us on this. (Applause)

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