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Keynote Address

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Keynote Address

Sultan Meghji*

Thank you so much for the introduction, and I want to apologize that I can't be there in person. I had a bit of a medical issue that came up a few days ago and so they've told me I'm not allowed to travel. It actually worked out nicely, though, because it's allowed me to keep up. I had an entire speech planned about a week and a half ago for this, and you can imagine that I've had to throw it all away. Quite a bit of change in this universe.

But instead of focusing on the trees, I wanted to focus on the forest today for a little bit. So, obviously, we're all aware of what's been going on in the banking sector. We're all aware of what we think that means from a cryptocurrency perspective, what we think the U.S. government is trying to do to push crypto out of the banking sector, and I'll talk about that just a little bit. But I'm going to ask you to keep a few themes in your head as I speak. So, the first theme is the inevitability of this change, the inevitability of this transformation that we're all going to have.

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The second theme is the fundamental place that organizations like yours, like Duke where I teach, and other universities globally are playing—and we’re seeing a resurgence of the leadership role of academia, which I’m incredibly excited about. And that’s not just in the STEM fields, but in fields like this. I’ve taught in both business and engineering schools in my career in academia, and I’ve lectured a million times in law programs, and it’s fantastic to see those curriculums evolving. And then the third theme is: What do you do with this? What’s next? How do you think about what becomes this evolutionary pattern?

And so, with that, I’m going to go back and say—and if I was in the room, I would ask you all to raise your hands—I’m assuming that at least a few of you have heard of Bretton Woods and the Bretton Woods meetings that came at the end of the Second World War. There’s a really funny story that not a lot of people know about Bretton Woods, which is you have all these European leaders and ambassadors and negotiators sitting around a table in the United States at the end of the Second World War trying to figure out how to finance the reconstruction of Europe, and how to restart the global economic system. It was an amazing group of people, but one of the most interesting people was the American ambassador, who was, to put it mildly, slightly more of an aggressive personality than others who would have been in that room.

A couple of things came out of that meeting. The first was the global economic order, the Marshall Plan, the World Bank, the IMF, the monetary system around the central banks that we’re all familiar with. It was the final death knell of banks having their own currency and how currencies came from the nation-states. But the most interesting thing is the notion of global reserve currency came out of that.¹ In the negotiations, or the days and weeks leading up to the final meeting, there’s this notion that a new currency needed to be created that would be separate from any one nation’s currency, and it would be an authentically unattached currency that anyone could use. A lot of the language that you hear people in bitcoin talk about—its

1. See *October 2009 Report, Appendix 1: An Historical Perspective on the Reserve Currency Status of the U.S. Dollar*, U.S. DEP’T TREASURY (Oct. 15, 2009), <https://perma.cc/Q6SD-ELDH> (mentioning that the U.S. Dollar became the global reserve currency because the U.S. emerged as the world’s major economy).

role globally—is stolen directly or borrowed directly from some of that language from Bretton Woods. And what was interesting is, for the entire time, everyone was pretty convinced this was the right thing to do. It would alleviate the gravitational pull of any one nation, it would create stability, a bunch of other things. All the language that you hear from the bitcoin community.

And at the very end, the British ambassador—and it was really the British and American ambassadors running everything—he went to go to the bathroom, and he came back, picked up his folder, and walked off and was going to go have the British government sign off on this. What he did not realize was that the American representative, when he got up, walked over and scribbled out “global generic currency” and put in “U.S. dollar.” And that is why the global or the Marshall Plan, all of this actually got built on the back of the U.S. dollar, which is a funny way to think about it. Because what that did was put the United States not just monetarily but also in terms of infrastructure, in terms of manufacturing, it was that foundational building block that created almost a century—or at least a century so far—of American financial dominance. We’re at about 57 percent global reserve currency is the U.S. dollar right now according to the IMF.²

But when you think about that global order, ignoring whether or not you think it was a good idea for any one country to have that, it did create a system where financial innovation and financial infrastructure sat in the United States. For the better part of eighty years, that’s been true. Right now, we’re seeing the first actual pressures against that. For the last fifteen years we’ve seen the incredible investments in financial technology (“fintech”). We’ve seen incredible inventions like some of the distributive ledger currencies,³ and it is an amazing, amazing opportunity for innovation. And the problem we have here in the United States is that we are not investing in it. We are not building regulatory systems that support it, we are not

2. See *Currency Composition of Official Foreign Exchange Reserves (COFER)*, INT’L MONETARY FUND, <https://perma.cc/683B-6KJD> (last updated June 30, 2023) (listing foreign exchange reserves).

3. See Brian O’Neill, *Total Fintech Investment Tops US\$210 Billion, as Interest in Crypto and Blockchain Surges, Says KPMG’s Pulse of Fintech*, KPMG, (last visited July 29, 2023) <https://perma.cc/8K5A-TKJY> (detailing growth in fintech investments).

in a position where we are embracing that. In fact, if anything, what the last two weeks have shown us is an active hostility to a lot of these activities. I'm a member of Bretton Woods, and, to me, the role they play as a thought leader in the central bank space is fantastic, because what the Bretton Woods community has said—and almost every central bank except the American central bank has said—is that financial innovation should stay in democratic countries with democratic and capitalist ideals that reinforce the benefits of the existing system while also finding ways to make it better.⁴ Whether it's from an equality perspective, from an access to capital, credit, and lending opportunity, these are all significant, significant disagreements that the United States's current regulatory environment has with its peer group around the world.

In the midst of all of this, we also have an aging financial infrastructure here in the United States. The average enterprise resource planning (“ERP”) system that actually runs most banks in the United States is probably almost as old as half of you in the room. The median age of these systems is something like eighteen years. There are about 10,000 depository institutions in the United States—about 4,500 banks, about 5,500 credit unions—and most of them have not gone through a significant technology upgrade to their primary system of record since before the 2008 financial crisis. Less than 16 percent have.⁵ And that gives you a sense of the age. At the same time, the regulatory environment is a very analog environment. It's people going in and looking at stuff, looking at binders, looking at folders, things like that.

I was explaining to a friend of mine the other day that there were two regulatory personalities within the community of free countries that are relevant. The first is a prescriptive philosophy: Do you have a firewall? When was the last time you updated your firewall? That is exemplified by what the European central bank does and, for example, what the German central

4. See Dorothee Delort & Jose Antonio Garcia, *Central Banks and Innovation*, WORLD BANK BLOGS (April 19, 2023), <https://perma.cc/R3KT-FEQW> (describing future innovation for central banks).

5. See Bloomberg Professional Services, *Banks Too Slow to Modernize Core Systems*, BLOOMBERG (Nov. 17, 2015), <https://perma.cc/SE5B-73KE> (stating the findings of a survey that only “16% of financial institutions around the world are replacing core banking systems”).

bank does. The second model is: Do you have a process to ensure that you are updating your firewall? That is the American model. And so, every single financial institution in the United States that is regulated has an entire frictioned infrastructure around it of people asking vague questions and getting intermittently useful answers. At any one point, we don't actually know how many firewalls there are in the banking system in the United States. We do not know when they were updated. We do not know if they were updated. And the authority structure, the actual laws that govern these questions and the fundamental structures, have not been updated since the 1930s—before the Bretton Woods system, before fax machines were invented.⁶ I use fax machines as an example because they're still commonly used by American regulators.

And so, here you see, I have highlighted three basic problems. Problem number one: a fundamental issue with technology. Problem number two: a fundamental issue with the regulatory process. And three: a fundamental problem with the data that we are capturing. So, as we think about this analog-to-digital transformation that we're walking down, we need to consider a couple of things. The first is: How do we keep the baby without throwing it out with the bath water? The American regulatory environment is, in many ways, the most stable, the most resilient. Not a small percentage of that is because of the balance sheet of the United States, but also because of all the interlocking systems. If you're a bank in the United States, you have, at a minimum, nineteen different regulatory bodies that you're interacting with on a daily basis. Whether it's parts of the Department of the Treasury like the Financial Crimes Enforcement Network ("FinCEN") and the Office of Foreign Assets Control ("OFAC") and the Committee on Foreign Investment in the United States ("CFIUS"), whether it's the Federal Reserve and its Reserve Banks—which, there's an amazing law suit if you're paying attention to these kinds of things, that Custodia, which was a de novo Bitcoin-oriented

6. See Linsey Knerl, *When Was the Fax Machine Invented?*, HP (Dec. 7, 2019), <https://perma.cc/5SBS-QVVC> ("The first recognizable version of what we consider the telephone fax was invented in 1964.").

bank, applied for Fed membership and it was denied in a kind of odd way.⁷

One of the most interesting things that is potentially going to come out of that law suit—and, if you're into these kinds of things, I would suggest looking at it—is that the Federal Reserve has made the argument for a long time that the Federal Reserve Banks of the United States are not part of the Federal Reserve Board itself and that they operate independently.⁸ Custodia has made the claim that there was a coordinated effort between those two entities which would then say that those Federal Reserve Banks are part of the U.S. government, which they are currently not considered, so they don't have to respond to Freedom of Information Act (“FOIA”)⁹ requests and they don't have to follow the Administrative Procedures Act.¹⁰ And if Custodia gets a positive judgment—which the first judgment has already come out and it was entirely in Custodia's favor¹¹—it would change the nature of how the American central bank operates, because it would change how we consider those Federal Reserve Banks, which is where cash comes from, it's where most banks actually get the loans from which they operate on a daily basis. It would fundamentally alter them because it would assume that they're part of the U.S. government, which they are not, and certainly the House Financial Services Committee would be very excited about that now that it's controlled by the Republican Party. Congressman Patrick McHenry has, I think, got—last I heard—a couple of hundred FOIA requests into those groups that he has not had a response to.

The inevitability of this transformation is paramount because we have seen the People's Republic of China put

7. See generally Complaint, Custodia Bank, Inc. v. Fed. Rsr. Bd. of Governors, No. 1:22-cv-00125 (D. Wyo. June 7, 2022), ECF No. 1.

8. See Dan Blystone, *Why is the Federal Reserve Independent?*, INVESTOPEdia (Apr. 11, 2022), <https://perma.cc/6ZBD-N3RZ> (“The [Federal Reserve] is independent in the sense that monetary policy and related decisions are made autonomously and are not subject to approval by the federal government.”).

9. 5 U.S.C. § 552.

10. 5 U.S.C. §§ 500–559; see also Complaint, *supra* note 7, at 3.

11. See generally Order Granting in Part and Denying in Part Defendants' 12(b)(6) Motions to Dismiss, Custodia Bank, Inc. v. Fed. Rsr. Bd. of Governors, No. 1:22-cv-00125 (D. Wyo. Nov. 11, 2022), ECF No. 102.

tremendous energy into this globally. There is tremendous infrastructure being built and that's already been built, whether it's roads, whether it's telecommunications, whether it's supply chains, whether it's consumer goods. All over the world, especially in areas where the middle class is growing, unlike in the United States—not just the middle class but also the populations are growing—where the financial infrastructure is being rebuilt on technology that is fundamentally opaque versus transparent like what we're talking about.¹² And the best way to counter that is to use transparent, open technologies. Hence why the entire blockchain conversation is really interesting, because, right now, there is no open democratic counterpart in innovation globally in high-growth financial services versus the Chinese—except what we're seeing with the crypto community. The United States is just not participating in it.

And so, if you think about the next eighty years, the next hundred years, finance is going to be entirely digital in every way imaginable. Paper is going to disappear from the conversation. The friction that currently funds so much of the global financial infrastructure, whether it's middle management, whether it's people typing memos or looking for bad behavior—I think everyone should pay attention to what Microsoft announced yesterday with their new ChatGPT implementation.¹³ That is a fundamental game changer to how offices operate and really will accelerate the digital transformation globally, especially in legacy analog organizations here in the United States where they're under a significant human capital pressure. We are now at this amazing moment where, as we separate the digital moving forward technologies from the analog organizations, we're going to see significant disruptions.

One can make the argument, I think very easily, that the current pressure on Credit Suisse and their, what, ten, twenty

12. See Motolani Agbebi, *China's Digital Silk Road and Africa's Technological Future*, COUNCIL FOREIGN RELS. (Feb. 1, 2022), <https://perma.cc/z3YE-99U6> (PDF) (describing advances in global technological infrastructure).

13. See Jonathan Vanian, *Microsoft Adds OpenAI Technology to Word and Excel*, CNBC (Mar. 16, 2023, 11:06 AM), <https://perma.cc/XKM3-QVD4> (last updated Mar. 16, 2023, 2:23 PM) (announcing that Microsoft will be adding AI to Microsoft 365).

percent share price drop this morning in Europe,¹⁴ is directly because, if you're a global systemically important bank ("G-SIB") and you have a billion dollars, and I give you three options where to put it: Option one, do you put it in Credit Suisse to short their balance sheet of an analog organization that has been kind of a problem child for a few decades? Do you put it in First Republic Bank in the United States, a regional bank that has already had a huge capital injection and still doesn't seem to be doing very well? The confidence in that organization has plummeted, and it wasn't that great to begin with. They had a bunch of CEO challenges over the last few years. Or, do you make a bid for part of Silicon Valley Bank, which, as of this morning, is probably receiving more capital than any other bank in the United States? Almost everyone who pulled their money out of Silicon Valley Bank is talking about putting at least some percentage of that back in because, for the next year, Silicon Valley Bank's depositors, no matter how much money you put in there, are guaranteed protected by the U.S. government.¹⁵ You could have a billion dollars in Silicon Valley Bank and the U.S. government will cover that in case anything happens to it. And Silicon Valley Bank will still offer you some degree of interest. Guess what? That just completely altered the dynamics of a bond market that was already under incredible pressure because of the rise in interest rates from the Federal Reserve.

If you are an investor right now, this is probably one of the most exciting times. A hedge fund friend of mine called me and he said that in seventy-two hours, he made three times what he expected to make for the entire year just on the swinging price of USD Coin. It went all the way down to \$0.88 when it got de-pegged.¹⁶ Everyone knew it was going to get repegged,

14. Margot Patrick et al., *Wall Street Casts Wary Eye on Credit Suisse*, WALL ST. J., <https://perma.cc/UF6H-AWQY> (last updated Mar. 17, 2023, 5:10 PM) (detailing Credit Suisse's investment history).

15. See FDIC *Acts to Protect All Depositors of the Former Silicon Valley Bank, Santa Clara, California*, FDIC (Mar. 13, 2023), <https://perma.cc/XTE8-MPSY> (explaining the FDIC's response to the Silicon Valley Bank failure and ensuring that depositors "will have full access to their money").

16. See Sage D. Young, *USDC Stablecoin Depeds From \$1; Circle Says Operations Are Normal*, COINDESK (Mar. 10, 2023, 7:01 PM), <https://perma.cc/B748-UMFT> ("USDC stablecoin, which is the second-largest stablecoin at \$42 billion of market cap, depegged from the U.S. Dollar as contagion from the collapse of Silicon Valley Bank spreads.").

because Circle is a fundamentally stable financial institution that had access to a fed facility before any of this even happened. So guess what? Buy it at \$0.88, sell it at \$1.00, and you can do that to the tune of, I think they said, about \$20 billion. One investor they identified this morning made \$120 million dollars doing that in a seventy-two-hour window.

That kind of real-time banking, that kind of real-time market activity, we introduced to the public markets over twenty years ago, before 9/11—it actually went live in the summer of 2001 on the New York Stock Exchange, where you could do internet-based trading in real time at very low cost—and we immediately had to change the regulatory environment around it. It became entirely digital, it became mostly automated, and the American banking system has to catch up. The problem is, the American banking system is pretty poor in terms of its ability to make these changes, build these new technologies, and implement them. The regulatory community has the exact same problem.

So, as we look to the next eighty years, I would like to highlight a couple of things that are inevitable to have to happen. One is the technology change has to happen, and I hope I've made some of that clear. I'll say one other thing about the upcoming technology change, which is quantum computing: now that we have standards for quantum encryption, they have to get rolled out very quickly, and here in the United States and in Europe, as well, we are going to see the strongest mandates around cybersecurity over the next decade as they start drawing lines in the sand. You will not be able to operate unless you upgrade your core encryption. Remember how I said a few minutes ago that a lot of banks in the United States had very old ERP systems? The biggest challenge is not just replacing, you know, one file on a computer with another file, or hitting update on your iPhone. That's fine, your iPhone will be just fine. When your iPhone is one hundred times faster than the computer that's running your banking system, which is basically the case here in the United States, that computer must get replaced. Most of the time, the organization in question doesn't have the source code, and there are only three vendors in the United States that own over ninety percent of that

market.¹⁷ It's a \$150 billion market in the United States owned by three companies that you may or may not have ever heard of. One of them is called Jack Henry. Has anyone ever heard of Jack Henry? No, right? You've probably heard of Fiserv, and you've probably heard of FIS. Well, those three companies control the technology in the American banking system.

There's actually another lawsuit that's very interesting because a client of theirs discovered a security flaw and told them, and then that core vendor sued the institution in question because it was a violation of the terms of service to run a security scan against their software.¹⁸ That's the 800-page contract they signed when they bought it. And there's an active lawsuit. They're trying to figure out how to handle this because there's now lawsuits in both directions because, if you're a bank, and you are found by your regulator to be running an insecure system, they could get shut down. Immediately. Do not pass "Go." If an examiner sees that, they will turn you off. What happens if your technology partner—in a highly centralized environment where there are only three vendors that control this market—tells you you're not allowed to do a security scan because they don't want that information coming back to the regulators to show that their technology is unbelievably flawed and doesn't work? And then the regulator comes in and finds it. If you're that institution, you're in an incredibly tough spot, because either you're violating a purchase contract on one side or you're violating your agreement with the U.S. government on the other side. It's a terrible place to be. And I think there's seven lawsuits related to that going on in the United States right now.¹⁹ I don't remember any of the names—if anyone wants, I can go find them and give them as a footnote or a bibliography.

17. See Yizhu Wang, *Core Banking Innovation Empowers Smaller Banks to Think Like Fintechs*, S&P GLOB. MKT. INTEL. (Mar. 28, 2022), <https://perma.cc/L8CX-Z5BP> ("Historically the core banking market has been dominated by Fiserv Inc., Fidelity National Information Services Inc. and Jack Henry & Associates Inc.").

18. See generally Complaint, US Ct. House SDNY Fed. Credit Union v. Fiserv Sols., LLC, No. 1:22-cv-09329 (S.D.N.Y. Oct. 31, 2022), ECF No. 1.

19. See, e.g., Bessemer Sys. Fed. Credit Union v. Fiserv Sols., LLC, 472 F. Supp. 3d 142, 151 (W.D. Penn. 2020) (describing Fiserv's failure to comply with security measures).

But this digital transformation has to continue, for no other reason than getting back to global currency. It's fine for J.P. Morgan and Goldman and Citi and Bank of America—there's seven banks that control over 85 percent of consumer deposits in the United States.²⁰ That's what, \$12 trillion or something like that? But when you get to the other 4,000 institutions, they are the lifeblood of how American business operates. They're how every company gets a loan for their office, or to figure out how to buy cars or trucks for a fleet of delivery vehicles, or garbage trucks or whatever. The big money center banks, the G-SIBs, don't participate in Main Street very much. If you all of a sudden make it impossible for 85 percent of the banks, 90 percent of the banks in the United States to operate because you don't offer them the same insurance terms that you're offering the big ones, the too-big-to-fail banks, and you're creating incentive for those businesses to move their deposits into the big ones—which is exactly what the Biden Administration has done over the last two weeks²¹—you have fundamentally weakened the banking system of the United States in a way that will not be easy to recover from because none of them have the money—because they're spending all of it on old computers—to buy the new computers.

We might be about to enter the largest contraction as a percentage of banks in the United States, because if I'm only being able to offer \$250,000 of deposit insurance on my bank account for a small business on Main Street, and J.P. Morgan can do unlimited because it's a too-big-to-fail bank, I'm going to lose all of my customers. They have better technology, they probably have better products and services anyway, I'm hanging on to them by the skin of my teeth. And all of a sudden, the Biden Administration has cut my legs out from underneath me. If you want to hear some really interesting stuff, Secretary Yellen was in front of either House Financial Services or Senate Banking yesterday and got some questions about this from a

20. See Adam McCann, *Bank Market Share by Deposits and Assets*, WALLETHUB (Feb. 23, 2023), <https://perma.cc/X9E9-LNYJ> (listing banks according to market share).

21. See Evie Liu, *JPMorgan Is a U.S. Banking Behemoth. 11 Charts Show How It Stacks Up.*, BARRON'S (last updated May 10, 2023, 10:52 AM), <https://perma.cc/FN2N-Y6AG> (comparing JPMorgan Chase to other large banks and to other FDIC-insured banks).

number of Members.²² The answers did not make anyone happy. I don't think she was happy to get the questions, I don't think the Members were happy with the answers they were given.

So, this is the conversation we're having in the United States right now. You go to China, you go to Nigeria, you go to Brazil, you go to Singapore, you go to the United Arab Emirates, you go to Neom, they're all just building it from scratch. Digitally native, quantum-encrypted, completely automated systems, and the vast majority of the underlying technologies are distributive ledgers, blockchain-like technology, and Web3 technologies. These are secured by design, they're auditable by design. The energy being put into that, even in the American venture capital community—and I'm lucky because I get to see that firsthand at Reciprocal—but seventy cents on the dollar of investment in fintech right now is going into these kinds of Web3 technologies.²³ So, at some point, there's going to be a conflict between the regulatory system in the United States and the reality of how people are building these technologies, because the way the regulatory system is currently operating, those technologies are verboten.

We have to figure out how to have that conversation, and everyone in the room is part of that discussion, whether you own crypto or not. You know, over 40 percent of American taxpayers own crypto as of two years ago, for the 2021 tax season²⁴—I'm sure that number is far higher now. The last couple of weeks have seen a tremendous outflow of capital from the American banking system. The two biggest areas that it's gone to are, number one, crypto, and, number two, depository institutions

22. See David Lawder & Doina Chiacu, *US Banking System Sound But Not All Deposits Guaranteed, Yellen Says*, REUTERS (Mar. 16, 2023, 3:16 PM), <https://perma.cc/PP2M-2V2M> (describing Treasury Secretary Yellen's response to two large bank failures).

23. See Alys Key, *Crypto Remains Largest Investment Sector in 2022, Outpacing Fintech and Biotech*, DECRYPT (Nov. 29, 2022), <https://perma.cc/9XUS-AWH4> (“Despite the decline in deal-making and a troubled year for crypto, Web3 and DeFi projects were still the largest areas for investment in emerging tech, beating out fintech and biotech.”).

24. See The Motley Fool, *Get Ready to Laugh: Here's How Many Americans Have Reported Crypto Transactions in Their Tax Filings*, NASDAQ (Feb. 19, 2018, 7:21 AM), <https://perma.cc/Q6B6-CD9L> (describing discrepancies between individuals who claimed crypto on their taxes and individuals who recognized gains from crypto).

that are digitally native outside of the United States. And we're talking tens of billions of dollars in the last two weeks. We're not going to hear about it for another 90 to 120 days, because the banks don't have to report that kind of outflow until a quarter or two out, and then it takes the agencies another ninety days just to handle the PDF files that they've been emailed. But I expect somewhere in the third quarter that a very interesting evolution of understanding of the American depository base will be created.

Getting back to what I talked about at the beginning, as you all are going out and thinking about "How does this impact me?" Guess what? Number one: American depository institutions are still the most reliable in the world. Your money is safe. You don't have anything to worry about today. The thing I worry about: I worry about the debt ceiling, making sure that legislation gets passed without any super stress, because the value of the U.S. dollar is far more important, the full faith and credit of the United States is far more important. If that gets hit, all of this gets much worse, much more quickly, and because of how much technology is in the system already—which can't be removed, no matter how much a bunch of eighty-year-olds might want it to be—it's still going to become an issue very quickly, like over a weekend.

Number two: As we think about where to go, we have to make philosophical decisions that are about openness, about transparency, about auditability, about regulatory clarity, about identity. These are all things that don't exist in the American legal system just yet. There's no right to privacy in the United States. There's no right to identity. I was deepfaked a few weeks ago, in a very odd way, to shill for a pretty terrible crypto project. It was one of the most amazing things I've ever gone through, and I won't talk about the active investigation, but it was absolutely fascinating to hear that I'm not the first person, and certainly not the first ex-federal official that this has been done to in order to shill for a crypto project. And guess what? It all tracks back to a single company that has made a whole lot of money on crypto that wants to keep as much ambiguity in the system as possible.

And so, by not solving these problems, we are fundamentally inviting not just our nation-state-level competitors to beat us, because we're not even at the table, but we're also inviting people who want to operate outside the

system, the criminal elements, the terrorist elements. We are giving them freedom to operate. And the last thing we need is a digital Taliban or a digital Al Qaeda who is attacking our financial system. The last thing we need is an emboldened Russian cyber-offensive campaign. The last thing we need is an emboldened North Korean cyber-offensive campaign that decides to start taking out banks and start really hitting the American dollar where it is. Because it won't just be the American dollar. They always test this stuff out on proxy nation-states in and around Europe and Asia. The last thing we need is to let them win.

And so, for all of you, I'm very sad I can't be there. I'm sorry this was a fairly intense discussion, but I wanted to cover a lot of ground and still keep it fresh. But with that, I will turn it back over to the room. Thank you all so much.