The Citi Institute Podcast

20 minute Special - Tokenization and the Shift to 24/7 Finance

Guests:

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Title . Tokenization and the Shift to 24/7 Finance

INTRO

From a rapidly evolving regulatory landscape to the growing potential of smart contracts, stablecoins, and the tokenization of real world assets. It's an exciting time for the world of digital assets for this special episode of the Citi Institute podcast we welcome Ryan Rugg.

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Ryan is the head of digital assets at our world leading transaction bank. We are going to be talking about all these timely topics.

Wrap up Quote1 - Ryan Rugg

00:06:30:08 - 00:06:57:23

We're seeing that clients want money to move at the speed of data does on the internet. So to have kind of that 'always on access' and global nature. So you know, when you think of Citi and our large footprint across the globe, you know, clients really see the benefit of having this instantaneous movement of money and liquidity, not having to buffer and forecast, for the future payments that are needed.

RONIT

Let's get into why we are having this conversation now. Ryan, we've spoken about digital assets for many years. While we were working together with Citi. But we're in a particularly interesting time when it comes to institutional digital asset adoption, because the regulatory landscape in the US in particular, but also in the rest of the world, is perhaps getting clearer.

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What's your take on that?

Ryan Rugg

Yeah, it is a very dynamic regulatory environment right now. We have seen this new administration start to develop its subcommittees. We saw a summit recently. We seen a crypto czar with Sachs coming in. They're really taking a much more progressive look at this space. And you know, we are closely monitoring but really focused on the safety and soundness as this kind of enters into the financial services.

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So, you know, we're frequently in dialog with the regulators as well as legislators to talk about this space and making sure that, you know, as these new technologies enter into financial services for enhancement, that we have a seat at the table. So I think, you know, things continually happen in this space, very dynamic, exciting. I think that, you know, 2025 will definitely be a much broader landscape than we've seen in the past.

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RONIT
So 2025 will be a really interesting year for institutional digital asset adoption. And we've already in Q1 seen a couple of interesting comments come out that helps signpost towards a more clear outlook from the US. So you had the Trump administration's executive order earlier in the year, and just a few days ago, we had an interpretive letter from one of our one of the banking industry's lead regulators, Yoshiki. Ryan,
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for the audience who doesn't follow this as closely as you do. Tell us a little bit about those to the EO and the interpretive letter.

Ryan Rugg
Yeah, absolutely. So for those that don't follow, kind of this regulation that closely. So what Ronit has explained is 1179 process. So any activity that a bank does in this space, they must, you know, coordinate with their regulators, as you see in this case, to make sure they get approval for this.
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So that has now been repealed as well as SAB 121 from a custody standpoint, which prevented large banks from being able to custody crypto assets that you've seen our counterparts at some of the other banks enter into this space. Because now that there's clarity. So one of the things that I think the ecosystem has to recognize is, you know, Citi and other banks aren't going to operate in the gray area.

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So if there's interpretive letters out there, if there's, you know, different issues, like we're not going to do until there's clear regulation that allows us to do it in a safe and sound way for our clients. So, you know, with the US intensifying their leadership around digital assets, we expect, you know, more of these changes to come or closely monitoring them, closely monitoring what it means for, you know, our business, our strategy, obviously continue to work closely with our regulators.
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Just because they're cool doesn't mean that from a framework governance risk reporting that's going to change. It's just a matter of actually filing those interpretive letters. But I think, you know, positive momentum in that direction about the changes that we're seeing, seeing that this administration is much more open to digital assets and having banks have a seat at the table, which I think is really important when we start thinking about the scalability of this technology in the future and making sure that the proper frameworks and governance and reporting and everything is put in us, you know, safe and sound way, because that's what we want to ensure for our clients.

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RONIT
And of course, what's happening in the US is part of a global trend. We've seen, in the EU, mica, rolled out, in locations like the UAE where I'm based. You had regulators like VR, digital assets, specific regulators set up Singapore's for many years, led the way in this. How do you see the global non US landscape of things getting a little bit clearer.

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Ryan Rugg
Like as you mentioned like with mica. Mica however you want to pronounce like out there, I would say that you've seen them leaning in a little bit. You know more in the past. Giving that clarity for people to kind of, banks and other large institutions to pave the way forward.

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That being said, every branch we launch with CTS, so, you know, right now relied with US, UK and Singapore, you know, working closely with the MAS in Singapore, working closely with the FCA as well as other regulators in the region, because, you know, as you start to scale, we think that having this clarity from our regulators is extremely important and partnering with them as we start to, you know, onboard clients.

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RONIT
Ryan, you snuck in a three letter acronym there when we weren't listening carefully. Let's double click on that. Tell us what Citi token services. Don't be bashful.

Ryan Rugg
Oh, thank you. So CTS stands for Citi Token Services, which is a new product we launched last September, which this is a statement that we started with was with our clients.
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They wanted, you know, multi board or multi bank always on liquidity and payment. So with that we started with as a three branches. I mentioned U.S, Singapore and UK and again targeting like the largest money hubs to be able to send money 24/7, 365. So if it's, you know, 5 p.m. in New York on Friday and it's 5 a.m. in Singapore and now you can send money, you used to have to have all these buffers of cash around the different regions around the different branches to be able to keep money for liquidity and payments, which is now added a huge amount of efficiency to our clients.
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We saw a client use it last month for, you know, Chinese New Year. You know, when you know Singapore, you know, branch was closed to be able to send money to pay for US equities and margin calls. So, you know, we started with a thesis statement for liquidity and payments, but it's really growing, to, you know, extrapolate multiple different use cases.
00:06:30:08 - 00:06:57:23
And I think that, you know, it's been we're seeing that clients want money to move at the speed of data does on the internet. So to have kind of that always on access and global nature. So you know, when you think of Citi and our large footprint across the globe, you know, clients really see the benefit of having this instantaneous movement of money and liquidity, not having to buffer and forecast, for the future payments that are needed.

00:06:58:01 - 00:07:23:17
RONIT
Today, what happens in I mean, obviously the traditional or existing rails, they move huge volumes, right? In our case, I think is it 4 trillion a day every night? So that means they move huge volumes. They're super robust, but they also move at human speed. They shut down at weekends. They shut down in the evening on Friday.

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What's blockchain or in this case CTS solving for? Is it simply it's giving us a second rail 24 over seven. What's it. How do you see this developing is obviously CTS is just been rolled out last year, but it's probably in a few years time. It'll probably lead to more. So tell us about what it solves. So yeah, it definitely solves, as you mentioned for the weekend.

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Ryan Rugg
And holidays and cut offs. But one of the unique attributes about a blockchain overall is the ability to have smart contracts. And like we all joke, it's neither smart nor contract. It's just a series of if this happens, then do that. So think about, you know, you're managing money and you know these three plus branches. If my account and you are drops below 100 million, send 50 million from Singapore.
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So automating that whole that whole process making it smart money. Right. So not just and we did a POC, a pilot last year with a ship in a canal where, you know, typically they have to have, you know, letters of credit or bank T's to be able to pass through, you know, and only open during traditional banking hours.
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This case, we took our tokenized deposits, pre funded a smart contract if the ship received fuel automatic and release said so. You know trade is another very paper written business that you know looking to kind of innovate within. But the whole programmability, the smart contracts, the being able to automate, digitize this process, taking the, you know, operation, the resource, you know, being able to lower expenses in the future is really where we're looking to grow.
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So I would say CTS is just scratching the service, surface by enabling our clients kind of this always on, but being able to add the programmability of it I think is a huge, huge benefit to our clients for the future.

RONIT
And let's double click a little bit on programmability. I think most of us understand what that means, but let's assume someone on this doesn't listen to this podcast doesn't really fully get what we mean, particularly the financial services.
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Give us a 101 programmability one on one.

Ryan Rugg
So programmability, like as I said, like a smart contract is neither smart nor contract. It is just code that says if something happens then do X. So you can do it for, you know, as the example I gave in regards to sending money from branch X to branch Y, you can do it too if this, you know, you know, policy comes in and these conditions are met, be able to send it out.
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So really automating the process versus having to have like the checks and balances of humans in it, to be able to actually use code as, you know, the ability to be able to send money. So making money smart is what we call because then it actually becomes completely digitized. So, you know, right now with CTS, you know, it is 24 seven, but do you do our large corporates want to have people, you know, if the money was received at midnight, do they want to have someone there to actually process it?
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I mean it gets deposit the bank account, but usually money is deposited for, you know, the payments where if the money comes in from New York, you know, send out to pay taxes, pay, you know, employee salaries, whatever the case is, if this happens then do that. So really again, just automating these processes that have been typically very you know, human intense, in the past,

RONIT
and so far we've talked a lot about payments because I guess that's, that's your wheelhouse.
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That's the bank here in. But these, topics such as smart contracts, or tokenization more broadly, they're obviously applicable across all the financial services and capital markets in, in payments and what take a sort of broad, expansive view here, Ryan, what parts of financial services do you think tokenization is really going to change the next 5 to 10 years?
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Particularly if you get some more regulatory clarity around the world.

Ryan Rugg
Yeah. Within the service business that I, I sit in, we are focused on a very broad range of capabilities, including, you know, efficient issuance of digital bonds, custody settlement, digital assets, tokenization, you know, what is asset RWA, real world assets. So really being able to move, you know, instantaneous movement of assets as well as liquidity and payments.
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So we talk about the holy grail being atomic settlement or DVP delivery versus payment when you're able to have money and assets settle instantaneously and you don't have, you know, you don't need messaging for, you know, payments and look, money and you don't need, you know, kind of intermediaries to settle assets such as bonds or equities or money markets.
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You've seen a large amount of growth, I would say focus in this area over the last year. You have, you know, large asset managers, you know, like Blackrock and Fidelity and Franklin talking about this especially about, you know, for money markets, for liquidity purposes, to really as a growth area and this and I think that, you know, I joke a lot of my experience in, in the last ten plus years is originally, you know, I was focused on, you know, tokenizing everything from mortgages, IP, bonds, equity, everything under the sun.
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But we always had to go back to traditional rails to settle. So, you know, when I joined Citi a little over two and a half years ago, focused on that cash piece of it that, you know, Fiat leg of it, but also keeping an eye on, like what's going on within the RWA, the real world assets, what is starting to be tokenized and what can we see?
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You know, these efficiencies, you know, from a digitization happening across the broader ecosystem.

RONIT
Real world assets RWA that's another, term that's maybe a sort of whatever the blockchain equivalent of inside Beltway is. We are in the blockchain world, real world assets. So otherwise, what are we talking about? If we talk about financial assets, right, that go on change, the existing kind of existing financial assets that are, you know, putting them on chain, aka tokenizing them and what just theoretically, why would we want to do it?
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Is it efficiency? Is it access? Is it tapping a new client base? What's the… why take something that exists in the world today in existing databases and legal systems. And what put that on the blockchain rather than just going completely digitally native starting with digitally native like Bitcoin or Eath and just focusing on crypto native products.
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Why? Why take existing financial assets and put them on chain? Seems very complicated and duplicative and hard to do. No?

Ryan Rugg
Yeah. You know, it's interesting you brought that up. And I guess we probably should have started the conversation like breaking down the different types of digital assets because it's such a broad word. Right. And as you said, it includes everything from real world assets like stocks and equities and bonds, as well as real estate to crypto to stablecoins to, you know, what we're talking about with CTS around tokenized deposits.
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It's a very broad ecosystem. And like so, you know, tokenized deposits were developed to be able to instantaneous movement of payment and liquidity, you know, across these branches have an always on infrastructure. Then you think about like money markets, tokenization of funds. Really I would say people are which is tokenizing that for liquidity purposes and collateral purposes. What for the most part, I've seen we touched upon tokenization of trade using smart contracts with the Canal and Mark and like being able to, you know, automate that process.
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So taking very paper written businesses and being able to create what we said, smart contracts, if this happens and then do that, then you move on to asset backed, which you're kind of alluding to, you know, in regards to, you know, there's repos, there's bonds, there's equities. And being able to automate that process. And again all the operate lowering operational adding efficiencies, digitizing it.
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Even though for your part for the most part it's pretty efficient. But it will give more access to others and more transparency, across the entire lifecycle of these assets. And then moving further down the curve is like stablecoins and crypto, which I would say are, you know, newer of the assets in the last plus, you know, ten plus years where, you know, stablecoins were created because of the volatility in crypto.
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So I remember when I first got in this space in 2015, you know, people were trying to use Bitcoin for like payments. While the volatility in it right is like one day it was worth, you know a thousand. Next day it was worth like next to nothing. It wasn't a good, you know transfer of value for payments. So then you saw the advent of stablecoins which stablecoins I think 97% of them are linked to, you know, US dollar with some smaller pieces linked to crypto and algorithm.
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But again, one for one reserve typically very stable and people usually use it most of flows I've seen of late is still from people going from crypto into stablecoin. So to kind of take out that vol that you see in crypto where crypto, you know, we've seen large amount of growth in the last couple of years in the space and you're starting to see institutions kind of enter it, but it's really being used for a store of value.
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So I know that was a very long answer for like, you know, RWA, but I wanted to break down a little bit of the differences in digital assets because there's so many different, you know, flavors and types. It's used for different reasons. And some of them are for efficiency plays, some of them for a store of value, some of them are for, you know, being able to have decentralize, you know, movement of money without a third party involved.
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So kind of the reasons and the use cases that people are using them for differ across the, ecosystem.

RONIT
Maybe to wrap up our conversation, we could double click on the crypto, the crypto point. Obviously, crypto has been something that large regulated banks in the US haven't been able to engage in. For lots of regulatory reasons. So call byside or asset management, financial firms in the US have run ahead in some ways.
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Done crypto, ETF products and related for their clients. How do you see crypto evolving in the next few years? How are big banks going to get involved? Do you see us getting and this is obviously a higher risk part of the business than tokenizing, say, dollars, like CTS does moving dollars on chain? How do you see crypto evolving?
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What's going to be the role for large American banks in that domain?

Ryan Rugg
I think it really depends on legislation. You know, there's, two bills out there right now. We start to see the first one, the stable and the genius bill, to hopefully come out the next couple of months. So I think once we get clarity on that, it will help large enterprises, not just, you know, banks figure out how they're going to participate.
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You know, as I mentioned earlier, we don't participate like in the if it's grey, there's not clear regulation out there. We're just not going to participate. And that's why, you know, focused on city token service first. And like being able to kind of automate that whole fiat side of it to have it 24/7, 365, you know, is definitely needed in all digital asset markets.
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But really building that solution out on a private permissioned blockchain, you know, on a private, permissioned version of Ethereum, because, you know, from a safety soundness and scalability. That's where, you know, from an organization standpoint, we're comfortable as more legislation comes out and more regulatory clarity, it'll help define how, you know, big banks participate in this space. Because there's definitely demand across the board.
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I would say, you know, as you mentioned, like the exponential growth and like that we saw with the ETF market once the SCC approved it. So I expect that demand to continue as more large enterprises enter this space.

RONIT
Definitely going to be an interesting year ahead for tokenization for digital assets and crypto. The market price action has obviously been quite something in the last few months.
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But this technology, in a more broad sense, is going to start finding a way into the regulated IT industry and it will be a fascinating journey to watch. Ron, thanks so much for joining us to share your insights and thoughts.

Ryan Rugg
Thanks so much for having me. I really appreciate it.

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