

Hello and welcome to a new episode of BFRR, our Bitcoin, fiat and rock and roll podcast. Here we explore the intersection of traditional finance, digital money and digital assets and help you understand how both digital money and assets will evolve in the future. I'm Coast Jonas Gruß and today I'm joined by our co-host Manuel Kleinigen. Hi Manuel. Hello. And today we do have

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a very special episode with you with two very, very great guests, think, long awaited. So I'm really glad that we could make this reality now. First is Manfred Richels. I'm sure most of our listeners know Manfred. I think one of the most knowledgeable people in payments that at least I do know. Manfred is currently head of corporate payments at the German Association of Saving Banks or DSGV. Before that, amongst others, more than 30 years with union credit in various roles.

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amongst other managing director for global transaction banking and also studied in Bayreuth a while back. So Manfred, I'm sure I forgot something, free to add, but first of all, welcome to the show. Thank you, Jonas. And pleasure being here. Yes. Pleasure is our side. And then secondly, we have today Tim Bailey with us and Tim is chief commercial officer at Red Day Technology, also leading here the global

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commercial growth of the Universal Digital Payment Network or also UDPN. I think also here for our listener, our audience, definitely a company and probably also Tim, a person that they know. And I think Tim also very impressive about you, like the background you had in lots of different roles, for example, at Intel, always related to product marketing and sales. So I'm glad you also could make the podcast and I'm sure we will have a great discussion today with you as well.

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Great to be here. Thank you, Jonas and Manuel for having me. Thanks for joining. So what are we discussing today? Actually, we want to do an episode on commercial bank money tokens, CBMTs, and go very deep into the topic. I mean, the people listening to at least some of our episodes. We talked about the CBMTs for so long, for years in the news episode of Manu covered the update, so much stuff happening in the space.

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But what we really did not do until this point is to go very, very systematically about CBMT. So really start from scratch. What is it? What is it about? Why is it important? What's happening globally? Which use cases will it address? And how does it basically fit into all of these, you know, let's say new facets of digital money coming up, like also retail CBDC, wholesale CBDC, Pontus, Appia, stable coins, crypto, Swift, Agura, you name it. So I think there is really, really a lot.

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we can discuss in around this topic. And that's definitely what we want to do today. So all things CBMTs and I'm really glad we can make this. So let's really, really start with the very basic and then maybe first question then to you Manfred, like what actually is a commercial bank money token or a CBMT? Thank you. And also thank you for the number of passwords you already mentioned. It's not always easy to understand the differences between them. So a CBMT and meaning a commercial bank.

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money token is nothing else than commercial bank money on DLT, which means that we are still talking about commercial bank money, nothing else. So it's completely coming from a regulated commercial bank. It's a liability of a regulated commercial bank, a customer's claim against its bank. And the token on the DLT constitutes this kind of claim, which also means

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that DOT is the primary record and the real source of truth. And the bank is liable for that record finally. It's as every conventional commercial bank money, it's completely redeemable into central bank money at any time. So that's the promise from the commercial bank to always be able.

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to redeem it and to exchange it into central bank money at any time, which also means it can be interest bearing like commercial bank money today. And it's also from the legal framework. It's exactly the same as commercial bank money. It's just a new technical form we are using and this new technically technical form.

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meets the requirements from various customers to be able to use it in a tokenized economy. So what this basically means, if I might try to put this into very simple words, is basically we have now this, I mean, let's say DLT or tokenized economy appearing where you need some kinds of money on our assets on the blockchain on chain where we do have crypto assets of obviously which may

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be able to serve some use cases, but obviously also volatile. Then you do have stable coins as another alternative. And then you basically do have, as you said, the commercial money we have today on a DLT rail. basically with all its pros and cons, so pros in a sense of you can redeem it always one to one, you can pay interest rate and have this basically available for DLT use cases. Is this kind of a fair summary, Manfred? Yes, absolutely.

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Maybe be more clear about the use cases we are looking for, because I think it's important to understand the history where we are coming from. So the origin of our initiative of the commercial bank money token initiative was coming from corporate customers who raised the need to have commercial bank money on chain because they are more and more digitizing their business processes.

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They're using DLT for that reason. They are more and more looking for automizing their processes. And they're looking for solution in which they can combine business processes and money in one combined process. So to avoid that they are confronted with restrictions.

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coming from their business processes and their financial value chains. And this is absolutely important to understand that we are coming from a customer need and we had some corporates asking specifically for money on chain and they were asking for commercial bank money on chain and nothing else to support their business processes, which are more and more in a digital or tokenized environment.

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And Manfred, if I may ask, there's lots of talking in the industry around tokenized deposits. Is that simply a synonym or is that a different way to call it? Or would you see any differences in other tokenized deposit projects and platforms? Because ultimately it's also a liability of a commercial bank. Yeah, let's say that that's a bit more the story for nerds, I would say.

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Because there's a difference between tokenization of deposits, which means the deposit itself, it's somehow stored and blocked for and used for tokenization as the underlying asset. And the deposit token is the real claim and liability on the DLT without

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having a deposit on an account blocked as the underlying asset because the truth is already on DLT. And that's maybe the difference. as I it's a bit more discussion from a nerdy perspective. At the end, both is a liability against the bank. the way how to implement it is a bit different.

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What we are aiming for is really to have the claim and the truth directly on DLT and to use the bank as liability and not a specific escrow deposit. Got it. And I think what is also quite special about the CBMT project is that you always have this multi-bank solution in mind, right? Because what we see so far, I think in the industry is lots of different banks providing their liabilities in tokenized form of their own blockchain.

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Here you said already it's more on the client's infrastructure and given that there several banks participating in the CPMT project, it's all about multi-bank capability, To ultimately enable payments between different banks, even in a tokenized version. Absolutely. I mean, to have deposits in tokenized form as one bank is nice, but does not create an ecosystem.

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The ecosystem specifically for corporates is built on a multi-bank approach, which means that finally several banks issue deposit tokens and those deposit tokens are fundable as today's commercial bank money. And this is because the assumption from a customer perspective is that one euro or one dollar is one dollar coming from

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whatever bank is behind and this \$1 or 1 euro is completely the same from each bank issued in terms of liability. And this is the important part, meaning whenever you transfer money from one bank to another bank, you are transferring this liability from one bank to another one, and you're transferring the same value behind.

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But it's always again, the promise of the bank to redeem it and to exchange it into central bank money at any time. However, you have a bank risk covered by the bank's balance sheet behind it, which specifically for corporate is important to understand and to manage. the real value of commercial bank money comes from a multi-bank approach.

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which also means the network of banks is important to make finally payments happen as in today's world. Yeah. So also today, payments are happening between banks in the common understanding that whatever is sent is created or is treated as a value from every bank in the same way. And this is

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the important understanding, also coming from a legal perspective that finally a deposit is clearly defined by a legal framework and it's always the same in each and every country. payment finality is well defined. whenever really the money is final at your account is clearly defined. And what we are doing is using this

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different technology, but to rebuild exactly the same mechanism as we have it today with commercial bank money. So you also mentioned Manfred, which I found very interesting that obviously one problem that commercial bank money tokens trying to solve is basically both digitizing business processes and money, like also alongside like similar infrastructure to really

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you know, providing value at for in particular corporate clients. What I'm now wondering is that obviously in a world today, we do have some, there is money on chain already available, right? So if we think about stable coins in particular, US dollar stable coins, have hundreds of billions in terms of volume. Like how do CBMTs fit in there? you know, why or put it very, very strictly and a little bit provocative by bother about CBMTs if we have stable coins already out there.

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Before coming to the stablecoin question, let me explain the corporate's needs again. I said, the corporates want to digitize their business processes. They are looking for DLT as a solution. They are looking for an integrated financial flow into their business processes, which means that they finally, they want to cancel their

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accounting and reconciliation processes to the maximum possible. That's one of the important aspects. The other important aspect is they still want to have this as the same money as they are using today, which means they do not, they're not looking for a different kind of money, which also needs basically to be treated differently in terms of risk management, maybe accounting.

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maybe controlling, reporting, and whatsoever are the obligations of corporate customers. So they want to have exactly the same treatment of money. They want to have the same compliance of money. So all the wonderful checks banks are responsible for in terms of AML, pay wise, CFT, and whatsoever is something which are beneficial for corporate customers.

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for which they are looking for also in the tokenized economy. And this means that finally, when talking about CBNT, this is something which is called a solution for corporates, specifically for the corporate business process integration use cases, as well as corporate treasury use cases. This does not mean that CBNT is solving

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every issue which might be out there and now coming also to the stable coin situation. think stable coins are basically something which are built for other use cases than the ones mentioned before, which means that stable coins are existing not only currently as a cross as a counter value to to cryptos, but also

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addressing specific needs in cross border payment use cases. this is something which, where finally there might be in future competition of the, of commercial bank money and stable coins. But I think that stable coins have a specific role in, in, in that cross border part in a part where we are talking about

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commissionless blockchains, are talking about so completely open frameworks and where maybe also other types of risks are acceptable than the ones which are being addressed with commercial bank running. That makes a lot of sense and I think that's really an interesting point that you also hear the demand from corporates that they want like exactly the same form of money because when you said that I was initially in my head thinking, well,

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You know, like would they really care in terms of if this is like e-money, if stable coins or commercial bank money. But I think the second part you made was very important, namely that they want the same risk checks, fraud checks, compliance measures. So they don't want to open like all these boxes again. So I think that's indeed a very interesting, like

advantage of CBMTs. And I guess Manfred, because you mentioned this in the beginning as well, the interest rate is also an advantage here, right? Because we do know that from the Mika.

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stable coins or e-money is basically not allowed to pay out interest, which obviously for the clients is, know, monetarily speaking, not as attractive as if you would get an interest rate on something. I mean, the legal framework for stable coins is still, I would say, in early stage. Yeah. So we have a regulation in Europe. We have more or less regulation in the US, maybe also in some other countries, but there is no

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clear and global understanding what a stablecoin exactly is. There are various forms of stablecoins out there at the moment. Not all of them can be called regulated under whatever law. And we also see a lot of experiments and gaining experience with stablecoins. So it's a market which I wouldn't call mature at the moment. It's something which is under development.

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We need to see what will be finally really a stable coin. And this is also the assessment every customer has to make. So what is exactly the legal background of each stable coin? What are the redemption requirements? And what does it mean to do this on an off-ramping? And what exactly is it built for? And this is something with

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which requires an assessment from every customer, specifically from a corporate customer. And whenever you want to really use it for large volumes, you need to see what is behind. I'm always saying the stable coin is as good as its worst day at redemption. I think this is maybe also something which can be used here.

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While a CBMT is very clearly regulated and it's very clear what it is about, it's well known, it's quite mature, and we are just using a new underlying technology. But the legal framework, the treatment, the rails are very clear to everyone. Everyone knows how to deal with it. And I think this is currently maybe an advantage. But as I said before,

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There are specific use cases for stable coins and I'm very sure that we see a coexistence of both in future as well as also tokenized central bank money. think this is also important to mention that we see a coexistence of new form of money and all of them have a solid reasoning why they are there and why they are needed.

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Okay, so basically saying it's a coexistence, both have a reason to be here, but for different use cases because they have different features, different strengths and weaknesses. Manfred, when we go a little bit deeper into the use cases, because you said the CBMTs, is for corporates, for corporate treasury, for corporate business automation, et cetera. Can we make this a little bit more tangible and can discuss a little bit more like exemplary use cases that maybe also you with the CBMT initiative do currently address or?

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which generally in your perspectives are out there for CBMTs that are on the promising side of things. Absolutely. And I think we have a couple of use cases. I will mention one and leave the floor to Tim to tell you about other ones as well. One is on which we did a piloting between two corporates. One has created, let's say, an infrastructure.

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which it's a chemical corporate which produces water but in a specific quality, which means that the quality is checked at any time. And whenever the quality of this water is out of whatever parameter, then some chemical is added to get back to this water quality.

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in this expected water quality. This is something which is basically valuable, specifically for the agricultural industry. What is important here is that another corporate, so the one I was talking about is Avonik, one of the largest chemical industries around the world. The other one is Siemens, and Siemens is creating

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the sensors and also the whole electric and the management of this machine. What they agreed on is that the sensor data is stored on blockchain. What we have done is to use this data to create a payment out of this data from Ibonic to Siemens for the use of those sensors, which means that at any time the sensors are used.

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also a payment flow is created from one corporate to the other one as integrated part of this flow. So it's a pay-per-use concept. And what we have done is to use CBMT for this kind of pay-per-use concept. now, Tim, maybe you can tell us a bit about other. Thanks, Manfred. So part of our role as a technical service provider to

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the CBMT project was we built what we call the CBMT sandbox. And sometimes sandboxes are conceptual frameworks. In the case of CBMT, the sandbox is an actual technical implementation, non-production, but production ready. And every bank that's part of CBMT has a control panel to connect to the CBMT sandbox.

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And Monford mentioned the importance of corporates or enterprises participating in the project. And in the sandbox environment, the banks can deploy what we call an enterprise portal to the enterprises that are participating in the CVMT project so that someone like a Siemens or Iwonic or Infineon can actually connect

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via that enterprise portal and test how they would make payments to other businesses, between two different banks or just within one bank. So we have enterprises that are now testing that capability in the sandbox. And one of the use cases that we're building right now is a agentic B2B payments use case.

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And was, Jonas, was listening to your episode a few weeks ago with Sonja from the IMF talking about agentic payments. And one of the topics that she brought up was accountability around agents that are in payment scenarios. And that's exactly what we're doing in this use case is demonstrating how two enterprises, agents in two different enterprises would interact with each other.

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And the focus is really on governance and risk control, right? So imagine a scenario where you have, you know, Mercedes-Benz, who's a participant in CBMT, and Siemens, who's also a participant. Mercedes-Benz is making a purchase from Siemens through their treasury management or ERP systems. They have an agent. And in this use case, the agent is actually linked to an identity that's issued by the banks that are participating.

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so that if there's some fraudulent transaction or AML violation, that the agent is cryptographically linked back to a real human being or an entity, which goes to the kind of

problem statement that Sonia was bringing up a few weeks ago, which is how do you define and then demonstrate accountability for agents? So that's actually a use case.

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that we're building right now and we'll publish a paper on this through the CBMT group later in September. Yeah, I think that's thanks for providing and sharing your insights here, Tim and Manfred. I think it's very interesting because the use cases that you have in mind are pretty broad use cases and payments are obviously is one part of it, but it's not just about payment, which I think is really the right approach in terms of how to solve that because I was a little bit expecting more like, look, this exact payment use cases and I don't know.

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Treasury moving money back in there and probably that's also use case but I like that you were more thinking from a broader perspective for example on look there is you know, this let's say IOT or general paper use use case which you can apply in all kind of every industry and here you just have CBMT as the money like Corporate Trust namely commercial bank money on chain and similar for for agentic So I think that was very good to understand and to see this and you also said

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Manfred in the beginning that this is something that is more and more demanded by clients. Obviously, agentic is a very hot topic as well. You also see then with the initiative you are having that these are use cases that are now more and more demanded because I'm just asking. I remember, I think, pay-per-use with Philipp. There was a paper we have written, I think it was four or five years ago. So I'm very glad to see, finally, interest coming up after so many years and just want to make sure that I...

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understood this correctly and this indeed the case. I mean, the corporate, they also are looking into various forms of how to improve their fine financial statements and how to improve their liquidity. And specifically, I had a longer discussion with some corporates specifically on that topic and they said, okay, there are...

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specific use cases which are absolutely good for paper use. There are other ones which are not really good for paper use. whenever, for example, we are talking about large infrastructures which are built then from the producer side, it's not beneficial to have them as a paper use concept.

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for, for example, for software, it's the best way of, of earning money. And therefore I think it's really depending on the asset you're creating. So on the real product you're creating, and there was also a longer learning curve from the corporate side, what to do and what not to do. And in five years, seven years ago, I had long discussions on pay per use concepts.

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with corporates and everyone was always looking on for paper use concepts on large infrastructures, large investments they have to do and how to create something around that. Then they understood that the problem is that the product is still on the producers balance sheet. And this is exactly what they want, but they do not want to have. So now we are looking for.

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smaller goods, smaller products, smaller investments, which need to be taken by the producer and to create pay-per-use concepts around those ones rather than looking for the

big machines anymore. Manfred, if you talk also industrial use cases and corporate use cases with regards to, for example, as you say, pay-per-use,

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Does that include then also processes being orchestrated by other smart contracts, for example, where you could argue these smart contracts can then directly interact with the commercial bank money tokens, smart contracts that are provided on the network, or is it more still a payments focused value proposition, money focused value proposition that can then also interact with other systems that might have the logic, for example, with the water use case that you

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talked about. think the water use case is exactly the example how to do it really in a most efficient way. So to have on one hand the business process and its data and its production logic use in smart contracts and in the same way

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using those smart contracts also for the payment processes. can talk a little maybe a little bit elaborate a little bit more on the enterprise smart contracts. So one of the things that was announced a couple of weeks ago was the first non-German bank joining CBMT, which is ABN Amro from the Netherlands. And then this week BNP Paribas was announced joining. So that's one.

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kind of new development is CBMT is expanding beyond just, it's obviously initially led by the group of German banks, but it's expanding beyond German banks. And I know that there will be more joining over the next few weeks. But one of the key reasons that AB and Umro wanted to join is because they have an active engagement with some of their corporate clients that want to test

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programmable money use cases. So, AB and OMRO providing smart contract capabilities to their corporates to do programmable payments use cases like DVP, whether certain conditions or certain deliveries are met, and then that automatically triggers payments between the banks and the corporates. that's, again, one of the most important things that Manfred mentioned early on was

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about CBMT is that it's very much customer driven, like corporate client driven. It's not just banks coming up with blockchain for blockchain sake. It's solving real business problems. And that's one of the best things that the ABN AMRO team is bringing is a client engagement on a smart contract development front.

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Yeah. thanks for going a little bit deeper on the CBMT initiative because that would have exactly been my next question because this seemed for my side to be an initiative that primarily was driven a couple of years back with the concept from German banks. Now, I mean, this is basically changing on two fronts. it's expanding across Germany. What you just said, Tim, I think it's a great achievement with BNB Paribas and also ABN to basically show very,

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one of the leading European banks, let's say, join. So I think that's the first piece. And the second piece is also like, it's now way going ahead from the concept phase into practice, right? And maybe you two could also talk us a little bit through, because I think you recently did like a CBMT pilot, or actually this was real money moved there. Maybe you can explain a little bit further where the CBMT initiative also currently stands, because my understanding is when I talk about

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digital money, it's often perceived at least that CBMTs are still so theoretical and not practical in terms of not using in practice and there. So it would be great to understand where you stand here and also what was basically tested or has been done because I think the recent months were really impressive in terms of.

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progress from the CBMT initiative. me pass it back to Manfred for that because the real money pilot was actually the Yvonnek use case that he talked about. he can talk a bit more about the roadmap and conversations with the regulators. So, Manfred, do you want to take that one? Absolutely. So, I've already explained what we have put into production. This is exactly this mortar use case.

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And this use case is for us, it's so important because it really implemented the whole life cycle, which is needed for a tokenized commercial bank money use case and not all and really solving a concrete business problem. And this is something we can also use as a role model now for other use cases.

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Why is it so important? Because we also had a lot of discussions with the regulators on whether what we are doing is really a deposit or not. And we finally have received the confirmation that CBMT is really treated as a deposit under German law, which is for us super important. But it was also, let's say, something we didn't expect.

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As we also understood that the deposit definition is different in each and every country. And this is also a challenge, which also means that now other countries need to make an assessment. What exactly is required to be treated as a deposit under specific local law? We have a quite good understanding in the meanwhile with some countries.

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but still not all of them. So we have a clear definition coming from the UK. We also have some other countries like France who are on the way to provide confirmation that what we are doing is really commercial bank money. But this is exactly at the moment, one of the challenges we are looking for. So the challenge is no more the technology. We have solved all the technical problems.

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And now we are talking about setting the rules, the standards, and also having a clear understanding about the legal background that this is confirmed by the regulators. And this is what we are working on. On one hand, on the other side, as you rightly said before, we need a network of banks to make payments happen. to broaden the network of banks is something which is for us of utmost importance.

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We are in discussion with several ones and we can already announce that we will have additional ones joining quite soon. And I think for every bank, it's now the right time to make up its mind and to join an initiative on tokenized deposits because you need to be part of the tokenized ecosystem.

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in one way or the other. And at the moment, it's still the correct time to where you can still shape the future and you do not have to accept what has been built by others. So if you want to be part of shaping the future, if you want to design also the tokenized economy on new forms of money, then it's something you need to join now and to help designing it.

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And speaking of designing it, as we discussed also this designing this multi-bank approach, Manfred, can you guide us through how a transfer and ultimately the processing of these commercial bank money tokens actually look like? So you mentioned now that there is regulatory clarity of what is recorded on the blockchain actually constitutes a deposit or actually constitutes commercial bank money. But how does it actually now?

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look like when those deposits are transferred from one bank to the other. So let's use maybe a very, very simple case of you want to transfer 100 euros from one bank to another one. What exactly does happen? So we have some 100 euros as liability of bank A, which is stored in your wallet as a token.

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You want to transfer this token to another bank. What you're doing is to instantiate the smart contract, the transfer smart contract, which allows you to transfer these 100 euros to another bank. At the other bank, you cannot accept a liability of the previous bank, Softbank A, but you need to...

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do something around it because now you're changing the liability from bank A to bank B. How does it work? means that the bank B accepts the incoming value, but in the same logical second burns the token and means a new token, which is representing the liability of bank B. So the token is

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transfer, but at the receiving address, it's also a smart contract, which then checks this token and brings it and means a new token, which represents a liability of bank B. This is what happens on blockchain, which means that at that moment, you have transferred liability from bank A to bank B, you have transferred

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the money. And as said before, the money is the so whatever happens on DRT is the source of proof. So the money is at that moment available for the customer. What then needs to be to be done is to run a settlement process between the banks. And this is exactly what is also today. What is what is done between the banks is a settlement process.

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in central bank money. This settlement process is completely independent from the previous payment process of the two corporates. And this settlement process happens in the ways currently settlements are happening between banks, which means that for example, we have quite efficient settlement systems between banks in various jurisdictions like in Europe with Target2.

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We also have instant payments which can be used. there are various possibilities in future when we have also tokenized central bank money available. expectation is that settlement will happen in tokenized central bank money, synchronous with the commercial bank money transfer. but there is still a way to go. are desperately waiting for.

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the central bank's money to come up with such possibilities and to issue settle bank money in tokenized form, which can be used for settlement, but there is no way to go for it. There are some promising projects like, and now we're coming back to the buzzwords you mentioned in the beginning Jonas, have some projects like Pontus and Apia from the European Central Bank.

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There are international initiatives like Agora, which play a role here. So if I may summarize, Manfred, basically the tokenized version of the deposit is transferred to the beneficiary bank, with the beneficiary bank, and then hold that tokenized deposit. And on the back of that, then create their own tokenized deposit as a liability of the beneficiary bank. And then once the settlement takes place, then ultimately this

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liability that the beneficiary holds of the sending bank is then burned or is it burned before the settlement takes place as you described it already? It's burned before. It's burned before. So what is definitely, let's say for a logical second or maybe even more time is true that there is a risk.

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between the two banks which requires the settlement. So there is a settlement risk and the settlement risk needs to be clearly managed with using instant payments in Europe or even better using tokenized settlement bank money for settlement. This settlement risk would be more or less reduced to null. it. So it's ultimately

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using, you could maybe argue like a trigger into existing payment systems or settlement systems and central bank money, or then the future further integration with wholesale CBDC like Pontus, for example, could be used in Europe, right? Or eventually up here when they think about a more holistic integrated meta. That sounds a bit similar to how, for example, this Agora project works, right? Because I mean, ultimately it's all...

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representing deposits and settling deposits on blockchains that they need to be settled in central bank money. So is there a specific differentiator from your perspective how this CPMT project differs to Agora? At from my point of view, Agora tries to think the settlement process also with wholesale central bank debt recurrences, right? So with tokenized central bank reserves, you could argue and include several central banks in it.

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So if that was, if Agora was live, how would that differ to the CBMT project? Let's first talk about maybe the, what, is done by the European Central Bank and then coming back to your question about Agora. So the European Central Bank is currently, and this is going to be live already in September is currently creating a trigger.

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which allows for a settlement in bank money coming from a DLT. And this solution is called Pontus. In future and the future, unfortunately, is time wise not defined yet. In future, there will also be a possibility to use tokenized central bank money for direct settlement. This is called APIA from the European Central Bank. And I hope this future

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is sooner than later, but there's still a way to go. know that the European Central Bank needs to do some homework around that. Coming back to your question about the Agora project, it's an initiative run by the EIS, so the Bank for International Settlement and the International Bank, how is it called? International Bank Association, I think. And this initiative

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aims to have a possibility for settlement in, I think, central bank currencies and using also deposit tokens somehow as the instrument for commercial payments. But the main focus currently is on the settlement process and this is what we are looking for. So what we want to do is to solve a corporate need.

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and to integrate into business processes which are driven by the corporates. This initiative, which is driven by the central banks and also some commercial banks, is aiming to create a high efficient settlement process in various currencies. This would be super helpful as it reduces also the settlement risk for the commercial banks, also for commercial bank money tokens.

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but it does not solve the problem of how to integrate into the customer's business processes. And this is exactly what we are looking for with commercial bank money. So finally, my assumption is that there will be somehow in future merge of those initiatives or interoperability or whatever. Not sure yet, of course.

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all those initiatives are not in the status where you can really predict clearly how the future will look like. But as said, we are really, really desperately looking for a high efficient settlement process in tokenized central bank money.

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You mentioned now Manfred, the initiatives from the European Central Bank, again with Pontus Apia and also how this compares to Agora. What I would be very interested in and curious about is how do other countries look about CBMTs? So are there, or maybe other countries, also other currency areas, currency unions, et cetera? Because I think if I remember our news episodes correctly, there was a lot of momentum on CBMTs, for example, in South Korea.

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I'm sure you are way closer to the market. how do other countries and initiatives think about CBMTs? Tim, do you want to start? Yeah. Sure. I'm happy to take that. think what you see is two different tracks. One track is you have more and more banks doing their own tokenized deposit. It started with JP Morgan. You now see Citi, launched Citi Token Services a few years ago.

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BNY Mellon just announced something earlier this year. Wells Fargo has announced something. DBS in Singapore. And so you're seeing individual banks do that. That's one trend. And the banks that we talk to, kind of the more forward thinking banks in most countries where we do business, we hear the banks are in the kind of testing, pre-production phases of tokenized deposit. The second trend we're seeing is these kind of regional

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interoperability networks. CBMT is obviously one that started in Germany and is now expanding to include other European country banks and will soon go beyond that. And then you're seeing GBTD, which is a project in the UK involving half a dozen or so of the largest banks in the UK. It's also at a high level a tokenized deposit.

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network, interoperability network between banks. And then in June or July, I think a group of large banks in the US, including JP Morgan, Wells Fargo, Bank of America, announced a plan to build a intra-bank tokenized deposit network with an organization called The Clearing House to help build that with the target to launch it.

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or at least have an MVP sometime in the first half of 2027. So I think we're seeing that trend, and those are just the ones that are announced. I know from talking to a lot of banks and other jurisdictions, they're planning or at least thinking about something similar. So I think there's general momentum within the banking industry around tokenized deposit for a lot of the reasons that

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Manfred talked about at the beginning, which is it doesn't require any new regulation. It falls under existing banking regulation. Unlike stablecoin, which even though there are now tens of billions and even hundreds of billions of liquidity, that amount pales in comparison to the bank-to-bank settlement needs, which are in the trillions of dollars. And so I think that's another big advantage of tokenized deposit is that

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It's commercial bank money. It's things that people understand and it's you know, very large, you know Amounts of liquidity that can handle those types of payments So I think that there's a lot of news and a lot of headlines around stable coins, but I think that I think tokenized deposit will ultimately be the larger larger transaction boy just to compliment to Tim there is also an Initiative in the US coming from some smaller regional banks. I think more than a dub

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A dozen of them have built a network called Carry Network, which deals with tokenized deposits. And we also have just the announcement of some banks in Japan who want to bring faster payments on blockchain to use also them as instant payment system. And I think this could also be called somehow an initiative around tokenized deposits.

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So there are various such initiatives outside. They're also in Europe. We have some experiments in Spain. We have some in Italy, some announcements. So there is also a lot of interest, maybe also because of the hype around stable coins, where banks are rethinking their role. And therefore, I think there is a momentum around that type of money. And as I said before,

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banks need to make up their mind and to join an initiative on tokenized deposits to play a part in shaping the future. we will definitely keep this different aspects and different developments also on our lists, on our radar. So in our next news episodes, I'm sure there will be other CBNT news besides stablecoins, traditional crypto stuff as well, which we will...

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We'll definitely talk about a lot. mean, we've been talking about for years about CBMTs and I think it's really interesting Tim Manfred what you said on who is now in this game as well, right? So that we do see very, very interesting heavyweights there as well. And really, really curious to see how this further develops and what the future of money will then ultimately looks like in, I don't know, five, 10, 20 years. And this is maybe a good transition into the really last question for today. Time is running.

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And here I would like, Manfred, Tim, both of you to take your crystal balls out and help us to understand, like, let's say looking ahead five years of now, so we're just 2031. How do you expect both like CBMT stable coins, digital euro, maybe also Pontus up here? Like how does, will this all work together? How will it be used and where? I know this is a very, very big question. We could probably fill a separate episode about it, but.

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You know, maybe just from a rough perspective, how would you think this would look like to wrap things up for today? Let me start on this. So first of all, I don't expect that one form of digital money will win the race. Yeah. So I don't think there is somehow the question the winner takes it all or something like this. So I think there will be a coexistence of the various new types of money.

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and also payment rails. Please, we should not forget that there is also a lot of development currently ongoing with the traditional payment rails to optimize them to combine, for example, the instant payment systems and faster payment systems in other countries. Therefore, there's also development there, which we should not forget. In terms of money, yes, in 2033, maybe we will see a digital euro.

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which will be there for retail customers for daily payments, creating some kind of a European monetary 70 and being a compliment to cash. We will have stable coins, which are fit for global ecosystems based on public blockchains, serving crypto markets and

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may be also serving specific use cases where openers global reach are the ones which need to be served. And we will see tokenized deposits like CBMT, which are specifically strong in the integration into corporate business cases. So, pit for corporate treasury supply chains for industry automation. And also,

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Maybe also for cross border B2B in specific regions where this makes sense. But for sure, for programmable and let's say machine triggered payments. This would be my summary on what's happening out there. And don't forget that central bank money will play the major and important role to provide settlement instruments.

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for the banks, but not everything will be on blockchain. There's also the traditional way of payment which will be important and will remain being important. Yeah, I would echo Manfred's comment around CBDC, particularly wholesale CBDC. think Pontus and Appiah, as we talked about, will play an important complementary role with CBMT, primarily as a settlement instrument between commercial banks.

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I think that will be the more dominant use case versus retail CBDC, particularly in places like Europe where you have established and mature payment systems. I don't think there will be one network that will rule them all. I think we've talked about these different regional networks, one in UK, the couple in the US.

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the CBMT starting from Germany and expanding across Europe. I think there will be multiple networks, kind of regional networks, business and enterprise focused networks. That's the second thing. So I don't think there will be one network to rule them all. And then the third thing is I think in five years, you'll see much broader ecosystem participation. By that I mean, you know, people like SAP,

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People like Kyriba who provide treasury management systems will play an increasingly important role in the adoption of tokenized money. Because at the end of the day, know, businesses want to interact with money, want to interact with their financial institutions in the way that they do today through their ERP systems or through their treasury management systems. And in the conversations that we have with those types of players,

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They're moving very quickly to bring that in. And then the last thing I would say is back on agentic payments. Even six months ago when we were talking about business to business, agentic payments, half of the people that we would talk to would look at us like that was science fiction. Why would you ever want to do that? And even in six months, that number has gotten very, very small. I think people are really starting to understand the value

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and the benefits that agentic enterprise payments can bring, but at the same time needing to understand the governance and the risk controls around them. So I think that's another big thing that we'll see in five years. Very exciting time. then there's definitely, I mean, circle back, I mean, maybe not wait for five years, but I've still seen a couple of years how this all developed. So Manfred, Tim, thanks so much for joining the podcast. It was really a pleasure to go.

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deep with you on the topics of CBMTs. I think it was very insightful to learn the differentiation to stable coins, some advantages, also different use cases, how this can fit into Agentic, and also what the CBMT initiatives wants to achieve, what initiatives globally exist. So I think a really good run through this topic. And thanks again, Manfred, Tim, for coming and also Manuel for joining this episode. Thanks a lot. Thanks for all the insights. Thank you. It was really insightful.

58:22

And also, of course, dear listeners, thanks for listening to this podcast. You made it until the end. If you like this podcast, as always, please recommend us to your friends, your buddies, whoever you think is interested, it should be interested in the future of money. And this is basically what you can help us most with and stay tuned for another episode in just a week. So in this sense, have a great rest of your day and see you next time. Bye bye. Tschüss, bye.