

Unified ledgers_ opportunities and legal challenges

Tue, Jan 28, 2025 3:02PM 32:14

SPEAKERS

Speaker 2, Speaker 1, Speaker 3

Speaker 1 00:00

You're listening to the OMFIF podcast, the show that explores the latest insights and discussions on Global Finance, Economics and Policy. For people who love staying informed about the rapidly evolving landscape of the financial world. Join us as we break down complex topics, interview key thought leaders and provide essential insights to keep you informed about the evolving world of finance. Hello

Speaker 2 00:24

and welcome to the OMFIF podcast. My name is Lewis McClellan. I'm the editor of the digital monetary Institute here at OMFIF, and today I'm delighted to be joined by Natalie Lewis, partner and head of FinTech and financial market infrastructure and payments at Travis Smith. And we're going to be talking about the unified ledger projects that are making progress at the moment, and the promise that they have for reshaping our payments infrastructure. It's a topic that we've touched on before. It's quite an important topic in the payments world, but Natalie is going to help bring the legal dimensions of that to life, which is an aspect of it that we haven't really dived into so much before So Natalie, let's get started. As I mentioned, there's several of these unified ledger projects that are moving forward. At the moment, we've got project agora from from the Bank for International Settlements. We've got the regulated liability network in the UK, and yeah, as I mentioned, we've talked previously on this podcast about the business models and how they change operations for payments. But can you talk to us a little bit about the legal dimension? And well, let's start off talking about what the projects are trying to achieve, and if you feel like they've got the exciting potential that they're correct up to have

Speaker 3 01:37

great thank you so much, Lewis. And yeah, I'm delighted to be discussing these topics with you, I think, in a nutshell, yes, I'm very excited by both of those projects that you mentioned. But of course, there's quite a lot to unpack here, so do bear with me as I take you through kind of what they're trying to achieve and what they are. So if we start with the rln, so that's the regulated liability network. So that's an industry initiative led by UK finance and some of its members, and it's looking at using new technology to innovate in the area of interbank payments and potentially also in the future more widely. They describe it actually as a platform

for innovation. But in essence, the way I look at it is that it could be a new, next generation financial market infrastructure. And specifically, of course, you mentioned the concept of unified ledgers, they are actually looking at using distributed ledger technology to operate a shared ledger which will record, which will transfer, which will settle regulated liabilities of central banks, commercial banks, and also potentially regulated non banks. And I think that mission statement of theirs actually is quite interesting. For example, would this unified ledger concept involve central banks and other FMIS actually needing to outsource their own ledgers to the rln for it to work, and what policy considerations might that trigger? And also, if the rln ends up connecting or combining the operation of various different FM eyes, might it then create a single point of failure? And so all of these questions actually are still out in the open. I think where the rln is at the moment is that they've just conducted their experimentation phase to understand some of the core functionality, but really we're still in the process of just waiting and seeing, seeing now what happens and where the RL and project might mature too. We could, if you'd like, unpack a bit of the specific functionality that I think could be particularly exciting if we've got time. Louis,

S

Speaker 2 03:52

yeah, let's, let's do that. We'll come to agora in a minute, but let's stick on the RLM, just know which? Okay, just for background, for for listeners, this is for domestic payments in the UK. That's right.

S

Speaker 3 04:07

Yes, that's correct. And actually, as we'll possibly come to later, that's one of the core differences between the rln and agora, in that it's the rln that, at least for the moment, is focusing on domestic use cases. So I'll just pick up just two points of functionality that I think could be particularly exciting. And obviously we're now on the podcast for the digital money Institute. So we ought to start, I think, with digital money. So the rln experimentation phase looked at building what they've called a tokenization platform so that would facilitate banks issuing tokenized deposits, so forms of commercial bank money simply represented by a token. But in addition, it's also meant to support the use of both retail and wholesale CBDCs, which are, of course, a form of central bank money. So in essence, i. Think the core difference that the rln is going to bring is that whereas our existing UK payment systems rely solely on settlement and central bank money across reserves accounts held at the Bank of England, so kind of the traditional settlement model, the RLM would actually supplement that by facilitating transactions using both tokenized deposits and also CBDCs. So I think that's the really interesting use case for digital money. And of course, just yesterday, I confess I've not digested it yet, Lewis, but just yesterday, the Bank of England put out their kind of next paper on on what's going to happen with digital money this year. So there is a lot of progress, at least on the cbdc side with the Bank of England that we can expect this year. And then I think possibly the second thing to mention on functionality of the rln is the API and orchestration layer that they're looking at building. Now, that might all sound a bit tech jargon, but essentially, I think it could give banks and payments firms completely new types of functionality. We've all heard about the promise of programmable payments. So for example, the ability to build into the payment system itself, conditionality of payments, and that could be revolutionary for transactions. And in particular, there's been lots of talk about its potential use in house purchases, for example. But I'm sure there'll be many other use cases that emerge as well.

S

Speaker 2 06:27

Yeah, really interesting, indeed. You mentioned the use of CDC and tokenized deposits. I guess it's we already have, you know, central bank reserves for interbank settlement. But this is about having, you know, a single platform, a single system that contains both the central bank reserves in the form of wholesale cbdc and tokenized bank deposits, which I guess is the sort of new element, the new a new form factor for those is that, is that fair?

S

Speaker 3 06:58

Yeah, absolutely. It's the integration of those different types of money on one platform, I think, which will be new. And that's obviously what makes them the unified ledger, because it's bringing lots of different types together.

S

Speaker 2 07:12

And then, as you say, that new bringing together on that new platform opens up a lot of potential new functionalities, which the the rln report, which came out last year, towards the end of the year, did explore some of the, some of the possibilities. There some, some very exciting ideas. Can you talk a little bit about the the legal challenges that the rln might have to face up to in the UK in some ways? You know, it's, it's, it's payments, it's, an existing activity, so it's not obvious that there are new, sort of unique legal situations that they'll face. But often that's not that's not the case.

S

Speaker 3 07:51

Yeah, of course. So I've got to say, when I first heard about the rln, I wasn't just excited about what it might achieve, but the legal geek in me, Lewis definitely immediately started mentally listing out what the potential hurdles might be and how at least I would approach solving them. I think, in a nutshell, there are a few, but in my experience, they're not insurmountable, and I think the complexity of any future legal work really will depend on how the rln is taken forward post experimentation phase. And I think quite aside from the specific legal solutions that might be built needed to be built into the system. So for example, to manage kind of legal, operational or other risks, one of the key issues to start with is actually how the FMI will be classified itself. And I think the paper that was published by UK finance actually touched upon this as well. So the types of issues that will need to be considered is, will it be a recognized payment system under the Banking Act? Does it meet the necessary requirements to benefit from settlement finality protections under the settlement finality regulations, or might it be caught by some other regime altogether? And I think for a project like the rln with its scope not yet tied down, this just won't be straightforward, and it might actually be even harder in the context of changes to the existing legal and regulatory frameworks that we have at the moment in the UK, and that's both for FMIS, but also for any types of instrument or tokenized forms of money that may be settled on the platform. And I think earlier I did mention that I think one of the interesting functionality benefits of the rln is this orchestration layer. But actually, you may have seen the Bank of England in their innovation in money paper last year, they talked about a new role in the FMI space, that of a what they've called a synchronization

operator. And I think, just at a conceptual level, the rlns orchestration layer could be used to do something similar, I think, to what the Bank of England has in mind with that. Concept, let me just go

S

Speaker 2 10:02

back. Let me just go back a moment where I want to come back to what you're saying there. But you mentioned the requirements for it to be a recognized payment system and the requirements for it to achieve settlement finality protections. Can you go into what those requirements are? And you know, is it conceivable for the rln to to meet them under under the current conception,

S

Speaker 3 10:24

yeah. So as you can imagine, under both of those different pieces of legislation, the actual requirements are quite prescriptive. They're in a schedule, for example, in the settlement finality regulations. But in a nutshell, the criteria, or the threshold that you need to be meet is one of systemic importance for both of those pieces of legislation. So it's under the Bank of England's remit as kind of overseer of financial stability and systemic risk management, but it will be the supervisor under those regimes, and broadly speaking, what it looks for for any new payment system looking to receive recognition or designation under those regimes is to see okay, do what I think or do you know, is it conceivable that this system might become systemic? What do we mean by that? There are specific tests in each piece of the legislation, but broadly itself. Would it? Would the transactions and the volume of transactions reach such a level through each of the systems that it could have a systemic impact on the economy? Were something to go wrong, and that can be pretty hard, actually, for a new payment system to try and prove, and I should clarify, that the test is not you don't have to meet to that standard before authorization or recognition or designation. Actually, as long as you can prove that you are likely to become systemic, the Bank of England might be minded with HMT to designate you, but actually trying to prove that I've worked with many innovative FMIS over the years, trying to launch and trying to prove that threshold is very difficult when you don't yet have any members signed up, and you're still kind of going through your use case scenarios. So I think that might be a challenge as well for the RLM, yeah, although,

S

Speaker 2 12:22

I suppose, I mean, they've got a lot of big names attached via the UK finance connection and

S

Speaker 3 12:27

exactly, and I think that will help, because if they've got people from day one looking to sign the dotted line, then I think that that can give a clear direction of travel for the regulators and HMT to okay, this, is a serious operation, yeah,

S

Speaker 2 12:42

Speaker 2 12:12

yeah. And I cut you off because you were going into the orchestration layer and the synchronization facility that the Bank of England is talking about. And, yeah, let's, let's hear a little bit more about what that is for. Is this to do with settling, synchronizing the RTGS with with tokenized security settlements and having an orchard station there for that. What are we talking about here? Yeah,

S

Speaker 3 13:05

so it's not entirely clear. I have to say it is. It is meant to be something different to an FMI. And the way I look at it, or certainly the way I've understood it, is that any kind of entity that sits in the middle of different FM eyes potentially, or provides extra functionality that might link and synchronize any sort of payments functionality between those FMIS could potentially be caught by this new synchronization operator concept. I think the clue is in the name, really. So it's certainly something that would need to be ruled out. I think so. It might not be, necessarily be the case that the RLM would be a synchronization operator, especially if it does fall within the FMI regime, squarely as an FMI, but I would imagine that all of the different functionality would need to be carefully considered to see whether it might fall within this concept that's coming in and the future. And why does it matter? Well, I think as we see these new regimes emerging, what is clear is that the rln will be operating in a legislative and a regulatory context which is just subject to change. So it won't be easy to predict these things going forward. And actually, I mentioned that I've been involved in quite a number of rule books and creating legal frameworks for FMI in the past. And it's not straightforward. And one of the reasons it's not straightforward is because it's the legislation and the regulation to which the operator is subject which will need to have quite a big impact on the structure and the approach to the contractual arrangements. So if that's not clear because the regulatory and legal landscape is moving, then the framework itself needs to be agile enough to adapt these future unknowns. So that's certainly a challenge that I can see the rln having to face. And I suppose the second point is that the. Yes, it's focusing on domestic payments at the moment, but it does ultimately have quite an ambitious scope. So for example, in the future, it might include security settlement legs of transactions. And I think DLT is really interesting actually in the field of securities settlement. And there's an obvious use case there, I think the rln, but actually, in the UK, we do separate the regulatory treatment at the moment of payment systems as FM eyes and securities settlement systems as a different type of FMI. So if they do go down that route of trying to have one ledger that does it all one one ledger to rule them all, shall we say, then actually there'll need to be some careful consideration of what that means as well?

S

Speaker 2 15:41

Yeah, yeah, I can see that for sure. So let's, let's move on to agora. And as you were saying, presumably, the complexity is multiplied if you're attempting to build this kind of platform with the intent of operating cross border, because you have to deal with legal frameworks in different jurisdictions. Is that going to be, I don't know, a fatal hurdle for something like agora wherever. That's a bacon ambition.

S

Speaker 3 16:09

I don't think it will be fatal, but it will certainly make it more challenging, and perhaps if, if I just

step back quickly. So agora, of course, is the Cross Border Initiative for a unified ledger concept. So actually, it's trying to, I think it's actually trying to achieve something very, very similar to what the RLM is trying to achieve. So it's going to be using tokenized deposits. It's going to be potentially using CBDCs, if we can get there, but on a cross border basis. And so it's an initiative with, I think it's seven central banks, it's about 40 private participants as well in the market that have all come together to try and see what would a unified ledger look like in the cross border payments context. And of course, it's trying to fix all the problems that we all know in cross border, which is that it's can be slow, it can not be very transparent, and certainly needs a bit of a bringing into the 21st century. So that's kind of what agora is, in terms of the kind of specific legal issues, I actually think the issues in designing the platform itself, and certainly the questions as to what type of entity might the ultimate kind of ledger operator be will be very, very similar actually, to what we've just discussed for the RLM. But it's the cross border angle itself that raise, I think, two really key issues, and these kind of link together legal, policy and operational considerations. So if we start with the first, I think, and it's not new, the Bank of England has said this in the context of the RTGS before, but it's alignment in Central Bank operating hours. So for a cross border payment system using wholesale CBDCs for settlement, but that to function efficiently and effectively, will need to achieve a world in which central banks participating in that system have longer and better aligned hours of operation. And why? Because it's those hours, actually, that will determine the times at which participants can actually readily and officially efficiently convert the relevant assets into wholesale CBDCs. So I think when people look at operating hours, certainly in the domestic context, it's all about kind of the length of hours just for operation of that platform itself, but actually for CBDCs, we'll need to make sure that the ability to convert Fiat into the cbdc is also available in each of the relevant participating jurisdictions to ensure that the unified ledger for agora actually works efficiently and effectively as well. It's all about speed and efficiency. I think of the cross border payments and ultimately what agora is trying to achieve. So I think that's one challenge, but I think a second and quite a different point, but very important point, is the settlement finality aspect. So this term, as you probably know, Lewis has quite mixed usage in the market, but I'm referring to it today as meaning the point at which a payment or another financial obligation is actually discharged for legal purposes. And as you probably know, systems for settling obligations under FX transactions typically aim to deliver PvP, so payment versus payment or atomic settlement, because that's a key means of mitigating the risk for participants. And so in doing so, there's quite an involved exercise of seeking to coordinate the moment that a final settlement of one currency leg occurs with the moment of final settlement of the other currency leg. And obviously that's integral. To any legal arrangements that you put in place as well to mitigate counterparty credit risk. Now it's this one's an interesting one, because I think for a unified ledger project, like a project agora, that actually might not be as hard as may originally seem, because actually, obviously both legs should be settled across the single ledger maintained within the same system. So, apart from the kind of, for want of a better word on, on and off ramping that I mentioned earlier, that the actual settlement issue should be relatively straightforward, but if we contrast some other systems being experimented with, so instead, those that might contemplate the possibility of transfers of assets across different ledgers being synchronized, and ultimately, who knows, the RLM may may end up closer to that in the future, depending on where they go post experimentation phase, I think that becomes more tricky because, for example, you might have a transfer of sterling across one ledger, but the corresponding transfer of US dollars may take place across an entirely different ledger. So in practice, there's likely to be some time delay, even if it's minuscule, or a mismatch between the actual moments of final settlement of each currency leg, which obviously raises the question as to whether such models could ever truly deliver PvP. Now I know, and as a lawyer, it's my job to design legal solutions to these sorts of issues, and as a firm, we have in the past come up with some quite innovative legal ways of

achieving that, even where operationally, the timing might have to be a second or two apart. But it's nonetheless, I think, going to be a really important point that's going to be needed to be born in mind in any cross border project, yeah,

S

Speaker 2 21:46

yeah. Well, it'd be interesting to see how that shakes out. And I'm sure the parties working on it are focused on those sorts of issues. Well, certainly



21:54

hope they are, oh, I'm sure they are, yes.

S

Speaker 2 21:58

Another issue in the in cross border payments is that, well, most of it is based on correspondent banking. And the reason for that is that, generally central banks, most central banks, only allow the banks that they supervise in their country to have accounts with with them in their currency. So if you're sending you need, you need to have a correspondent banking relationship. Do you see this changing if we're looking at these, these new unified ledger based systems of cross border payment?

S

Speaker 3 22:28

So it's a really interesting question. And I think the really short answer is it will only change if the central banks look to open up access or relax the standards that they or at least the criteria that they apply for direct access to, say, reserves accounts at the Bank of England and the equivalents in other jurisdictions. But actually, I think we are, at least in the UK, very much ahead of the curve on this so foreign banks can already access Bank of England reserves accounts broadly as long as they're authorized in the UK or if they participate in the Sterling monetary framework. And we know that the Bank of England is continuing to focus about on this because they actually mentioned it again. Foreign access was a big part of their discussion in their RTGS access project, but obviously that was in the context of direct participation in UK payment systems that the Bank of England has has a big say in. So I don't think we can necessarily say that based on that programs like Agra mean that central banks will all of a sudden become much more open to cross border participation, but it's an important piece of the puzzle, because if foreign institutions are not able to access a reserves account with a particular Central Bank, as you say, they have to rely on on indirect access instead. So the corresponding banking networks, and I have to say, if they're not able to access a reserves account today, how likely is it that the same central bank will be willing for them to hold a claim on it in a form of a cbdc? I think that's going to be the crucial policy decision that's going to need to be made by central banks. But we need it, I think, for innovation in cross border payments to really get off the ground so these kind of very strict limitations on foreign institutions accessing central bank settlement and reserves facilities will need to, I think, be looked at across the globe by by central banks, for agora and other projects to really take off. But actually linked to this, and I know it wasn't in your question, Louis, so forgive me, I don't

think it's just about foreign access. Actually, I think it's also about making sure that we allow and keep encouraging non bank access to reserves accounts. So the UK, as you probably know, was actually world leading when we opened that up originally. And I think, I think the first non bank, PSP, to join FPS, was wise, as it's now known. But at. Actually, a report from the World Bank in 2023 highlighted that we've still got quite a long way to go. So non bank access is improving, but it remains generally low. And I think for really innovative cross border payments and actually even domestic payments to thrive, that will, I think, have to be remedied,

S

Speaker 2 25:21

yeah? And that's, I think, long been a policy aim of those looking to improve cross border payments well domestic payments as well. But I think it was part of the cpmi Yes, roadmap report, yeah, yeah, broaden access to RTGS, and, as you say, not just to foreign banks, but to domestic, non bank payment service providers. So yeah, hopefully that is something that we that we see in the future, very exciting times. I suspect some of those are later stage evolutions. Maybe not something we'll see this year, but we are nevertheless in a very dynamic time. You know a lot of changes going on in the in the world of digital money. So for the first podcast of 2025 first podcast recorded this year, what are your big predictions for digital money this year? Anything that you're expecting to see?

S

Speaker 3 26:15

Wow. Well, where do I start? I think there are probably three. So we mentioned one of them already, and it's cbdc progress. We had the kind of publication exactly yesterday, and so we know that the Bank of England is meant to be reaching a conclusion on cbdc Generally, but also whether UK, the UK, should build a retail cbdc, and I think that's the key question, and hopefully that should come reasonably soon. There are some fears, obviously, that the political or the policy angles, specifically privacy and state control of money, might make it just too difficult to achieve. Are these just too big, these questions to solve quickly? But I'm not sure how true that will be. I think we've seen some really strong statements from the bank, and it's really encouraging. You know, the 14th of January, they came out with the first publication on it for this year. So I'm hopeful we will see a lot of movement this year. I think what doesn't help Lewis is media labels on these things. So, so have you heard of bitcoin? Is how they're calling calling it. And the problem with that is it puts in the mind of your average person, that puts it in the same mental box as Bitcoin. And it's just not right, because a retail cbdc, of course, will be a central bank issued it ought to be similar in many ways, to traditional cash. It would represent a direct claim on the Bank of England, and really the only difference is that it would be held in purely electronic form. So let's hope that we can kind of change the narrative with the media this year as well. And I think you know, the two factors that must weigh heavily in favor of a retail cbdc are ones that we're all probably very familiar with. So the first, of course, is consumer choice and financial inclusion. You know, we still are in a world where for certain groups of people, they are very limited in their access to other forms of money. And this might be a way to break through that. And also, I think there is still a fear that the private sector stable coin could emerge. It could become systemic. It could disrupt the Bank of England's ability to fulfill its objectives, and that hasn't gone away. Whereas a retail cbdc would be within the control of the bank, so allowing it to ensure that monetary and financial stability and sovereignty, if you like, is upheld. So maybe that is the first stepping stone for us on our digital money journey, but we'll have to see. So I think, yes, cbdc is, is the first one we we should

hopefully see quite a lot of movement there. Um, Prediction number two, again, it has to be, there will be now, and we know from from the end of last year, a renewed focus on the regulatory regime for crypto assets. So we can expect a lot of discussion, consultation, policy papers this year from the FCA, as they deliver their mandate to have a more tailored regime for crypto assets. And a lot of that content will affect stable coins. So I think it will be really critical. Because actually, in 2025 i Let's hope that this will be the boom year for stable coin issuers. And also, what I really hope is that by the end of 2025 after seeing what's what's been published by the FCA, they do still want to set up in the in the UK. And then I suppose finally, and I would have to mention this, given my love for FM eyes, but there will certainly be an approach, or a new approach, emerging for UK retail payment systems renewals. So this comes obviously off the back of the national payments vision and the committee now of the FCA bank, PSR and treasury, they need to come up with some new plans that are regulatory initiatives. The payments ecosystem, one of which will definitely be by the middle of the year. Apparently, suggestions for the future reform of paid at UK, which, as you know, operates the non card retail payment systems in the UK, I think you know what they're going to come up with is still up in the air, but I think whatever it is is likely to be quite a material change for the industry, and could mean a lot of work for kind of the whole ecosystem. And I've got to say, many in the sector are still crying out for the new payments architecture project to be restarted in whatever form is agreed upon, and that, of course, was paused in 2023 but I think regardless of where we end up, clearly we have to do something to ensure that we have the modern payments infrastructure that we need. So as you said at the start, Lewis, I think it's going to be another fascinating year, that's for sure.

S

Speaker 2 30:49

Yeah, absolutely. Well, terrific. Much to discuss. I'm sure we'll check back in with you throughout the year to see how these developments that you're laying out have have come to pass and what are the legal implications for the people operating in the space. So thanks very much for all your insights. Natalie, it's been great to



31:08

have you absolute pleasure. Thank you so much, Lewis,

S

Speaker 2 31:12

and thank you to everyone for tuning in today. Make sure you follow us on social media. We're on Twitter or X and LinkedIn, and you can check out our website for news of our upcoming commentaries, reports, more podcasts and the events that we run. Listeners this might be interested in the report that we're publishing in partnership with G and D on the cbdc, some retail CBDCs and plans for central banks in that area that were being published on February 11. So check out our website if you'd like to register for that. Thanks for listening. Goodbye.

S

Speaker 1 31:47

Thank you for joining us for this edition of the OMFIF podcast. If you found today's conversation engaging, make sure to stay tuned for additional thought provoking discussions on artificial

engaging, make sure to stay tuned for additional thought provoking discussions on artificial intelligence, central bank digital currencies and digitalization of finance by subscribing to our channel, stay connected of the latest developments by following us on our LinkedIn page. OMFIF, digital monetary Institute.