Peterson Institute for International Economics

Implementing the digital euro project

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[00:00:26.27] - Nicolas Véron

Good morning. Good afternoon. Good evening, wherever you are in the world. I'm Nicolas Véran. It's my pleasure to introduce this new session of What Now Europe, the series at the Peterson Institute for International Economics. And today we'll talk about the digital euro, which is one of the big projects of the European Union at this point. We'll go into the depths of it. Obviously, it's a different approach from what other jurisdictions are taking in terms of their central bank consideration of digital or central bank digital currencies. Big contrast with the US, where people talk about stablecoins, but the Federal Reserve doesn't talk about the digital dollar. Different big contrast with China. Maybe we'll come back to it. We couldn't have a better speaker, of course, than the very project manager of the digital euro within the executive board of the European Central Bank, Piero Cipollone. Piero, you studied initially at the Sapienza University in Rome and at Stanford University. After graduating in 1992, you became a policymaker, but also an academic.. You have a specialization in labor economics, indirectly relevant to our topic today. You work— you were affiliated with University of L'Aquila, with LUISS University in Rome, also as a visiting scholar at Berkeley.

[00:01:45.07]

And in also in '92, after your graduation, you, as I said, became a policymaker. You worked for 3 years at the Ministry of Foreign Trade and then entered the Bank of Italy in '95, where you have been foremost but not of your career. You had countless positions everywhere at the Bank of Italy, but I will also mention that in the late 2000s, you were the head of the INVALSI Institute, which is an agency in Italy involved with the evaluation of public policies in education and training. In the early 2010s, you were 3 years in Washington, D.C. as an executive director at the World Bank for Italy and the other countries in the constituency. You were came back to the Bank of Italy in 2015. But in 2018, you went to the Prime Minister's Office of Italy, where you served as economic advisor under Prime Minister Giuseppe Conte, a different era of Italian politics. And then you became the Deputy Director General of the Bank of Italy in 2020. And of course, in November '23, you joined the European Central Bank as a member of the executive board. So with that, what is the digital euro?

[00:02:59.14] - Piero Cipollone

Thank you, Nicolas, for having me at the show and thanks for reminding me how old I am. So because all these things I've done because I'm a very old man. Anyway, so the best way to explain what the digital euro is, is to explain what we are doing at the Eurosystem. One fundamental function of the central bank is to issue money. So what we are doing, we are launching a series of initiatives to modernize the way we issue money so that money is fit for a world that is becoming, where digital payments are becoming the norm and where technology might, based on DLT and tokenization, might change the financial market. So we are trying to modernize our offering of money at the retail payment, at the retail level. We are complementing the cash with a version of it that is digital. And this is the digital euro. So a means of payment that is very much the cash, but can be used for all use, for all the needs people might have. Instead, at the wholesale level, meaning at the transaction among big financial institutions, we think that to support the financial, the innovation in the financial market, we need to provide a new form of money, which is central bank money in the form of a token that can be traded on a TLT platform.

[00:04:39.08]

So that's what we are doing. And the digital euro is the retail part. For the wholesale part, we just launched two projects. One is called Pontes and one is called Appia with the same aim, modernizing the way we provide money for the financial market.

[00:05:03.04] - Nicolas Véron

So just to get the semantics right, the digital euro, as you said, is a retail project, right? And if we talk about CBDC projects, but in a wholesale context, you at the ECB don't call it digital euro. You basically call it Pontes Appia, right?

[00:05:21.19] - Piero Cipollone

Yeah, we, we call it tokenized wholesale central bank money. But for sure, Pontes and Appia are the project, the nickname of the project.

[00:05:32.05] - Nicolas Véron

Of course, Pontes means bridges in Latin, and Appia was the name of a famous highway in the Roman Empire, also in Italy. So that's very, very European and at the same time Italian connections.

[00:05:50.04] - Piero Cipollone

Let me clarify, no conflict of interest. I was a German coming up with these two names. So now—

[00:05:56.25] - Nicolas Véron

And of course, the use of the Latin language went all the way to Germany in the olden days. So let's start maybe with what makes a European approach specific, right? We've seen a couple of years ago after Facebook launched their ill-fated Libra, Project in 2019, everybody started talking about central bank digital currencies, CBDCs, and there was a lot of excitement. And then we saw a number of central banks, including in Europe, like the Bank of England, the Riksbank in Sweden, basically phase out their project, saying, okay, we're not really ready for that. So why is the ECB uniquely pushing ahead with the retail digital currency?

[00:06:38.09] - Piero Cipollone

Well, As I said, the first fundamental reason why we initiate this project, which I mean, some reflection about providing digital form of central bank money for retail, where initial reflection were already going on. And the reason is very simple in Europe. You know, we have been together for 25 years. And the only means, unified means of payments that we have in Europe is cash. It's the only public form of money that allows you to pay and discharge your obligation in Europe. But obviously cash doesn't work for a modern world. About one-third of our transaction is an e-commerce transaction and you cannot use cash. So we thought that in order to keep fulfilling our mandate to provide means of payments to people, we need to have a form of public money that would allow you to satisfy all of these needs when you want to pay, when you want to pay online. This issue, which has to do with the freedom of people to choose how to pay, has a profound implication for Europe. Because as I was saying before, in Europe, we do not have a unified means of payments, which means that we cannot go around and pay everywhere for all use cases, meaning for all your needs, without one single solution.

[00:08:15.25]

If you want to do that, you have to rely on non-European solutions. And since the central bank has a mandate to ensure a smooth functioning of payment system, You understand that relying too much on foreign solutions might be a risk. So the occasion of the digital euro, beyond providing a means of payments to people to satisfy all their needs, would also solve this problem of fragmentation of the payment, retail payment market in Europe. So that is the deep—

[00:08:52.22] - Nicolas Véron

So in a way— Sorry. Go ahead.

[00:08:54.04] - Piero Cipollone

No, no, this is the deepest motivation. I can provide you more information about how fragmented we are, but maybe this can come up in the conversation we are having.

[00:09:08.22] - Nicolas Véron

That's right. In a way, to put it bluntly, if Visa and/or Mastercard was a European company, possibly you wouldn't, the ECB wouldn't have gone for that project. Is that the— An acceptable way to frame it?

[00:09:23.23] - Piero Cipollone

Well, Nicolas, we have been pushing for private solutions for a very long time. We started with the SEPA and it took 12 years to implement that. Private SEPA? Well, SEPA is the Single European Payment Area. So it's essentially a mechanism through which you can pay instantly across across Europe, which has been implemented.

[00:09:48.22] - Nicolas Véron

Or wire transfers, right?

[00:09:50.03] - Piero Cipollone

Wire transfer, you are right. But, and it took 12 years to implement this because, I mean, markets are fragmented and we come from different experience. Then we, you know, we pushed for, we and the commission pushed for instant payments. So the regulation, the initial regulation was 2016 and nothing happened. Actually, only one jurisdiction took advantage of that new solution to make instant wire transfer across financial institutions. And they implemented that as a very important scheme to pay at the point of sale in the store. But not much happened.

[00:10:32.05] - Nicolas Véron

Which country was that? Sorry.

[00:10:33.11] - Piero Cipollone

It was the Netherlands with the idea. They invented this solution, that this idea was very efficient. Next, we pushed for Someone said, well, it's hard to scale up solution, European solution, because we don't have a platform, we don't have an infrastructure. So the ECB and the Eurosystem provided this infrastructure, which is called TIPS. So since 2018, TIPS is available, which is an instant payment system that allows you to pay instantly across the euro area. But the market did not take advantage of this to provide a solution to pay at the point of sale, again, at the store. So you can just do a wire transfer through TIPS. So there are important— so we have been struggling to see the private sector to scale up and provide unified you know, some solution that would cover all use cases for Europeans across the euro area. To tell you the truth, there are important initiatives going on, which we supported very much. The trouble is that because of the market are so entrenched into legacy solution, it's very costly and very difficult to scale up. At the European level. In fact, all this new initiative, one is called the EPI, which are developing a platform that is called Viro, and one that is called European Payments Initiative, right?

[00:12:19.27]

Yes, that's the name of the company, and Viro is the name of the solution that they are doing a big effort to scale up both at the European level and coverage of use case. But to expand a private solution is very costly because you have to rely on new standard and this is very costly. So yes, we think we have been encouraging this solution. And we think though that through the digital euro, this private solution will have a chance to scale up at the European level so that you have you know, many solutions competing for providing services to the market.

[00:13:09.08] - Nicolas Véron

So is it a governance issue? Is it just that, you know, it's practically impossible for BNP Paribas, Deutsche Bank, and the Sparkassen in Germany to come up with a joint project because their cultures are completely incompatible? I mean, what explains this failure of the private sector over decades to come up with what you told them to come up with?

[00:13:31.14] - Piero Cipollone

Well, first of all, you start with the solution that are national. Rule, different rules. At the governance level, you have different rules, different remuneration scheme, different practices. And then you have the technological part, different standards, each standard for each country. Coverage, differential coverage, certain solution coverages for covered, for example, only point of sale, other just peer-to-peer, other just covered e-commerce solution. So you have a patchwork of solution, each entrenched in different technological solution and rule of the game, if you will. So how do you put this together? It's not that simple. Also because sometimes in order to come up with a new solution, you have to dismantle the old one. And this means investment. This means that you give up some revenues for an investment that you have already paid for. So there is also a P&L issue. So it's not that easy to give up to something that works at the national level to come up with something at the international level, because it's very difficult to put together things. Moreover, there are 15 countries in Europe that do not even have a domestic scheme. I can name some countries. Austria is one of these.

[00:15:20.14]

Finland is one of these. So these countries do not have even a domestic scheme, which means that—

[00:15:27.05] - Nicolas Véron

When you say they don't have a domestic scheme, that means that basically the only options they have for use of payment cards is Mastercard and Visa in practice, or American Express, right? Absolutely.

[00:15:38.11] - Piero Cipollone

Absolutely. Those are the only solutions. So if for whatever reason, these providers will not be able to provide their services to one of these countries they will not be able to pay. That's a big— some, you know, of some concern, someone, as you can imagine, for a central bank.

[00:16:01.21] - Nicolas Véron

Did this kind of geopolitical risk assessment that, you know, there's a kind of maybe unlikely but not completely implausible scenario in which the American card service providers would withdraw service as they did in Russia, indeed in 2022. My impression— tell me that I'm wrong, but my impression is that the ECB has been increasingly explicit over the last few years, especially in the last 2 years, about this geopolitical motivation. Do I get things wrong?

[00:16:31.12] - Piero Cipollone

Well, let me— you are right, but with some nuances. First of all, we have been saying that we do this. Because we need to fix our internal problem. First of all, as I was saying before, right? You cannot, it cannot be a system where your citizen cannot rely on an infrastructure that it's European somehow for something that is so basic as a payment. So this is something that we should have fixed anyway. You might ask why you started a few years ago in 2015. 2020, basically, and not before. Because before that, cash was king. The real problem is that— problem— the real change has been that digital payments have accelerated and therefore marginalizing cash. That's where this need to provide something additional became so important. Now, we have been consistent in saying no, but certainly the point that you were making, the geopolitical risk, is resonating much more with politicians. And that's where we saw some acceleration from the political side to put this project into into focus. I must confess that before that, there was a kind of slow move. This was a slow-moving project, at least at the legislative level. Then what happened in the last 3 years, 3, 4 years, provide a sort of acceleration to the, mostly on the political side.

[00:18:28.12]

We, Obviously, we use this to explain how concrete this risk could become. But again, we are not doing this against someone. We are doing this to fix our internal problem. If you want, I can tell you how I try to convince and to explain to the American friends and those that are not Europeans, how paradoxical is the situation we live in. So to explain to our American friend, I say this, suppose you live in New New York, and your local credit union gives you a debit card. Then you go to San Francisco and you go to Starbucks, you want to buy your coffee, and the cashier tells you, I'm sorry, sir, I cannot take this debit card because that's been issued in New York. That's exactly the situation we are in Europe. How paradoxical. I mean, how would the US react to that? So we are trying to fix this.

[00:19:29.02] - Nicolas Véron

Except of course, if you're from Finland and the debit card you got is a Visa debit card and you can use it in Portugal, right?

[00:19:35.11] - Piero Cipollone

Yeah. Yes.

[00:19:37.14] - Nicolas Véron

That's very clear. You mentioned the legislation. Indeed, there is some news on this. There was a proposal by the European Commission. I can't even remember when, 2 years ago or something. And then It went into the discussion, as it does in the EU, with what we call the co-legislators, so the Council of the European Union, which is the representatives of the member states, and the European Parliament. And as it happened, often the deadlocks in the EU legislative process are in the Council, but here it's been maybe even more in the European

Parliament. I know you are not here to comment on political processes and legislative processes, but can you get a sense of where, how this legislative proceeding has developed and where we are now.

[00:20:28.13] - Piero Cipollone

So let me be factual on this. You're right. The initial proposal from the Commission was June 28th, June 2023. So almost 3 years ago. Then the discussion with the College of Legislators started. And there was initially the movement at the Council Working Party was not as fast as we were expecting, but last year there was an acceleration. So at the end of 2025, under the Danish presidency, which did a great job, there was a proposal and they come up with their own proposal, which is not the proposal from the Council, which is not that far from the initial proposal of the Commission. There are some changes here and there. At the same time, the process is developing at the Parliament. To be fair with the Parliament, we need to remind that we had the election in 2024. So it took some time for them to reform the Commission. But it's not a mystery that there is some part of the Parliament that is skeptical about the project of the digital euro. And in particular, the rapporteur has been taking a position that has some question. Let me put in this way. However, in the last 6 months, progress has been made.

[00:22:14.03]

And up to now, they have looked at and agreed on, well, almost more than one-third of all the articles. So the latest news we have is that they will come up with a vote, so a formal decision on June 23rd. It's not that far away. So we have been patient for 3 years. It doesn't cost much to wait a couple of more months. What is important for us is that we get the final legislation by the end of this year. As long as we have a final legislation by the end of this year, we will be able to respect our timeline that at this point in time foresee the issuance, the full issuance of the digital euro by say July 2029.

[00:23:05.01] - Nicolas Véron

Of course, the rapporteur, as you mentioned, is Fernando Navarrete, also a former central banker. So you will, as you said, there's a good chance that the legislation will be ready in time for your own operational timeline of deployment of the digital euro. Will the content of this legislation, which is now coming into focus, that you have a form of agreement in the Council, a form of agreement in the Parliament,. And then you will have a reconciliation process, which we call the trilogue in European jargon. But, but now that this is coming a little bit clearer, is the content okay? Are there things that make your work as an issuer of the CBDC more difficult? Can you give us a sense of where the sticking points have been?

[00:23:52.15] - Piero Cipollone

So let me, let me put it this way. The proposal from the Council is very close to the to the proposal of the Commission. There are some marginal differences, especially in the obligation of the banks to distribute the app of the digital euro, but those are minor things. The bulk of the substance of it, the underlying philosophy, it's very close. It's very close. So I do not expect many problems. The most tricky things in the discussion at the Council were two, essentially. One is the issue of the holding limits. Let me explain. In order to protect financial stability, we said from the very beginning that the digital euro has built in three safeguards. One is the fact that the digital euro is not remunerated, so no interest fee put to move. Second, you don't need to pre-fund your wallet in order to pay. We call this, this waterfall solution. Essentially, when you pay, you can transform instantly your commercial bank money into the digital euro and pay. And the third most important is the fact that there will be a cap to the holdings of the digital euro for individuals. So the initial proposal by the—

[00:25:23.25] - Nicolas Véron

So just to understand, there's no cap in terms of the payments you can make in digital euro, but there is a cap in terms of how much digital euro you can keep in your digital euro wallet, right?

[00:25:36.06] - Piero Cipollone

Absolutely. No limit to the transaction, a limit to the actual stock that you have in your wallet.

[00:25:44.11] - Nicolas Véron

So if the wallet is depleted, then your bank account will replenish it to the extent needed automatically. And that's what you call the waterfall.

[00:25:52.01] - Piero Cipollone

Exactly, exactly. And this is meant to avoid that people need, exactly to avoid that people for free, for the concern not to have enough money, that they preload or pre-fund too much their wallet. So it's their freedom to choose. So the issue was who is going to set the holding limits. And the member states had some concern that the initial proposal was that the ECB would have done that. Member states have some concern by saying, look, financial stability is also our own responsibility, so we want to have a say on that. But we come up with a very good solution, a balanced solution, so we are satisfied with that. Now, the other dimension was how do you compensate the— is the remuneration process. I mean, how do you pay the banks for the services they provide and distribute in the digital euro?. And now you make sure that merchant will not be, since they're obliged to accept the digital euro, merchant will not be, well, will be somehow protected from possible exploitation from the service provider if they do not have any protection. So these all things we call it the compensation model. And the commission and the So the Council came up with a very reasonable solution.

[00:27:23.02]

And now those are the two, again, the two topics that are being discussed at the Parliament. But again, I expect that in the coming, in these 2 months, because they are discussing these two issues as we speak, and there might be some They might come up with some variant compared to this proposal, but there are not so many alternatives. So the set of choices is limited. So I guess at the end of the day, the proposal will not be so different. And therefore, the trialogue discussion should be easy to will be easy to converge to our final solution in the trilogue.

[00:28:13.17] - Nicolas Véron

The compensation model, if that means that once the digital euro is in place, say in 5, 7 years' time, if I go to a merchant, I go buy my coffee at, you know, the Pain Quotidien, maybe not Starbucks, who knows, then I will see that the machine of the merchant does not only accept Visa, MasterCard, Alipay, whatever, but there will also be a little logo Digital Euro and I can pay with Digital Euro without any other intermediation, right?

[00:28:47.15] - Piero Cipollone

Absolutely.

[00:28:48.19] - Nicolas Véron

And the cost of that, the merchant will be compensated, what, 100% for the cost of the adaptation? How does that work?

[00:28:56.15] - Piero Cipollone

The merchant will pay a fee that is certainly Certainly, especially for small merchants, will be much lower than the current fees. So it will be an average of comparable means of payments. But because among the comparable means of payments, there are also non-European schemes which are more expensive. The digital euro will be definitely below the cost of this. And this will be protecting especially small merchants. This amount of money will compensate both the banks of the merchant and the banks that have provided you with the digital euro wallet. We call it the issuing bank and the acquiring banks. What is the advantage compared to the current scheme is the fact that the ECB will not charge for the technical services that provides, and this should save money. And this money saved will be distributed more or less in an equal form among the merchant, between the merchant and the banks. The provider of the payment services.

[00:30:23.28] - Nicolas Véron

I should say for our international audience that in Europe, the fees for credit card use are already significantly lower than their level in the US and in many other countries. So we're starting from a lower level. But does that mean that in practice— sorry about that— does that mean that in practice, when I go to a merchant, the merchant will tell me, oh, please pay with digital euro, not with Visa or Mastercard? I should disclose that Mastercard is a corporate member of Google at this point, but that doesn't affect the way I speak about the policy issue.

[00:30:59.27] - Piero Cipollone

Could be. I mean, could well be. I mean, definitely this could happen. But the freedom remains in the hands of the people. People can choose how to pay. So This to tell you that if the digital euro will not provide a user experience as good as the competi— or the other solutions, then it's not clear whether the people will use it. So the onus is on us to provide at least a user experience as good as the current solution.

[00:31:32.27] - Nicolas Véron

And if my merchant adopts that kind of behavior, which is not impossible, then, you know, they will tell me to pay with digital euros, that business loss for Mastercard. Mastercard, maybe Mastercard will want to exit the European market because they no longer make money, and then I can no longer make payments outside of the European Union with my credit card. How is all this going to play out?

[00:31:54.11] - Piero Cipollone

Well, I mean, first of all, first of all, as you know, we are talking about debit here, while Visa and Mastercard also provide very important services, which is a credit, which is a different— completely different product, completely different feature. So we are not talking about this. So there is a large, still a large market for Visa and Mastercard to provide. Second, merchants, sometimes they say that their problem is not just the cost, it's the complexity and the lack of the transparency of the fees that they pay. So maybe this is a space where Visa and Mastercard could work to become, so to reduce the complexity and therefore have the merchants to accept it. But again, let me reiterate this. This is not the choice of the merchant. The choice is of the consumer. So as long as Visa and Mastercard provide good services for the consumer, so user experience, This is their competitive advantage. So people might use the digital euro as an option, but I don't expect, I do not expect that the digital euro will displace private payment system. It's another fallback option that you can use for privacy reason because it offers also the offline solution.

[00:33:51.24]

But I do not expect such a dramatic outcome as the ones you were representing.

[00:33:59.08] - Nicolas Véron

And of course, I misspoke. I said Mastercard is a member of Google. I meant the Peterson Institute. And this is because I didn't drink enough coffee. And by the way, Visa has also been a donor of the Peterson Institute. But again, it doesn't color the way we at the institute talk about these things because that's our model. Let me go to the international comparison. Again, the Fed is not doing a retail digital currency the way the ECB is doing. The People's Bank of China is doing it in a different way, which looks a little bit more like a bank deposit. Can you get us a bit through those differences and the kind of discussions you have with other central bankers around the world? Because I assume that, you know, you have central bankers who tell you, you know, 'You're doing this thing, it costs a lot of money, but we're not doing it because we don't think we need it.' So what is the kind of conversation you have?

[00:34:53.28] - Piero Cipollone

Well, I mean, this is a, you know, what's important to understand is that different jurisdictions have different needs. So let's take, for example, Sweden. They have been thinking about that for a long time. But their feeling is that they do not have this concern about the coverage of the, I mean, the possibility of domestic solution to cover the needs of their people. So the audience to provide a solution that was not there for digital payments, they did not have this urgency. That's why they are thinking about it, but the pressure to cover digital payments was not there. We did not, I remember, I insist on that, we did not have such a luxury. The US, they have been thinking about doing something. In fact, one of the most advanced studies that I read in terms of possible implementation of a digital dollar was this famous Hamilton Project, which was done in collaboration between the MIT and Boston Fed. Then for political reason, I understand they are, you know, they are posing the project. But if they are doing that, it's because probably they are satisfied with possible solution they have domestically. China entering this issue for another completely different solution.

[00:36:55.04]

Because they wanted to open up a little bit of competition among the two giants they have. You know that there were two big providers which internalize all the payments basically. So they have—

[00:37:11.11] - Nicolas Véron

Apple Pay and Tencent Payments, right?

[00:37:14.04] - Piero Cipollone

Exactly. So the central bank did not have any influence almost on this. So they needed to provide a solution that people could rely without necessarily entering into, you know, this walled garden. So each jurisdiction has his own problem and trying to react to the problem that he has, it has, in order to try to fix it. I insist on that. We had a fundamental problem of fragmentation and we tried in many ways to to solve it through private initiative, which for reasons that have to do with the fact that when you are stuck in a bad equilibrium, it's very hard to move out. We think that instead the digital euro will not only provide a public solution, but also offer an infrastructure that the private sector, including Visa and Mastercard, can use to distribute their project. Their product. So we envisage through the digital euro to set up an infrastructure in a market that is resilient, competitive, and open to competition. And we hope to get better prices and better services out of this.

[00:38:35.28] - Nicolas Véron

We have a few minutes left only, as there are so many questions. I want to move to the wholesale Euro discussion. But before that, we have a question from a participant about— on Zoom— about cryptocurrencies. And of course, there's all this discussion about stablecoins. I don't want us to lose focus, but will it be possible to convert crypto assets into the digital euro? And how is the project engineered for that?

[00:39:03.07] - Piero Cipollone

Well, I mean, you can— let me put it this way. If you sell, I mean, if you sell any crypto and someone wants to pay you and you are willing to accept a digital euro, you can do that. I mean, you need just to have a PSP. That's a payment service provider that is able to to work on both sides. I mean, has to be able to provide you a wallet and the digital euro and has to be able to provide you a wallet with the crypto. But there is not, I mean, it's another good as any other. I mean, you can buy bread with the digital euro, but you can buy any other financial activities if you want.

[00:39:57.13] - Nicolas Véron

So let's move to the wholesale space and the international space and also how the digital euro fits with the discussion about the international role of the euro, right? I mean, my impression is that in the last few years, the ECB has been increasingly explicit that they would welcome more international use of the euro. So they're not just agnostic. They're basically laying the foundation for the euro being used offshore internationally. That includes swap lines, repo lines, interlinkages with fast payment systems, or instant payment systems, as you call them, in other jurisdictions like like in Brazil, in India, what have you. What is the digital side of this strategy? And can you give us a bit of a snapshot of where the ECB stands in that cluster of issues?

[00:40:49.15] - Piero Cipollone

Yes, definitely. Let me clarify, though. I mean, we don't do industrial policies, right? We provide solutions for letting people to to make sure that payments flow freely in an efficient way with transparency, low cost, and possibly instant. Those are, I mentioned these 3 things because those are, this is exactly the metrics that the G20 has taken in order to improve the fast payment, the payment system. So essentially on the international part, Nicolas, we are being true to our promise that we would have supported the G20 strategy for cross-border payments. This was initiated by the Saudi Arabia G20 presidency a few years ago. And we also have clear metrics to judge. So in the discussion that, you know, there have been a lot of work done on this. And one of the outcome was that maybe a low-hanging fruit to improve the deal state of the fast payment system, cross-border fast payment system, would then be interlinking fast payment system. There are like 100 jurisdictions around the world that have fast payment system. So a smart thing to do would be to connect them. And that's what we have been doing. That's what we have been doing on the side of the payments.

[00:42:27.05]

So we, you know, I don't want to bother you with all the initiatives we have, but that's exactly the logic we are moving. At the same time, you know, we have been kind of restrictive in allowing people to use the, you know, then our repo lines. And we thought that because of the frequency of the possible shock would have been much better to allow central banks to have access to our liquidity in case they need it for whatever reason instead of selling it in a disorderly way, their asset in euro. And this is exactly the logic the logic of the new repo lines. So no industrial policies, but just provide, make sure that the payment system works well, both domestically and internationally.

[00:43:29.16] - Nicolas Véron

So without going too much into the weeds, a bit of a sense of why the ECB is putting emphasis on repo lines for the international use of the euro, whereas the Fed and the People's Bank of China in a different environment, you swap lines. How should we think about those different instruments?

[00:43:48.29] - Piero Cipollone

Well, as you might imagine, the repo line, less risky for a central bank than a swap line because in a repo line, you have people give you as a collateral for your loan, for your liquidity, they give you an asset that is Euro-denominated asset. So it's very much, it's pretty much safe in some sense. Swap line is a currency against currency. So there is some risk associated to that in case the currency, I mean, there is an FX risk associated to that. But we are, you know, so for the time being, we stick to the to the repo line. But we have some swap line with the important jurisdiction. Moreover, all what we do on this has to be rooted into monetary policy reason. There is no— that's the only legal justification that we can use to enter into this kind of contract. So as I said before, We are expanding our repo line because of the frequency of the shock. We have, you know, in few years we saw many, many shocks. So you need a way to absorb this shock more easily. And that's why we decide to expand the repo line.

[00:45:18.21] - Nicolas Véron

I have so many more questions, but unfortunately our time is up. Fortunately, this was a very rich discussion and I look forward to other opportunities to invite the ECB to the series, also talking about the international role of the euro and the expansion of the eurozone. I'm sure Hungary is paving the way. Presumably we'll have opportunities to discuss that. But in the meantime, thank you so much, Piero Cipollone, for a very illuminating explanation of the digital euro project. Thank you and have a great rest of your day.

[00:45:53.02] - Piero Cipollone

Thank you, Jorrit. Bye-bye.