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## Central bank digital currency: the future starts today

Thank you very much, David. Thank you for your very kind introduction. Thank you for having me here in Ljubljana. We all experienced how the pandemic has accelerated the shift to virtual events, and I guess we are all very pleased to be here in person in Ljubljana, yet the world is not returning to the old normal. Payments are a case in point, and that is what I am going to talk about.

The pandemic has accelerated a longer-running move to digital. Mobile and contactless payments are already part of our daily lives, as we know. QR codes and 'buy now, pay later' options are gaining popularity. Gloves, badges and Olympic uniforms with payment functions are being prepared for the Beijing Winter Olympics. The tech-savvy generation will soon dream about money and payments for the metaverse.

Alongside these developments, the world's central banks are stepping up efforts to prepare the ground for digital cash, or CBDC. They have a job to do, which is delivering price stability and financial stability, and they must retain their ability to do it. Let me explain why.

Central-bank money has unique advantages: safety, finality, liquidity and integrity. As our economies go digital, they must continue to benefit from these advantages. Money is at the heart of the system and it has to continue to be issued and controlled by trusted and accountable institutions which have public policy, not profit, as objectives. Central bank money will have to evolve to be fit for the digital future.

What are the priorities now? First, know where you are going. There is this wonderful quote by Dag Hammarskjöld, who once said, 'Only he who keeps his eye fixed on the far horizon will find the right road.' You have to look at the far future if you want to find you road, and then get going. These are equally important. I am going to elaborate on these two priorities.

First, why do we need to know where are we going? Because, today, the financial system is shifting under our feet. Big techs are expanding their footprint in retail payments. Stablecoins are knocking on the door, seeking regulatory approval. Decentralised finance (DeFi) platforms are challenging traditional financial intermediation. They all come with different regulatory questions, which need fast and consistent answers.

Banks are worried about the implications of CBDCs for customer deposits. Central banks are mindful of these concerns and are working on answers. They see banks as part of any future CBDC system. But make no mistake: global stablecoins, DeFi platforms and big tech firms will challenge banks' models, regardless.

Stablecoins may develop as closed ecosystems or 'walled gardens', creating fragmentation. With DeFi protocols, any concerns about the assets underlying stablecoins could see contagion spread through a system. The growing footprint of big techs in finance raises market power and privacy issues, and challenges current regulatory approaches.

Will the new players complement or crowd out commercial banks? Should central banks open accounts to these new players, and under which regulatory conditions? Which kind of financial intermediation do we need to fund investment and the green transformation, which was a major focus of these two days here in Ljubljana? How should public and private money coexist in new ecosystems? For example, should central-bank money be used in DeFi rather than private stablecoins as a settlement asset?

We urgently need to ask ourselves these kinds of questions—and there are many others—about the future. This is the far horizon for the financial system, but we are approaching it ever more quickly. Central banks need to know where they want to go as they embark on their CBDC journey.

CBDC will be part of the answer. A well-designed CBDC will be a safe and neutral means of payment and settlement asset, serving as a common interoperable platform around which the new payment ecosystem can organise. It will enable an open finance architecture that is integrated, while welcoming competition and innovation. It will preserve democratic control of the currency.

This brings me to my second message: the time has passed for central banks to get going. We should roll up our sleeves and accelerate our work on the nitty-gritty of CBDC design. CBDCs will take years to be rolled out, while stablecoins and crypto-assets are already here. This makes it even more urgent to start.

In the design-thinking methodologies that we use in the BIS Innovation Hub – and other innovators like to use – the ideal product stands in a sweet spot at the intersection of desirability, viability and feasibility. When applied to CBDCs, these translate into three dimensions: consumer use cases, public-policy objectives and technology.

We have to ask ourselves why consumers would want to use a CBDC and what would they want it to do. The recent ECB public consultation showed that consumers value privacy, security and broad usability. In order to meet consumers' expectations, CBDCs need to be made to work most conveniently. Payment data must be protected. Digital functions that are not available with cash can be developed, such as programmability or viable micropayments.

Then CBDCs should meet public-policy objectives. Central banks are there to safeguard monetary and financial stability for the public good. CBDCs are a tool to pursue this through enhancing safety and neutrality in digital payments, financial inclusion and access, innovation and openness. Important questions remain. How can CBDC systems interoperate, and should offshore use be discouraged? These are the questions that are still on the table when it comes to public policy.

Technology opens up design choices. System design will be complex. It involves a hands-on operational and oversight role for central banks and public-private partnerships to develop the core features of the CBDC instrument and the underlying system. These features are ease of use, low cost, convertibility, instant settlement, availability and a high degree of security, resilience, flexibility and safety. Complex trade-offs will be addressed by central banks, including how to balance scale, speed and open access with security, and how to balance offline functionality, which we want to see with digital cash, with complexity and security. These are the kinds of trade-offs that we will have to look into in the coming months and years.

Let me come closer to the conclusion. Across the world, central banks are coming together to focus on their common mission. Charged with stability, they will not rush. They want to move quickly, but not to break things. Consultations with payment systems and providers, banks, the public and a broad range of stakeholders have begun in some countries. As we know, the ECB has started that consultation process. To build a CBDC for the public, a central bank needs to understand what they need, and to work closely with other authorities. The BIS Innovation Hub is helping central banks. We already have six CBDC-related proofs of concept and prototypes being developed in our centres, and more to come.

The EU is uniquely placed to face the future. You can build on a state-of-the-art fast-payment system, on the strong protections provided by the General Data Protection Regulation (GDPR) and on the open philosophy of the Second Payment Services Directive (PSD2). The ECB's report on a digital euro sets the stage.

A CBDC's goal is ultimately to preserve the best elements of our current systems while still allowing a safe space for tomorrow's innovation. To do so, central banks have to act while the current system is still in place, and to act now. I thank you very much for your attention.

**Q&A**

**David Wright**

Are there any questions for Benoît?

**Participant**

You mentioned the competition that is already there between the private providers and potential public providers in terms of central banks. Do you see that there is global competition between central banks? Is it you competing with others like the ECB? It seems that, in the US, the Fed started only because it was afraid that China might be first. Do you see that? Do you see a risk in that the process may be accelerated just because of the fear that others will be first?

**Benoît Cœuré**

I would say not that much. There is a global technological competition, and CBDCs are part of it, but I do not see CBDCs being primarily led by international competition. I do not even see it as being primarily an international project anywhere, including in China. It is about how the domestic monetary and payment system is organised. In many countries, there is a policy discussion around CBDC. It does not shape up as an international discussion, but more as a conversation on the role of big techs and on the balance between public authorities, banks and big techs in running and controlling the payment system, and in accessing and control payment data. That is very much a domestic discussion, including in China. The notion that CBDC should be seen primarily as some kind of strategic race or contest is, by and large, a myth.

**Participant**

You mentioned consumer usage, which has a retail element to it. Do you see wholesale in a CBDC context working the same way or would that be a completely different framework that would apply to wholesale?

**Benoît Cœuré**

You are absolutely right to bring back the wholesale dimension of CBDCs, which is very important. The use case is very straightforward. As you see some critical infrastructures moving to decentralised platforms, you need to find a way to settle on these platforms in central-bank money. You need to find a way to send a central-bank token to these platforms, just to preserve the role of central-bank money as the safest settlement asset in a critical infrastructure, which is a basic principle of oversight for market infrastructures.

If you want to keep it, you will need wholesale CBDC to be used as a settlement asset on these kinds of platforms. That is pretty straightforward and does not create the kind of political complexity, trade-offs and choices that come with retail CBDC. Retail CBDC has a totally different scale. It is about hundreds of millions of tokens or accounts. Privacy will be a key discussion, with different answers in different places, and that does not arise when you discuss wholesale CBDC. It is an important part of the picture but I would say probably less difficult.

**Stanislava Zadravec,**
**Banking Association of Slovenia**

You mentioned three words that are key in the whole process: digital cash, monetary stability, and technology and new set-ups in payment processing. Looking at these three, I have a few questions, but I will address only two to you this time. What do you think is the difference between instant payment and the envisaged framework for the use of digital currency? What is the role of the banking system? If we are talking about cash distribution and monetary policy and stability, the road is clear, but when we hear statements like private partnerships in payment settlement and processing, the whole picture no longer seems so clear.

**Benoît Cœuré**

It is an evolving picture when it comes to the different players in this ecosystem. There might be a shift, to some extent, out of banks and towards non-bank players, which has been accepted by PSD2 and by the current framework, but this has nothing to do with CBDC. This cannot be blamed on CBDC. It is a more general shift in the system that comes with new technology and the open philosophy that has been decided in Europe. CBDC will be part of it but not the driver of it.

I would expect banks to remain very much at the heart of the system, particularly when it comes to being the front end of any retail CBDC system. I do not think that any European central banker wants to be in the business of onboarding clients and doing the anti-money laundering/combating the financing of terrorism (AML/CFT) checks on clients. That is not really a line of business in which central banks want to be. That is being and should continue to be done by banks. We have to think of an architecture where most of the front-end will be done by banks, and possibly by non bank payment-service providers, as allowed under PSD2. The central bank, at the heart of the system, will issue the CBDC and have an oversight role. It may have a role in terms of setting the technical standards to ensure interoperability, which is an important feature of the system, but it will not be in contact with clients. That is my personal expectation. We will see what comes out of it.

Finally, when it comes to the difference between retail CBDC and fast-payment systems, fast payment systems are commercial money, so it all boils down to the difference between commercial money and central-bank money. Just as today, if you buy a loaf of bread from a bakery, you can use banknotes, which is central-bank money. You can use coins, which, in many places, is government money. It is the liability of the Treasury. You can use your mobile phone or your credit card, which would be commercial money. We are already living in this system. I do not see the basic principles changing. It is just that, with the use of banknotes for transaction purposes gradually dwindling, you need to keep the option for citizens to use central-bank money, which will be digital cash.

**Participant**

You insist on the role of central banks in terms of oversight of currency, and you do not need to convince us in the room of that. How do we convince the younger generation, which is already using crypto-assets, stablecoins and all sorts of things, of the beauty of central-bank money?

**Benoît Cœuré**

It has to be diverse and it has to be an ecosystem, so I have absolutely nothing against the young generation using crypto, provided that it is regulated adequately and that they are aware of the risks. It is a matter of investor protection. If that is about any digital asset being used as a payment instrument, it is about enforcing payment standards and regulations. Internationally, that would mean enforcing the Principles for Financial Market Infrastructures (PFMI), which should really be enforceable on any stablecoin or global payment arrangement.

With that caveat, we need diversity, and there will always be a mix of private and public payment instruments. The beauty of it is that central banks are not in a competitive mindset. They are not for profit, so they have to provide this option to citizens. Some of them will use and some will not, and that is fine.

**David Wright**

As a non-expert, this seems to me to be an irreversible process. Am I right? Secondly, I see securities and banking regulators beginning to clamp down on various forms of cryptocurrency. Where is that going? Thirdly, what is the timeframe? How do you look at this in terms of timing?

**Benoît Cœuré**

First, we have to accept and acknowledge that both the answer and the timeline will be different in different jurisdictions, because they are starting from different places in terms of how their payment system works, whether they already have an efficient fast-payment system, and so on and so forth. The likelihood of big tech companies stepping in is different in different countries. There is no single answer to that, but I would very much agree that the train has left the station, and that is the direction into which we are all going.

In terms of the timeline, it has to be a number of years, because these are very complex issues. There are lots of technical choices to be made, and there will be political discussions to be held. These discussions will not be held and decided by central banks. I do not think that they would like that, by the way. If there is a discussion to be had on who is going to access, safeguard and store client data for a CBDC, what would be the threshold for disclosure, or whether there is a threshold below which CBDC holdings can be anonymous, that has to be a political discussion, also because it is very closely linked with the AML/CFT discussion, so it has to be consistent.

This will take time, particularly in Europe, where you have to aggregate 19 different public opinions. It is really for member states and the Commission to lead that part of the discussion, while the ECB leads the more technical part of the discussion. It is a number of years but the whole point that I wanted to make here is not to take too long to do that, because the world is moving around you. If you wait too long, you will face a landscape with market power being locked in by very large players and you might be too late to the party.