

Joachim Nagel: The digital euro and the protection of privacy

Opening video address by Dr Joachim Nagel, President of the Deutsche Bundesbank, at the International Conference on Payments and Securities Settlement – Data and Information, Eltville, 5 July 2024.

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1 Introduction

Ladies and gentlemen,

A very warm welcome to you all on this second day of the International Conference on Payments and Securities Settlement. I'm sorry I can't be with you today in person and can only send you this video message.

The conference was organised together with the Bank of Canada. I am very grateful for this cooperation between our two central banks. Many thanks to the organising teams on both sides of the pond!

The aim of this conference is to bring together experts on payments and securities settlement. And to give them the opportunity to present and discuss their research.

Technological advances have revolutionised the payment landscape – both for payment professionals and for the general public. Professionals have started to reap the benefits of tokenisation for payments and settlement. The public are increasingly using contactless payments, digital wallets, and peer-to-peer transfer services.

These innovations provide instant and secure transactions, transforming the way we manage money. As central banks, we need to ask ourselves what implications these new technical capabilities have for our services.

One key question is whether our "analogue core product" of cash should be complemented by a central bank digital currency, or CBDC. If so, we need to decide whether to issue CBDC for the general public or for payment professionals like financial institutions.

In the Eurosystem, we are considering both of these things – that is, both retail and wholesale CBDC. Needless to say, the retail project is attracting the most public attention. But let me first say a few words on wholesale CBDC.

The Eurosystem has done pioneering work to explore the real time settlement of wholesale financial transactions in central bank money using new technologies. Trials and experiments are taking place over the next few months. We are testing three Eurosystem solutions that allow wholesale financial transactions to be recorded on DLT platforms and settled in central bank money.

Market participants seem highly interested. This shows that solutions for wholesale CBDC could be an important step for our future financial system. The trigger solution, a settlement mechanism offered by the Bundesbank, has attracted significant market interest.

We are convinced that the trigger solution is highly efficient and comes with hardly any unwanted implications. Rather, it is easy to implement, because there would be no need to upgrade the existing and established T2 system.

That is the good news from the wholesale side. Now I would like to focus on the retail project.

2 Why we need a digital euro

The digital euro is currently in the "preparation phase", as it is called. In this phase, which is scheduled to run until October 2025, our experts are preparing for the possible implementation of a retail digital euro in the euro area. The ECB's Governing Council will take a decision after this phase and following adoption of the necessary legislation.

I am aware that some people have their reservations about the digital euro project. We need to take these reservations seriously and counter people's concerns with compelling arguments.

One of the main arguments against a digital euro is that we do not need it at all. In my view, that argument is flawed.

Our lives are turning increasingly digital. In shops, more and more people prefer to pay with cashless means of payment. And when it comes to online shopping, which is becoming ever more important, we as customers have no choice but to pay electronically. Both of these factors mean that cash use is lower than it once was.

However, the electronic payment options currently available to euro area households have their deficiencies. Some payment cards work only in specific countries. And all the cross-border payment options are currently non-European, which limits our strategic autonomy in a critical infrastructure.

That's why, as a service provider to society, we are thinking about offering a digital form of central bank money for the general public.

3 Results from a public survey on the digital euro

If I could see you now, I would see a group of experts who know exactly what makes CBDC special. And what sets it apart from other digital assets. However, if we look at the digital euro's main target group, the general public, we see significant gaps in their knowledge and understanding.

A recent representative survey for the Bundesbank showed that this is the case for the German population.¹ Only 41 percent of respondents said they had already heard, read or seen anything about the digital euro. By contrast, 59 percent said they knew nothing about it yet.

That doesn't come as much of a surprise, though. As long as the final decision on the digital euro has not been taken, it makes little sense for the Eurosystem to launch a large-scale public awareness drive.

Once that decision to introduce the digital euro has been taken, there will of course be an advertising and education campaign. And that will be necessary.

Currently, there are fundamental misunderstandings about the digital euro. Even within the group of respondents that had already heard of it, 26 percent had no idea what the digital euro actually is. Only 17 percent said something like, The digital euro is intended to serve as an additional means of payment issued by the central bank.

In other words, only seven out of a hundred Germans know about CBDC and have understood its concept correctly. All the others either don't know about the digital euro or don't have a clear picture of it. Some confuse it either with cryptocurrencies or with cashless means of payment in general. Others think it is intended to replace cash or monitor their payment flows.

Such misconceptions are certainly related, in part, to negative campaigns and fake news about the digital euro. And they suggest it will be a challenge to tell people what the digital euro really is (and what it isn't).

The encouraging takeaway from the survey is that half of all respondents could generally imagine using a digital euro. That particular question was preceded by an explanation that it would be a digital form of cash as an additional means of payment, issued by the central bank. And that cash would continue to exist.

Moreover, I am confident that many of those who currently cannot imagine using the digital euro will change their minds once they see it in practice.

The survey also showed what characteristics a digital euro needed to have in order for people to embrace it. For example, 59 percent of the respondents said that having an option to pay offline was important or very important; 72 percent said it was important that a digital euro would be based on a purely European infrastructure.

However, the most important feature for respondents is the protection of privacy. Three out of four respondents said it was important or very important for the digital euro to protect their privacy better than existing payment options.

4 The digital euro and the protection of privacy

To make the digital euro a success, it is therefore of the essence to provide the highest possible level of privacy, while complying with anti-money laundering regulations.

Therefore, I am pleased to note that the panel immediately following my video message will be focusing on privacy and CBDC. Both papers covered by the panel provide useful thoughts on the trade-off between data use and data protection.²

Data are considered the most valuable commodity of the 21st century. And, in principle, there is nothing wrong with people paying for services with their personal data. Provided they know who is using which data for what purpose and they explicitly accept those uses.

However, many people aren't happy about their data being used commercially. They don't want people to be tracking their consumption behaviour. And they are perfectly entitled to have their data protected.

So if you were to go to a winery in Eltville to buy some bottles of Riesling and pay with the digital euro, only the bank that operates your wallet would have full visibility of the transaction. But it is not allowed to use that information commercially without your consent.

The Eurosystem will not be able to assign the transaction to you personally. And if you pay offline, no personal information whatsoever is shared with anyone else. Like with cash.³

5 Conclusion

Ladies and gentlemen,

There is still a long way to go before we can issue the digital euro. Exchanging views and opinions with experts from outside the Eurosystem is very important and valuable in this regard.

¹ Deutsche Bundesbank (2024), [Bundesbank survey: Widespread acceptance of digital euro among general public](#), press release, 4 June.

² Agur, I., A. Ari & G. Dell'Ariccia (2023), Bank Competition and Household Privacy in a Digital Payment Monopoly, IMF Working Paper WP 23/121; Tinn, K. & C. Dubach (2024), (Central Bank) Digital Currency with Asymmetric Privacy -Theory Model, mimeo.

³ European Central Bank (2024), [Progress on the preparation phase of a digital euro - First progress report \(europa.eu\)](#).