

Joachim Nagel: The digital euro – unifying and trustworthy

Text of the Vigoni lecture by Dr Joachim Nagel, President of the Deutsche Bundesbank, Rome, 24 June 2024.

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1 Introduction

Ladies and gentlemen, It is a great privilege to give this year's Vigoni Lecture. I am especially honoured to be the first central banker to deliver this speech.

Many of the previous speakers, politicians as they are, laid out their political vision of the European Union and the role of Italy and Germany within that union. But, as the saying goes, a cobbler should stick to his last, so I'm not even going to attempt such a daring task. Instead, I would like to talk about a topic that is close to my heart as a central banker. Nonetheless, I suppose it will also be of great European interest: the digital euro. A project that in my eyes has the potential to revive the European spirit and put fresh wind in its sails.

As you might know, central bankers have a tendency to become quite technical whenever they talk. So before we go into the details, let me describe my idea of the digital euro in a nutshell: I imagine the digital euro as a digital form of central bank money, universally accepted and with the highest privacy levels of any electronic payment option.

Where do we currently stand on the digital euro project? The project was launched in October 2021. The Eurosystem began by exploring possible design features and distribution models for a digital euro in an investigation phase.¹ It concluded that it would be possible to develop a digital euro that meets users' needs and the Eurosystem's requirements. In June 2023, the European Commission released a concrete legislative proposal on the establishment of the digital euro, to be discussed and ultimately adopted by the European Parliament and the Council.²

And in November 2023, the digital euro project entered what is being termed the preparation phase – set to last two years, initially.³ This second phase will involve finding providers that could develop a digital euro platform and infrastructure as well as finalising the digital euro rulebook. The final decision on whether or not to issue a digital euro has, however, not yet been taken.

Overall, we have already made some important progress. But we still have a long journey ahead of us. Or to draw an analogy with the European Football Championships currently taking place in Germany: We have made it through the group stage. And are now on the road to what will hopefully be a glorious final.

In my speech today, I would like to lay out the case for the digital euro. I would also like to take this opportunity to address some common concerns. And, to finish up, I would

like to share some thoughts on how Italy and Germany can move the digital euro project forward.

2 A means of payment for the digital age

"Why do we actually need the digital euro?" That's a question I get asked a lot. After all, consumers can already choose from a variety of payment instruments. The answer to this question is multi-faceted, yet ultimately quite simple. I will focus on five factors that speak in favour of the digital euro.

The first factor is that our world is becoming more digital by the day. And the way we pay for goods and services is no exception. Cash has traditionally been the means of payment most widely used by euro area households. But over the course of the past few years, digital payments have noticeably gained in importance.

Let me give you some numbers:⁴ In 2022, customers in the euro area used cash for 59% of transactions at the point of sale. Just six years earlier, in 2016, this share still stood at 79%. At the same time, the share of transactions executed with card payments rose from 19% in 2016 to 34% in 2022. In terms of the value of payments, cards already accounted for a higher share of transactions than cash payments in 2022 – 46% compared to 42%.

So it seems intuitive for the Eurosystem to seek to accommodate this change in payment behaviour too, by offering a digital complement to cash. By doing so, we would enable people living in the euro area to hold central bank money in digitalised form. And we are certainly not alone in this endeavour, as many other central banks are exploring central bank digital currencies (CBDC) or have already issued one.⁵

But the digital euro is more than just an appropriate response to the digitalisation of our economies. The second factor in favour of a digital euro is that it also fits well into an era of geopolitical tensions. As things stand now, our digital payments often rely on non-European companies. In contrast, the digital euro would be built exclusively on European infrastructure. Accordingly, the digital euro would strengthen the strategic autonomy of Europe and increase our resilience.

The third factor is that the digital euro could support the development of innovative payment solutions in the private sector. Applications that come to mind here include smart contracts for automated payments and micropayments. All in all, the digital euro is an appropriate answer to both the opportunities and challenges of our times.

But what about the potential drawbacks of a digital euro? One argument made against the digital euro is that it might increase risks to financial stability. If the digital euro could be held in large amounts, periods of banking distress could see shifts from deposits to digital euro accounts or wallets. This could contribute to a systemic bank run where everyone is worse off.

While this may certainly sound a scary prospect at first, there exists a very simple remedy for this risk: holding limits. A holding limit implies that the amount of digital

euros a customer can hold is capped at a specific amount. And this means that only a limited amount of deposits can be withdrawn, which will considerably reduce the risk of a bank run during times of distress.

And not only that: the digital euro might even reduce overall financial stability risks, as recent Bundesbank research suggests.⁶ Why is that? As you can imagine, the digital euro would also act as an alternative to bank deposits during "normal" times free from financial distress. Fewer liabilities in the form of deposits mean a less leveraged banking system. And a less leveraged banking system is more stable, which would reduce the risk of a bank run in normal times.

Given all that, you might ask yourself: what exactly is the optimal level of the holding limit? I think the jury is still out here. A paper by ECB economists first suggested that a holding limit of 3,000 digital euro per person would be successful in containing the impact on bank liquidity risks even in extremely pessimistic scenarios.⁷ The recent Bundesbank research that I just mentioned indicates that the optimal amount could be in the range of 1,500 to 2,500 digital euro per person.⁸ We will take a careful look at what the optimal amount would be.

Given that there will most likely be a holding limit of some kind, does that mean you won't be able to make payments that exceed this limit? Again, there is a straightforward technical solution for this problem: if the available amount of digital euros is insufficient, a "reverse waterfall" will immediately help out by drawing the missing funds from your bank deposit account.

3 Trustworthy and unifying

So far, the advantages and the solvable pitfalls that I have spoken about have mostly been of a technical nature. But money is far more than simply a "cold" means of payment. Money is also something emotional. Its existence is deeply linked to trust. After all, unlike gold coins or commodity currencies, modern money does not have any intrinsic value. Rather, its value is founded on its users trusting that others are willing to accept it as a means of payment as well. And, in the case of Europe, it is something unifying.

Or as the historian Yuval Noah Harari put it so eloquently: Money is the only trust system created by humans that can bridge almost any cultural gap, and that does not discriminate on the basis of religion, gender, race, age or sexual orientation.⁹

Follow me to elaborate on these two points in a bit more detail, starting with trust. One objection that we hear time and time again is that the Eurosystem could use the digital euro to monitor or even control the people in the euro area. Let me assure you, this is not something anyone needs to be concerned about. Quite to the contrary, I would argue that the Eurosystem is particularly well placed to provide a trustworthy digital means of payment.

The fourth of my five factors that make the case for a digital euro is that the digital euro would provide the highest possible level of privacy, surpassed only by cash. Why? Well, the Eurosystem is simply not interested in collecting and commercialising individual

customers' payment data. We work for the public good, not for profits. This is a crucial difference between the digital euro and its private competitors.

And we are committed to honouring the trust that the public places in us, as this is critical for achieving our primary mandate of maintaining price stability. People can trust that we will also deliver on our promises regarding the digital euro. And people can also trust us that the digital euro will not replace cash – another fear that is routinely voiced. The digital euro would complement cash, not replace it. Creating the digital euro is about expanding consumers' choice when it comes to means of payment, not shrinking it.

How would the digital euro contribute to bringing the euro area closer together? As things currently stand, cash is the only true European means of payment that can be used throughout the whole currency area. But, while cash will undoubtedly remain an important part of economic life in Europe, it is also undeniable that the use of cash is in decline. Private digital payment initiatives such as the European Payments Initiative (EPI) are a step in the right direction. But EPI is currently limited to a handful of countries.

For a digital means of payment to act as a unifying force, people in the euro area must be able to use it in every corner of our currency area, from Santa Claus' Main Post Office in Rovaniemi, Finland, down to the Pescheria di Catania in Sicily. I thus welcome the European Commission's intent to grant the digital euro legal tender status.¹⁰ And of course, I also welcome the fact that the European Commission wants to strengthen the role of cash by ensuring that it remains widely accepted and available in the euro area.

On top of this, the digital euro would work both online and offline. Such universal acceptability and usability is currently only envisaged for the digital euro – and that's the fifth factor in favour of a digital euro.

4 Italy and Germany's role in developing the digital euro

The digital euro is a joint project of the Eurosystem. The project's success hinges not least on the input and contributions of national central banks, with their invaluable expertise in developing and operating the payments infrastructure. So, with this in mind, what could be the role of Italy and Germany in developing the digital euro?

First of all, the Banca d'Italia and the Bundesbank have a long tradition of cooperating when it comes to running our payment infrastructure and working to modernise it. Key examples are the development of the TARGET2 and TARGET2-Securities systems, in which we took a leading role, together with our colleagues from the Banque de France and, in the latter case, the Banco de España. I am sure that both central banks will also play a leading role in bringing the digital euro to life. We at the Bundesbank have set up a directorate general dedicated to the digital euro to further the project.

And secondly, the connection between Italy and Germany with respect to the digital euro goes deeper than cooperation on technical matters: The digital euro is something that's close to the hearts of the individuals heading up both institutions. At the Banca d'Italia, my esteemed colleague Fabio Panetta is one of the foremost experts and supporters of the digital euro. During his time at the European Central Bank, he was

spearheading efforts to press ahead with the digital euro. And he continues to do so at the Banca d'Italia.

I myself have been a committed supporter of the digital euro from the very beginning as well. At its core, my endorsement of the digital euro derives from my general passion about the potential benefits of the digital transformation of our society. This digital transformation is not something that we should shy away from for fear that it might lead us into uncharted territory. It is, on the contrary, a fantastic chance for our societies to reinvigorate growth and build a better future. And the digital euro could be one of the cornerstones of this digital transformation.

Or in the words of Fabio (Panetta): A digital euro will make our money fit for the digital age. It follows in the footsteps of the architects of the euro, who rightly believed that the currency union would only be complete with a tangible form of the euro, issued by the central bank. The digital euro takes their vision forward into a digitalised world.¹¹

To sum up: I see the digital euro as the logical and appropriate answer to both the opportunities and challenges of our times. It would give people in the euro area access to a public digital means of payment that they can use in every corner of our currency area while protecting their privacy to the greatest possible extent.

5 Closing remarks

What are the next steps for the digital euro? Since we are in the middle of the European Football Championship, allow me to sketch the (potential) future of the digital euro with an analogy to the game beloved by both Italians and Germans alike.

Just like in football, successfully bringing to life the digital euro will be a team effort, involving central bankers, commercial bankers, merchants as well as payment and IT experts.

Every football match has clear rules, and referees to apply them. Likewise, the digital euro will need a strong legal and regulatory framework. This is something that the European legislators are already working on.

One important question that we don't yet know the answer to is what the stadium where our game will take place is going to look like. The infrastructure to enable the digital euro will need servers, networks and a platform for communication. Here we are still in the planning phase.

Once everything is properly set up, I am sure that the digital euro will flow between customers as smoothly as a football passes between the players of the "Azzurri" or the "DFB-Elf" when they're in top form.

And, most importantly, it is my fervent hope that the general public will be as happy about the digital euro as football fans from around the world would be about a European Championship final between Italy and Germany.

Ladies and gentlemen, In turbulent times like ours, it is our duty to stand up for our convictions. With regard to the digital euro I am profoundly convinced that this project

will be an economic success, that it will deepen the cooperation and friendship between Italy and Germany and that it will connect the people of Europe even further. Many thanks for your attention.

¹ See ECB (2023), A stocktake on the digital euro, Summary report on the investigation phase and outlook on the next phase, 18 October 2023.

² See European Commission (2023), Proposal for a regulation of the European Parliament and of the Council on the establishment of the digital euro, COM(2023) 369 final.

³ See [Eurosystem proceeds to next phase of digital euro project \(europa.eu\)](https://european-council.europa.eu/media/eu-press/press-releases/2023/10/1801_en.pdf).

⁴ See ECB (2022), Study on the payment attitudes of consumers in the euro area (SPACE).

⁵ According to the CBDC tracker, The Bahamas, Jamaica, Nigeria and Zimbabwe have already introduced CBDCs. A further 21 countries have launched a pilot CBDC and 27 countries are working on a proof of concept. See [Central Bank Digital Currency \(CBDC\) Tracker \(cbdctracker.org\)](https://www.cbdctracker.org/).

⁶ See Bidder, R. et al. (2024), CBDC and banks: Disintermediating fast and slow, Deutsche Bundesbank Discussion Paper No 15/2024.

⁷ See Meller, B. and O. Soons, Know your (holding) limits: CBDC, financial stability and central bank reliance, ECB Occasional Paper Series No 326.

⁸ See Bidder, R et al. (2024) op. cit.

⁹ See Harari, Y. (2018), Sapiens: A Brief History of Mankind. New York: Harper Perennial.

¹⁰ See European Commission, op. cit.

¹¹ See Panetta, F. (2023), Shaping Europe's digital future: the path towards a digital euro, Introductory statement by Fabio Panetta, Member of the Executive Board of the ECB, at the Committee on Economic and Monetary Affairs of the European Parliament, Brussels, 4 September 2023.