

Burkhard Balz: Envisioning tomorrow - the role of CBDCs in Europe's digital financial ecosystem

Speech by Mr Burkhard Balz, Member of the Executive Board of the Deutsche Bundesbank, at the Frankfurt Digital Finance Conference, Frankfurt am Main, 13 February 2025.

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1 Introduction

Good morning ladies and gentlemen and thank you very much for your warm welcome.

I am honoured to have been invited back to this year's Frankfurt Digital Finance Conference in this wonderful building here in Frankfurt's Palmengarten and to have been asked to hold a keynote to kick off today's event.

Allow me to begin my keynote this morning with a quote attributed to Oscar Wilde: The future belongs to those who recognise opportunities before they become obvious.

These words, ladies and gentlemen, could not be any better suited to our financial ecosystem.

And it is precisely opportunities that I wish to address in my keynote today – the opportunities provided by central bank digital currencies, or CBDCs for short. A subject that is as timely as it is significant.

2 The future is digital

We are at the cusp of a new era. One in which the digitalisation of the financial sector is not just an option but a necessity. New technologies are venturing into the realm of payments and new forms of money, such as digital central bank currencies and stablecoins, are also emerging as alternatives to physical cash.

These developments all pose new challenges for central banks. Ultimately, central banks must continue to ensure secure and efficient payments in line with their mandate and redefine their role in an increasingly digitalised world in order to maintain the public's trust in our monetary system.

The question that we therefore now face is: how do we respond to these technological challenges?

And that is precisely why we in the Eurosystem – by that I mean the European Central Bank and the national central banks of the euro-area member states, including the Bundesbank – are taking a proactive approach to actively help shape the future of Europe's digital financial ecosystem.

3 What are we aiming to achieve with the introduction of a digital euro?

One could argue that the Eurosystem already offers enough sufficiently well-functioning products, be it physical banknotes and coins or cashless payment instruments. After all, these have proven their worth for decades. Yet at the same time, we cannot simply ignore the evolving world around us. In an increasingly digitalised society, we must adapt to the changing needs and demands of consumers and rethink our payment services.

Let me outline the three key motivations behind the possible introduction of a retail CBDC in Europe – a digital euro, which we sometimes like to summarise as resilience, autonomy and efficiency.

Let me first start with resilience. The foundation of an independent and efficient monetary policy is the adoption and use of the euro. By providing our common currency—the euro—in its form as legal tender and as a modern "all-in-one" digital payment solution, we are paving the way for our currency to enter the digital age, making it "future-proof" and fit for purpose in an increasingly digital society.

The digital euro would thereby help to preserve the euro's fulfilment of the core monetary functions and shield the euro area from competing foreign currencies as well as foreign—and potentially unregulated—stablecoins by safeguarding the anchor function of central bank money.

Second, the digital euro is necessary to improve the autonomy of the European payment system. In its current form, the European payments landscape is highly dependent on non-European providers. Almost 25 years after the introduction of the euro, we still do not have a digital payment solution that can be used across the entire euro area and that runs on a European infrastructure, which, in my view, is not compatible with the concept of a single European market. Although a small number of successful payment innovations have emerged across the euro area over the past years, such as iDEAL in the Netherlands or BIZUM in Spain, the reach of these payment solutions usually ends at national borders.

As a result, payments in Europe are largely dependent on international schemes, primarily those in the United States. At present, just under two thirds of all card payments in the euro area are processed by non-European providers. And I believe that Europe's dependencies in the digital age are likely to increase if we do not fundamentally take matters into our own hands.

Third, is the issue of efficiency. By creating a pan-European payment rail in a technically modern form, we would foster competition and innovation in payments across Europe, which we believe is the best path towards efficiency in payments. The payment initiatives we have today, such as BIZUM or WERO, would be able to integrate the digital euro into their payment applications, thereby enabling them to gain instant European reach.

4 What would a digital euro be for the common citizen?

Although the issues I have just touched upon are very important, they are not necessarily of primary relevance for the daily life of a majority of citizens in Europe. Hence, what would the digital euro be from the perspective of the customer?

I believe that the digital euro would not just be a commitment to Europe's autonomy, increase the resilience of our payment system and foster competition and innovation, it would also improve payments and make life easier for the 350 million residents of the euro area.

The digital euro would serve as an additional means of payment alongside cash. As a digital upgrade of banknotes and coins, it would be an "all-in-one payments solution", as we like to call it, which means it can be used in almost all everyday payment situations, including at retail checkouts, transactions among family and friends, online purchases, and payments to or from public authorities. Furthermore, it would be the first digital currency which could be used both online and offline. That is to say, also in the event of a loss of internet reception.

Moreover, the design of the digital euro would ensure that it would offer the highest possible level of user privacy, comparable only to cash. No other digital means of payment in Europe currently offers all these features.

Despite the many benefits the digital euro would bring for Europe as a whole, we must, nevertheless, proceed with caution. The introduction of a digital euro raises important questions about privacy, security, and the impact on financial stability and monetary policy. We must ensure that the digital euro upholds the highest standards of data protection, that it is resilient against cyber threats, and that it does not have a negative impact on financial stability.

5 Wholesale CBDC

Digitalisation raises questions not only in terms of how we intend to continue providing access to central bank money for our European citizens in future, but also in terms of how we intend to supply money to our wholesale customers. It is and will remain essential that we are able to settle digital transactions using new and innovative technologies, such as distributed ledger technology (DLT) in central bank money. An entire ecosystem is currently evolving around the tokenisation of securities, which involves all parts of the financial system.

Like other financial players, the Bundesbank, and also the Eurosystem as a whole, see the significant benefits that the use of these new technologies can bring. The advantages of DLT, such as automated settlement by means of smart contracts and reduced reconciliation needs, are clear.

But to fully harness this potential, we also need an innovative settlement mechanism for the cash leg—one which settles transactions in central bank money. We are therefore working on developing wholesale solutions that enable banks to settle DLT-based financial market transactions in central bank money.

The Eurosystem recently completed an exploration phase together with the market, which ran from May to November 2024, during which we tested various new technologies for wholesale central bank money settlement using real transactions. The Bundesbank also participated in this exploration phase with its "Trigger solution", which builds a bridge between DLT platforms and the conventional TARGET payment system. The feedback we have received from the market so far has been very positive. I think we can already say that the exploration phase was a complete success.

The anticipated benefits of DLT are seen as having the potential to address and overcome the ecosystem's current shortcomings, such as fragmentation, complexity, over-intermediation, and technological inefficiencies, which hinder the growth of a digital capital markets union.

By developing a new ecosystem from the ground up, it could be made more integrated and harmonised, featuring a "common set of rails"—a shared ledger or a network of fully interoperable ledgers—that would guarantee reachability, open access, and compatibility across the services of all participants.

Our primary focus is now on implementing a short-term wholesale solution to meet the immediate and growing demands of the market. This will buy us some much-needed time to continue working on a vision for a long-term solution for wholesale CBDC. A solution which must ultimately go hand in hand with the evolving financial market ecosystem.

6 Business-to-business (B2B) payments

Alongside its work into the possible introduction of a digital euro and the exploration of wholesale CBDC, the ECB, together with the Eurosystem, has also been turning its focus to another area of payments—one which is increasingly gaining traction: business-to-business payments, or B2B payments for short.

To fully leverage the potential of the evolving payments landscape in the area of CBDCs, last October the ECB organised a special focus workshop on innovations in B2B payments and the role central bank money could play.

This workshop provided a one-of-a-kind platform to learn more about the potential use cases out there in the market. Given the high level of interest shown in the first focus workshop, I'm sure this will not be the last one of its kind.

7 Outlook

Ladies and gentlemen,

The introduction of the digital euro and the exploration of wholesale CBDC and B2B use cases are not just a technical exercise, but a clear commitment to the innovative strength and competitiveness of Europe.

The Bundesbank and the Eurosystem are determined to play an active role in shaping this digital transformation.

It is, however, crucial that we continue working together and pool our resources and expertise in order to fully exploit the opportunities offered by digitalisation to create a strong, stable and future-proof digital financial ecosystem for Europe.

Thank you for your attention.