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Opening address

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* English translation from the original in Spanish

Good morning.

Let me begin by thanking Cecabank for inviting me to take part in this conference. From experience, I know that these events are particularly valuable for sharing expertise and drawing practical lessons. They also play a decisive role in strengthening our ability to understand and address, with greater confidence, both the opportunities and – most particularly – the challenges facing the financial sector.

This is especially true in the context of the digital transformation of finance, a process that reaches into the very core of the financial system and is changing practices that we long thought were set in stone. It is important to foster an open and ongoing dialogue with the private sector as this helps us stay abreast of trends and identify the most pressing concerns and needs. Within the Eurosystem we are well aware of this and therefore actively seek ways to facilitate such dialogue.

That said, I will now focus on two specific issues. First, I will outline the current landscape of digital assets and tokenisation, as well as the main implications, in my view, arising from their emergence. Second, I will address a key issue in this environment: dependence on specialised information and communication technology (ICT) third party service providers.

As you know, the digital asset market has grown significantly in recent years. It has become a global phenomenon, with potentially far-reaching implications for economic growth, employment, innovation, market integration and, of course, financial stability.

According to recent International Monetary Fund (IMF) estimates,[1] the aggregate value of crypto-assets in 2025 reached close to $4.2 trillion, while the stablecoin segment exceeded $300 billion. At the same time – and more importantly for our discussion today – the volume of tokenised funds has tripled over the past 12 months and the capitalisation of traditional assets tokenised on public blockchains has increased from around $5 billion in early 2023 to approximately $45 billion just two years later.[2]

In this context, shared institutional platforms are becoming increasingly common. These platforms enable a group of institutions to cooperate voluntarily in developing private infrastructures for delivering advanced financial services using smart contracts. Examples include the Regulated Layer One initiative, launched by several European financial institutions, and SWIFT's recent project to create a 24/7 cross-border payments network based on distributed ledger technology (DLT).

At the same time, the use of permissionless public networks and proprietary platforms continues to gain traction in certain market segments. This trend could lead, first, to concentration among certain providers and, second, to fragmentation risks owing to a lack of interoperability. This scenario therefore warrants careful analysis.[3]

[1] IMF Crypto Assets Monitor.

[2] Source: RWA.xyz.

[3] According to data from the Association for Financial Markets in Europe, this was the case in 2025, in the tokenised global fixed-income market, where two private operators accounted for more than 80% of the market share.

These dynamics are part of a long-term and structural trend highlighted by the Bank for International Settlements (BIS) that is likely to continue in the coming years. In light of this, it is essential to have appropriate and up-to-date regulatory frameworks, such as those adopted by the European Union, which will be extensively discussed today. It is equally necessary to reflect on the role that central banks should play in this environment.

As a central bank, our institutional objective is twofold. First, we aim to preserve the role of central bank money as the anchor for the monetary system, maintaining the existing balance between public and private money, thereby supporting confidence in the currency. Second, we seek to remove barriers that hinder tokenisation from reaching the scale needed to contribute effectively to growth and productivity, should market forces drive such development.

Two of these barriers are platform fragmentation, which limits interoperability, reduces liquidity[4] and hampers asset synchronisation, and the absence of a fully reliable and risk-free common settlement asset for on-chain operations, comparable to that available in traditional financial market infrastructures.

Taken together, these factors highlight the need to move forward through coordinated public action, which is already beginning to take shape at both the international and European levels.

At the international level the initiatives promoted by the BIS Innovation Hub since 2024 deserve particular attention. One of the most prominent projects in this area is Agorá, which aims to assess the feasibility of a multi-currency platform for cross-border wholesale payments in which wholesale central bank digital currencies and tokenised deposits can co-exist.

This initiative aligns with the objectives of the G20 Roadmap for Enhancing Cross-border Payments and explores alternative ways to reduce costs and execution times and increases transparency, while preserving settlement in central bank money. This strengthens the stability and security of the international financial system. It should be noted that Agorá does not aim to deliver a final product, but rather to develop a prototype to assess this approach and identify the key legal, operational and technological challenges. Following an initial conceptual phase, it has now moved into a technical testing stage in collaboration with seven central banks and more than 40 private institutions.

At the European level, work is also progressing on several fronts. In late March the Eurosystem began to accept certain DLT instruments as collateral in its credit operations, provided they are non-native assets issued through central securities depositories and meet existing eligibility criteria.

Although the current scope is limited and does not yet allow for the deployment of novel use cases, such as automated collateral management through smart contracts, this step is an important milestone and reflects our commitment to progressively adapting to technological developments in financial markets. In addition, we are assessing the feasibility

[4] To address this, some bond issuances follow a dual strategy, trading simultaneously on several markets. For example, certain instruments issued on the SIX Digital Exchange are also listed on the Swiss stock exchange.

of incorporating assets issued and fully settled on DLT networks in the future, always with due caution and without compromising existing safeguards against financial and operational risk. Given their inherent complexity and implications, any such steps will be phased in gradually – by asset group, mobilisation channel, etc. – in line with market and regulatory developments.

This gradual approach is accompanied by a broader strategic discussion on central bank money. At the retail level, progress has focused primarily on ensuring access to cash and preparing for the issuance of the digital euro (a digital version of cash). At the wholesale level, the agenda is particularly ambitious and is structured around two complementary initiatives, albeit with different scopes: Pontes and Appia. I will focus particularly on the latter, which may be of greater interest to this audience.

Pontes is primarily operational in nature and aims to offer the market, in the short term, a common solution to facilitate the settlement of transactions originating on private DLT-based platforms in central bank money. To this end, it envisages the development of a technical connection with TARGET Services, building on interoperability solutions already explored with the industry throughout 2024.

The project will get under way towards the end of this year with a pilot phase and will then progressively incorporate enhancements in line with TARGET's legal, technical and operational standards, providing a reliable settlement infrastructure compatible with a well-established and reliable framework. It will thus offer a predictable and secure environment for banks, market infrastructures and large issuers to explore the possibilities of tokenisation.

Our aim is to lay the foundations for a gradual transition in Europe towards a more digital and integrated financial ecosystem, ensuring that any developments towards tokenised capital markets take place in an orderly manner.

Appia, by contrast, takes a longer-term and more ambitious approach. It is less a technological project than a strategic exercise aimed at building a shared vision of how a tokenised financial market in Europe should be structured to ensure it is competitive, integrated and connected to the global environment.

As we move in this direction, it is essential to uphold a number of the key principles at the core of the European project, such as strengthening the strategic sovereignty of our financial infrastructures, safeguarding the role of central bank money in the monetary system, encouraging innovation, advancing the effective integration of our financial market and reinforcing the euro's position as an international reserve currency.

To this end, and in response to the fragmentation we see today, Appia is built on the premise that, to realise its full potential, we need to move towards shared network models – models that operate as open and neutral infrastructures, ensuring fair, transparent and broad access for all service providers.

This approach involves rethinking the life cycle of financial transactions, so that competition takes place less at infrastructure level – where collaboration can add greater value – and is instead shifted to the layer of assets and services built on top of it. This is a structural change, with significant implications in terms of governance, geographical location, standards, control, regulations and business models. It also means remaining open to a wide range of implementation options, without it being clear from the outset which approach will ultimately emerge as the most effective.

Appia, therefore, blends analytical and experimental approaches that allow us to explore and test all hypotheses rigorously and, wherever possible, to substantiate our conclusions with practical findings.

In this context, maintaining a structured dialogue with the broader community (including both traditional and emerging stakeholders, authorities and academia) is once again key. To this end, alongside the Appia roadmap, a call for contributions and proposals from the private sector has also been launched. In any event, it will be essential to adopt a modular and flexible approach that makes it possible to adapt to a constantly changing environment, in close coordination with the Pontes project.

Against this backdrop of rapid technological progress and transformation, I would now like to turn to the second topic I wish to address today: specialised technology providers. Banks increasingly rely on them to offer their customers products and services. It is therefore essential that banks manage the risks associated with these third parties, some of which have become systemically important to the financial sector.

In the European Union, the Digital Operational Resilience Act (DORA) establishes uniform requirements for the entire sector, focusing on ensuring that critical or important business functions can continue to be delivered or, at least, be restored in line with pre-defined objectives. A key element of this resilience objective rests on banks adequately managing the risks arising from the ICT third party service providers on which they depend.

For this reason, the Regulation imposes specific requirements, particularly where providers deliver critical functions or services. Most of these requirements were already contained in the European Banking Authority's (EBA) outsourcing guidelines, although DORA applies to the entire financial sector for technology service agreements.

In addition, DORA introduces a highly innovative element: a supervisory framework for ICT providers that are critical to the European financial sector as a whole, recognising the systemic dimension that some of them have attained. It is important to stress that this supervision does not replace banks' own management and control obligations, but rather complements them.

Critical providers supervised under DORA are identified based on the registers of third-party arrangements that all European financial institutions are required to maintain and submit to their competent authorities, which are then forwarded to the European supervisory authorities, namely the EBA, the European Securities and Markets Authority and the European Insurance and Occupational Pensions Authority, as appropriate. The criteria set out in DORA are applied to this aggregated information to identify the most critical providers. As you know, the European supervisory authorities published in November 2025 a list of 19 providers that have been under active supervision since January this year.

This is a pioneering global initiative, through which the European Union has blazed a trail for other jurisdictions. It is also a huge joint effort by all financial sector stakeholders, committed to the common goal of making this sector more resilient. Banks have had to compile the registers I mentioned earlier, which underpin the entire process, and the completeness and quality of the data they contain are crucial. The authorities are taking on new responsibilities and allocating significant resources to the supervision of these third parties, quite apart from the complexity of the governance arrangements that have been required. Lastly, providers face the obligations that come with their status as supervised entities. This entails not only direct economic costs, but also the need to provide information and respond to authorities' requests.

At the Banco de España, we are firmly convinced that these efforts are necessary. Digital operational resilience in the sector is not an option but a necessity, and all of us – banks, providers and authorities alike – have a responsibility to contribute to it.

In conclusion, today I have sought to underline that the digital transformation of the financial system – driven by the development of digital assets and tokenisation – is a structural trend with considerable potential, but also one that entails risks which must be managed rigorously. The response of European central banks and authorities is key because it will preserve financial stability, guarantee the role of central bank money and foster an environment in which innovation progresses safely and efficiently. Initiatives such as Pontes and Appia reflect a gradual, coordinated and strategic approach towards a more integrated and resilient financial ecosystem, while the regulatory framework, in particular DORA, underlines the critical importance of operational resilience and proper management of dependency on ICT service providers. Only through collaboration between institutions, providers and authorities will we be able to consolidate a financial system that is robust, competitive and ready for the challenges ahead.