

The Era of Digital Currencies: The d€

As a result of the digital transformation, the way we make payments is changing. The use of cash to make payments is declining and the COVID-19 pandemic has accelerated the shift to online shopping and digital payments. The digital euro would be the electronic form of cash for the digitized world. It would enable consumers to use central bank money in digital form, complementing the function of banknotes and coins.

Dr Christos Kallandranis
Assistant Professor in Finance
University of West Attica
Dpt. of Accounting & Finance



Is Digitalization avoidable?

- **Short Answer: NO**
- **Long Answer:** blockchain technology built economic system that runs without people, thus making a transaction “trust-free”.
- This technology provides a viable alternative to eliminate middle-mans, thereby lowering operational costs and increasing the efficiency of a sharing service.
- **Siemens** by using blockchain technology and following the successful issuance of its first digital bond in 2023, issued a €300mn digital bond demonstrating its commitment to blockchain technology in capital markets.
- **Short Answer: Interoperability**

What are CBDCs?

1 Digital Form of Central Bank Money

CBDCs are central bank liabilities, representing a claim on the central bank, similar to physical banknotes.

3 Potential for Increased Efficiency

CBDCs offer the potential for faster and cheaper payments, improved financial inclusion, and enhanced monetary policy.

2 Digital Representation of Fiat Currency

They are backed by the full faith and credit of the issuing central bank and can be used for everyday transactions.

4 Technological Advancements

Leveraging advanced technologies, such as blockchain and distributed ledger technology, to enhance security and transparency.



Recent CBDC developments

Most central banks have been experimenting with CBDC, from research and pilots to select deployment



BIS (The Bank for International Settlements) announced project Mariana to investigate the use of automated market makers for FX trading and settlement with testing across the Swiss franc, euro and Singapore dollar.
mBridge continues post-pilot to advance real live transactions across 20 commercial banks in 4 jurisdictions.



The European Central Bank communicated its desire to focus on:

- Tokenization of securities leveraging a wholesale CBDC for securities settlement issued on DLT.
- Wholesale CBDC as a vehicle to enhance cross-border and cross-currency settlements.



The Central Bank of Brazil has invited firms to co-pilot its CBDC, the digital real. The pilot includes testing the buying and selling of federal public bonds by individuals.



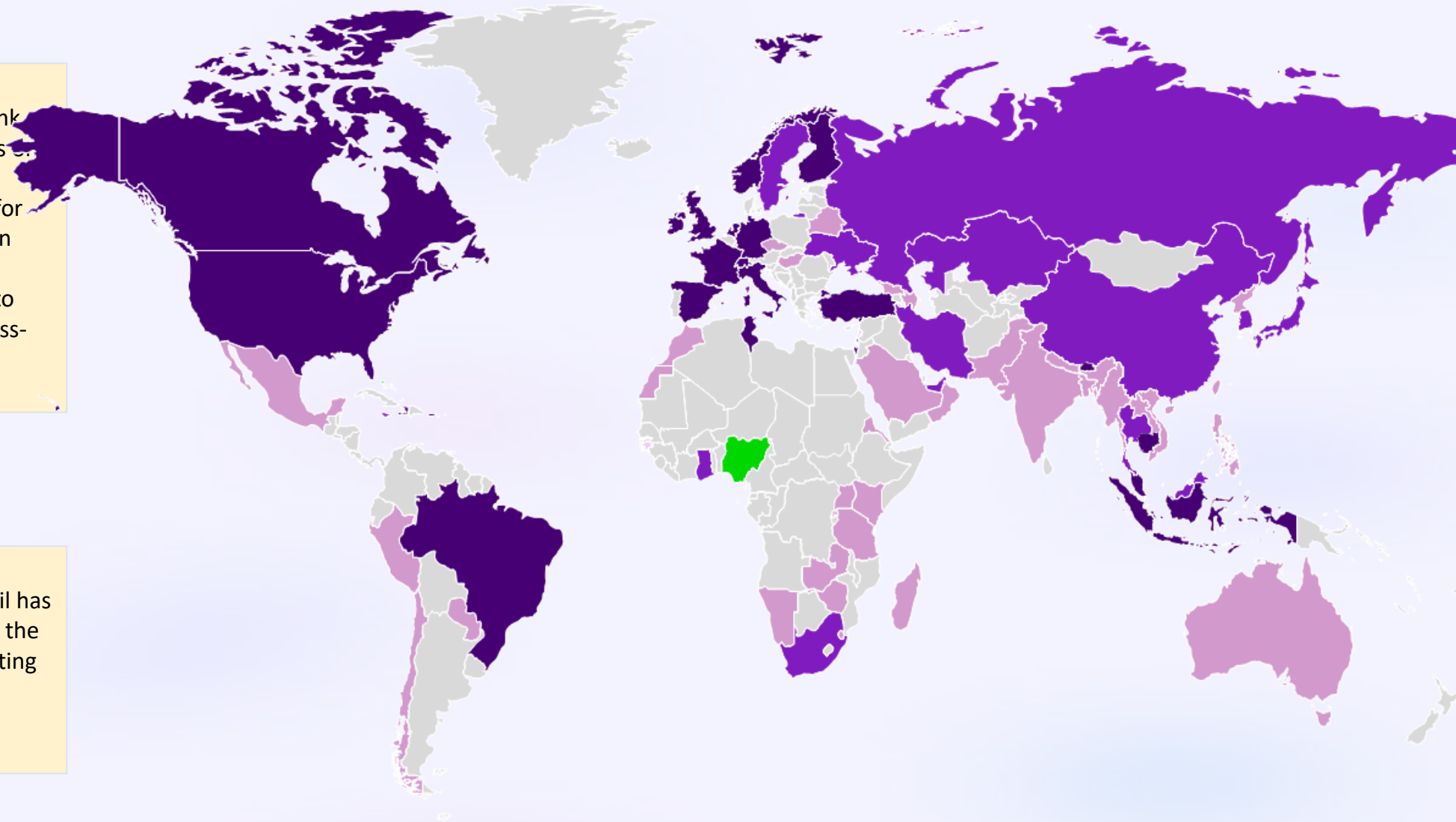
The Bank of Japan said its pilot will test the use of its CBDC and a forum will be set up with the private sector to discuss retail payments and related technology.



The Reserve Bank of India and the Central Bank of UAE started to collaborate on financial services innovation. The PoC and pilot focus on CBDC interoperability.



The Reserve Bank of Australia tested a series of use cases including offline payments, tokenized bills, interoperable CBDC for trusted Web3 commerce and liquid assets security trading.



Research Development Pilot / PoC Launched



What is the Digital Euro?

Digital Representation

The digital euro is a digital form of the euro, the official currency of the Eurozone. It is a central bank digital currency (CBDC), meaning it is issued and backed by the European Central Bank (ECB).

Electronic Transactions

It is designed to facilitate electronic payments and transactions within the Eurozone, offering an alternative to traditional methods like cash and bank transfers.

Privacy and Security

The digital euro prioritizes privacy and security, with robust measures to protect user data and prevent fraud.

Interoperability

It aims to be interoperable with existing payment systems and financial infrastructure, ensuring seamless integration into the Eurozone's financial ecosystem.



Why is the EU Pursuing a Digital Euro?

Innovation and Competitiveness

The EU aims to maintain its global financial leadership and stay ahead of the curve in digital innovation. The digital euro is expected to boost financial technology development and attract investment in the Eurozone.

Financial Inclusion

The digital euro aims to improve access to financial services for all, including those who are currently underserved by traditional banking systems.

Economic Efficiency

The digital euro is projected to streamline payments, reduce transaction costs, and enhance the efficiency of cross-border transactions within the Eurozone.



Key Features of the Digital Euro



- 1 Central Bank Issued**
The digital euro will be issued and backed by the European Central Bank (ECB), ensuring its stability and credibility.
- 2 Offline Functionality**
The digital euro will offer offline functionality, enabling transactions even in the absence of an internet connection.
- 3 Privacy and Security**
Robust security features will be implemented to protect user data and prevent unauthorized access.
- 4 Interoperability**
The digital euro will be designed to work seamlessly with existing payment systems and financial infrastructure.

Potential Benefits for European Citizens

1

Enhanced Convenience

The digital euro is expected to simplify everyday transactions, making it easier to pay for goods and services, send money to friends and family, and manage finances.

2

Increased Accessibility

It could provide greater financial inclusion, offering access to financial services for those who may be excluded from traditional banking systems.

3

Improved Security

Robust security measures built into the digital euro can help protect against fraud and cybercrime.

4

Greater Transparency

Transactions using the digital euro may be more transparent, providing greater visibility into the flow of funds.



Challenges and Risks of a Digital Euro

1

Privacy Concerns

Concerns exist about the potential impact of the digital euro on privacy, as authorities may have access to transaction data.

2

Financial Stability

The widespread adoption of the digital euro could pose challenges to the stability of the traditional banking system, potentially leading to disintermediation.

3

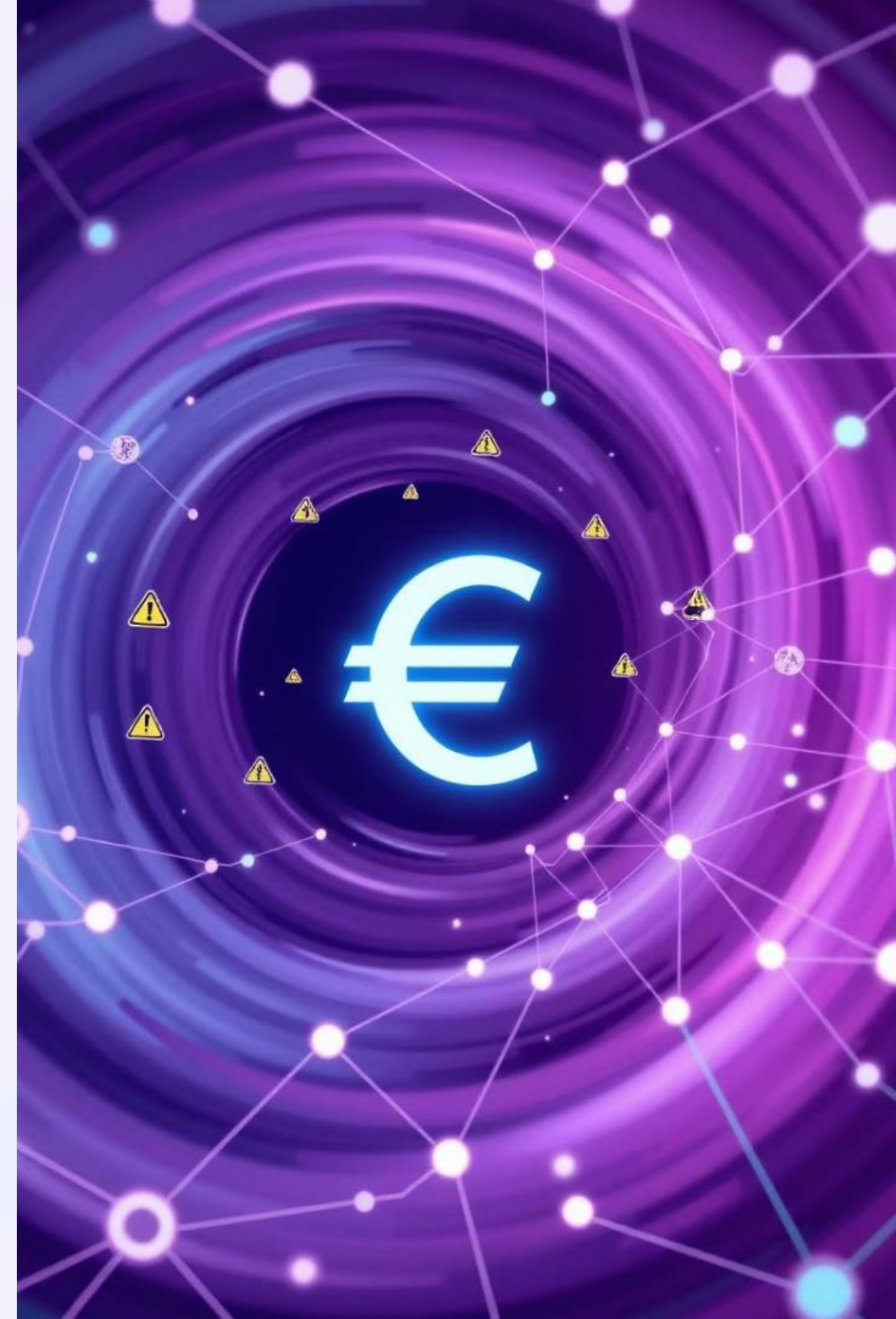
Cybersecurity Threats

The digital euro is vulnerable to cyberattacks, and robust security measures are essential to protect against potential threats.

4

Economic Impact

The introduction of the digital euro could have significant economic consequences, potentially affecting inflation, interest rates, and financial markets. The banking system also feels somehow vulnerable. The digital euro may affect, to a limited and manageable extent, the profitability of banks, especially the smaller ones, as commission income will be reduced.



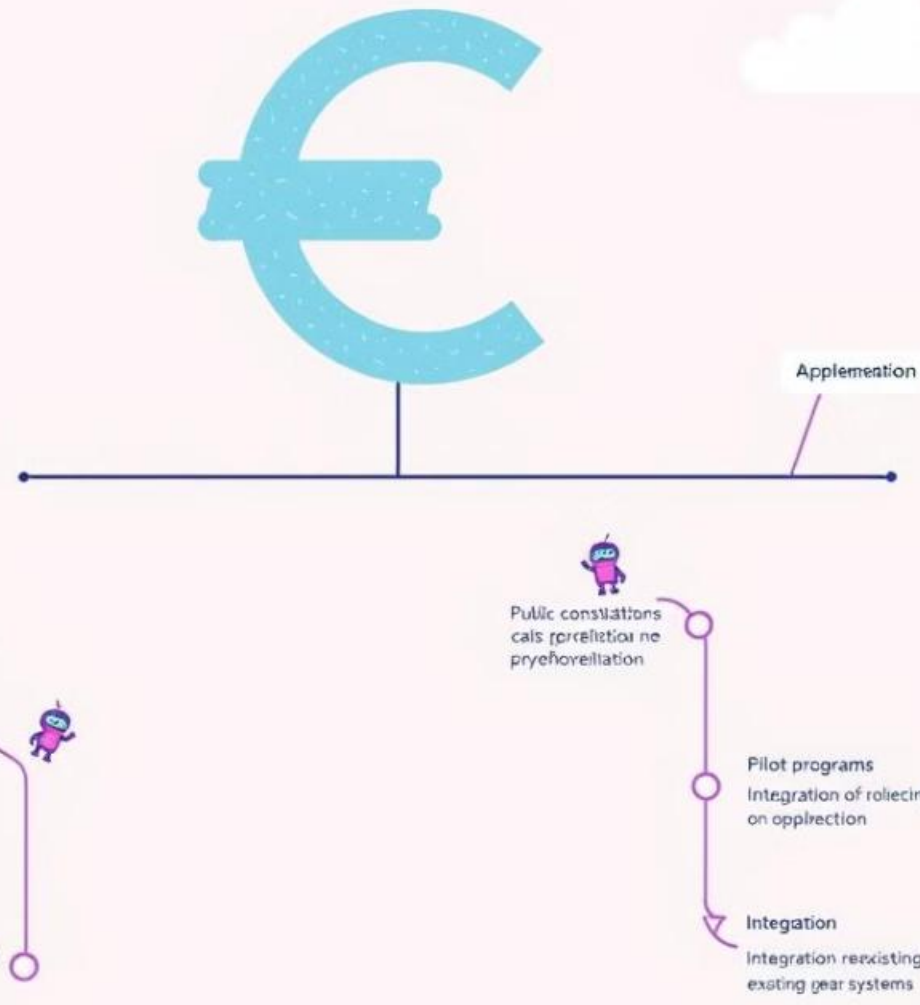


Regulatory and Policy Considerations

Issue	Considerations
Privacy Protection	Establishing robust data protection mechanisms and balancing privacy with transparency and security.
Financial Stability	Assessing the potential impact of the digital euro on the traditional banking system and taking measures to mitigate risks.
Anti-Money Laundering and Terrorism Financing	Developing effective measures to prevent the digital euro from being used for illicit activities.
International Cooperation	Collaborating with other countries and international organizations to ensure the seamless integration of the digital euro into the global financial system.



The Road Ahead: Adoption and Implementation



Extensive Research

The ECB is conducting in-depth research and analysis to inform the design and implementation of the digital euro.



Public Consultation

The ECB is engaging in public consultations to gather feedback and ensure the digital euro aligns with the needs of citizens and businesses.



Pilot Programs

Pilot programs are being developed to test the digital euro's functionality and gather real-world data.



Gradual Implementation

The digital euro is expected to be rolled out gradually, starting with limited functionalities and expanding over time.

Concluding: An ambitious path ahead

- A digital euro will make our money fit for the digital age following the footsteps of the architects of the euro.
- The digital euro will preserve people's freedom to choose between private and public forms of our single currency for their everyday payments.
- The digital euro will give us a digital means of payment that, like cash, unites us because it can be used by everyone, everywhere.
- It will strengthen our autonomy and resilience by relying on a European infrastructure and reducing our dependence on a handful of non-European providers.

