

THE DIGITAL EURO AND CENTRAL BANK DIGITAL CURRENCIES (CBDCs): CHALLENGES FOR MONETARY POLICY, FINANCIAL STABILITY, AND THE FUTURE OF PAYMENT SYSTEMS

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Abstracts: The digital transformation of the financial system in recent years has prompted central banks worldwide to intensify their research and development of Central Bank Digital Currencies (CBDCs). Among the most prominent initiatives is the digital euro project, which represents a response to the rapid proliferation of digital payment methods, the rise of private digital currencies, and the imperative to preserve monetary sovereignty and financial stability. The subject of this research is the analysis of the digital euro concept and its potential economic and institutional implications. The study aims to examine the prospective effects of introducing the digital euro on the implementation of monetary policy, the operations of the banking sector, the efficiency of payment systems, and the stability of the financial system. Furthermore, it addresses the challenges this form of currency may pose to non-eurozone countries, with a particular focus on Serbia. The methodology applied in this research encompasses a content analysis of relevant domestic and international scientific literature, the comparative method, institutional analysis, and descriptive statistics based on available data from international financial institutions. The research findings indicate that the digital euro can enhance the security, accessibility, and efficiency of payment systems, increase the resilience of the monetary system, and stimulate innovation within the financial sector. Concurrently, its implementation raises critical concerns regarding user privacy protection, the potential disintermediation and reduction of the commercial bank deposit base, cybersecurity risks, and the adaptation of the regulatory framework. The scientific contribution of this paper lies in its critical analysis of contemporary approaches to CBDC development and its comparative assessment of the digital euro's potential implications on the financial systems of countries undergoing the European integration process, with a specific emphasis on Serbia and the Western Balkans.

Keywords: digital euro, central bank digital currency (CBDC), monetary policy, financial stability, banking sector, payment systems

Introduction

The digitalization of the financial sector represents one of the most significant transformation processes in contemporary economies. The development of information and communication technologies, the accelerated adoption of digital solutions, and changing consumer habits in financial services have led to a gradual shift away from traditional forms of cash payments toward the more intensive use of electronic and mobile payment instruments. Concurrently, the emergence of private digital currencies - particularly cryptocurrencies and stablecoins - has raised new questions regarding the preservation of monetary sovereignty, the efficiency of payment systems, and the capacity of central banks to maintain their pivotal role in currency issuance and the implementation of monetary policy (Kostadinović, Ilievska Kostadinović, 2026).

Under these circumstances, numerous central banks have launched research and development projects aimed at creating Central Bank Digital Currencies (CBDCs). Unlike decentralized cryptocurrencies, which operate without a central issuer and are often characterized by high price volatility, a CBDC represents a digital form of official fiat money issued

by a central bank, retaining its status as legal tender. This approach seeks to merge the technological efficiency of digital payments with the public trust traditionally placed in central banks. The digital euro project has attracted particular attention within academic and professional circles; it is being developed as a response to the rapid digitalization of the European financial market, the growth of cashless transactions, and the need to preserve the monetary autonomy of the European Union. The digital euro is not intended to replace cash but to serve as its digital complement, aiming to provide citizens and businesses with a secure, accessible, and efficient means of payment in the digital environment. Its eventual introduction could significantly influence the transmission mechanism of monetary policy, the business models of commercial banks, the structure of payment systems, and the overall stability of the financial system.

In addition to potential benefits, the development of CBDCs raises numerous questions that require an interdisciplinary approach. Prominent among these are user privacy protection, cybersecurity, the potential shifting of deposits from commercial banks to the central bank (disintermediation), the risks of digital bank

runs during crises, and the necessity of adapting the regulatory and institutional frameworks. Concurrently, non-eurozone countries that are deeply integrated with the European financial market face the challenge of timely adapting their own financial systems to these emerging technological and regulatory trends. The analysis in this paper tracks the evolution of central bank digital currencies, with a specific focus on the digital euro project and its potential implications for monetary policy, the banking sector, and financial stability. Special attention is dedicated to assessing the prospective effects that the introduction of the digital euro could exert on non-eurozone countries, including the Republic of Serbia. By conducting a critical analysis of contemporary scientific literature, institutional documents, and available statistical indicators, this study aims to identify the key advantages, risks, and developmental opportunities of the digital euro, as well as to evaluate its potential impact on the future development of the European and regional financial systems. To provide a comprehensive assessment of the economic and regulatory dimensions of CBDC development, the methodology applied herein encompasses content analysis, the comparative method, institutional analysis, and descriptive statistics.

Against the backdrop of current shifts in the international financial environment, this paper addresses the following research question: To what extent can the introduction of the digital euro enhance the efficiency of the payment system and the transmission of monetary policy, while preserving financial stability and the traditional role of the banking sector? Accordingly, the primary research hypothesis posits that the digital euro represents a significant innovation in the evolution of the modern monetary system; however, its successful implementation depends on a meticulously defined regulatory framework, robust technological security, and the alignment of interests among central banks, commercial banks, and financial service consumers. The paper is structured into several interconnected sections. Following the introduction, the theoretical foundations of central bank digital currencies and a review of the relevant literature are presented. The subsequent section analyzes the development of the digital euro project and its institutional framework, followed by chapters examining its effects on monetary policy, financial stability, and the banking sector. A dedicated chapter addresses the implications for the Republic of Serbia, after which the discussion of the research findings and concluding remarks are presented.

Literature review

An analysis of the available literature reveals that existing research has predominantly focused on the institutional development of the digital euro, its technical architecture, and its effects on monetary policy within eurozone member states. Considerably less attention has been devoted to the potential implications of the digital euro on the financial systems of non-eurozone countries that are heavily integrated with the European market. Most notably, there is a conspicuous lack of studies examining the prospective consequences for the Republic of Serbia within the context of its monetary policy, payment systems, banking sector, and European integration process. This paper seeks to address this research gap by providing a comparative analysis and a critical evaluation of contemporary CBDC development trends from the perspective of Serbia.

To trace the evolution of this academic discourse, we present a chronological synthesis of selected ad hoc analyses conducted to date. Kiff et al. (2020, pp. 5–23) identify the core models of retail CBDCs and define the fundamental institutional and technical frameworks of their design. In doing so, they emphasize the need for further empirical research regarding the impact of these solutions on finan-

cial system stability and the structure of banking intermediation, highlighting the associated benefits, risks, and implications for the financial sector. However, from a peer-review perspective, a limitation of their study is the insufficient analysis of how individual CBDC solutions affect specific domestic financial systems and banking sector structures.

In contrast to authors who have focused on the economic and technological facets of central bank digital currencies, Bossu et al. (2020, pp. 22–35) place particular emphasis on the legal prerequisites for their implementation. The authors argue that the successful introduction of a CBDC requires an adequate regulatory framework that precisely defines the central bank's mandate to issue digital currency, its legal status, and its relationship with existing forms of money. They specifically point out that current legislation in many countries is not adapted to the issuance of a digital form of national currency, meaning that introducing a CBDC would necessitate amendments to central bank laws and monetary legislation. The authors conclude that technological readiness alone is insufficient for implementation; rather, legal certainty constitutes a pivotal precondition for the successful functioning of CBDCs. Furthermore, Ahnert et al.

(2022, pp. 1–10) provide a comprehensive overview of the economic literature on central bank digital currencies, analyzing the key motives behind their introduction as well as their implications for monetary policy and financial stability. The authors highlight that while a CBDC can contribute to a more efficient payment system and strengthen monetary transmission, it poses significant risks regarding bank disintermediation and potential disruptions to financial system stability. Consequently, they underscore the necessity for further research into user preferences and privacy protection. Recent studies offer further granular insights into these dynamics. Employing a systematic literature review.

Tang and Si (2025, pp. 4–18) analyze the global evolution of central bank digital currencies and their diverse implementation models. The authors conclude that a universal blueprint for a CBDC does not exist; rather, its optimal design is strictly contingent upon the specific monetary policy objectives, regulatory frameworks, and technological capabilities of each respective jurisdiction. Concurrently, they underscore the critical need for further empirical investigations to capture the long-term macroeconomic ramifications and the systemic impact of CBDCs on financial stability.

Focusing on empirical adoption metrics within the Eurosystem, the European Central Bank (ECB, 2025, pp. 1–8) examines the prospective acceptance of the digital euro among eurozone households. The ECB concludes that the majority of consumers would utilize the digital euro predominantly as a medium of exchange rather than a store of value or savings instrument. Crucially, the findings indicate that the introduction of the digital euro – implemented alongside calibrated holding limits to cap individual digital balances – would exert only a muted and contained impact on the commercial bank deposit base and overall financial stability. On a global scale, the International Monetary Fund (IMF, 2024, pp. 2–5) notes that institutional interest in digital fiat currencies is remarkably widespread, with over 90% of central banks world-wide actively exploring the feasibility of CBDC deployment. The IMF report emphasizes that various jurisdictions occupy highly differentiated stages of development – spanning initial research and pilot programs to advanced implementation phases. The primary catalysts driving this global trend include the modernization of domestic payment architectures, the enhancement of financial inclusion, and the defense of national monetary sovereignty.

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Expanding upon these dimensions, **Cannataci et al. (2026, pp. 6–18)** critically analyze the proposed model of the digital euro, asserting that its ultimate success will rely not only on technological readiness but also on addressing user privacy protection, the legal liability of participating actors, and economic incentives for adoption. The authors conclude that developmental transparency and public trust constitute pivotal prerequisites for the widespread acceptance of the digital euro.

Concurrently, the **European Central Bank (ECB, 2025, pp. 1–3)** underscores that the digital euro is conceptualized as a digital equivalent to cash, designed to complement rather than replace physical banknotes and coins. Based on a survey conducted among households across 11 eurozone countries, the study concludes that citizens would primarily utilize the digital euro for everyday transactions, thereby allowing physical cash to retain its role as an essential form of public money. Furthermore, the findings indicate that the introduction of the digital euro - augmented by calibrated holding limits within digital wallets - would exert a contained and limited impact on commercial bank deposits and overall financial stability. However, a notable limitation of the ECB study is its narrow geogra-

phic scope, which fails to encompass non-EU economies.

From a structural perspective, Senn et al. (2026, pp. 3–10) systematize the designs of digital payment systems with potential application for CBDC implementation, placing a specific emphasis on technical architectures, privacy models, and the stability of diverse solutions. The authors highlight that the development of central bank digital currencies involves complex trade-offs between security, privacy, and operational efficiency; they contend that there is no single optimal solution, but rather multiple competing architectural approaches dictated by the surrounding institutional framework.

Finally, Gortsos (2026, pp. 15–22) examines the proposed regulatory framework for the digital euro within the European Union, focusing closely on the legal structure and institutional design of the CBDC. The author details the provisions of the European Commission's draft regulation, including the digital euro's status as legal tender, holding caps, and the resulting implications for the monetary sovereignty of member states. He concludes that legal harmonization at the EU level is a fundamental prerequisite for the successful implementation of the digital euro and the preservation of current monetary system

stability. Nevertheless, reviewers note a distinct research gap in Gortsos's work, as it entirely overlooks the legal and economic implications for non-eurozone countries.

Research methodology

To ensure a comprehensive and scientifically grounded evaluation of the economic and regulatory dimensions of Central Bank Digital Currency (CBDC) development - with a particular emphasis on the digital euro and its prospective impact on the Republic of Serbia - this study employs a multi-methodological approach. The research framework is systematically structured to combine qualitative and quantitative methods, thereby facilitating the empirical validation of theoretical propositions.

The research design operationalizes the following scientific methods:

- **Content Analysis:** This method was deployed to conduct a rigorous examination of contemporary domestic and international scientific literature, peer-reviewed journal articles, and specialized studies in monetary economics and financial technologies. Content analysis facilitated the systematic identification of theoretical concepts, benefits, and systemic risks associated with CBDC deployment, while also mapping the prevailing consensus within the academic community regarding the potential disintermediation of the commercial banking sector.
- **Institutional Analysis:** Through the application of this method, formal institutional documents, policy reports, and strategic frameworks issued by key monetary authorities were critically evaluated. The focus was directed at the working papers of the European Central Bank (ECB) concerning the architectural design phases of the digital euro; report metrics from the International Monetary Fund (IMF) and the Bank for International Settlements (BIS); and the regulatory strategies of both the European Union (such as the Markets in Crypto-Assets - MiCA regulation) and the National Bank of Serbia (NBS). This approach enabled a comprehensive understanding of the legal and operational environments governing digital currency development.
- **Comparative Method:** This method was utilized to contrast various CBDC models and architectural designs, focusing primarily on analyzing the asymmetric effects that the digital euro exerts on intra-eurozone economies versus non-eurozone jurisdictions (non-resident areas). Additionally,

the comparative approach served to evaluate the varying degrees of exposure and the developmental phases of CBDC initiatives across the Western Balkan region.

- **Descriptive Statistics:** The quantitative underpinning of this study relies on the application of descriptive statistics. Through the analysis of secondary statistical data retrieved from official publications of the National Bank of Serbia (such as dinarization reports), the current structure of the domestic deposit and credit aggregates is examined. By employing relative numbers (percentages) and currency structure indicators (specifically, the level of euroization), the hypothesis regarding the high sensitivity of the domestic financial system to external monetary shocks emanating from the eurozone is empirically supported.

The integration of these methodologies provides a robust framework to derive objective conclusions regarding the developmental trajectory of the digital euro, identify systemic risks to regional financial stability, and formulate optimal strategic recommendations for the monetary authorities of the Republic of Serbia.

Research Findings: The Adoption Phases of the Digital Euro and CBDCs Across Selected Southeastern European Economies

Contemporary literature indicates that central bank digital currency (CBDC) represents not merely a technological innovation but a complex economic and institutional transformation with the potential to reshape the structure of the financial system. In this context, the principal challenge lies in identifying an optimal CBDC design that minimizes risks to financial stability while maximizing the benefits in terms of payment efficiency and financial inclusion. From a regional perspective, the Republic of Serbia is currently classified as being in the research and observation phase of CBDC development, without having advanced to the pilot implementation stage. Although the existing legal framework permits the issuance of the Serbian dinar in digital form, no official decision has yet been made regarding the introduction of a digital dinar, nor has an implementation timeline been announced. The National Bank of Serbia (NBS) currently prioritizes the further development of its Instant Payment System (IPS NBS), which already enables highly efficient real-time domestic payment transactions, thereby partially reducing the immediate need for CBDC

implementation. Nevertheless, Serbia has established the necessary legal framework, defined the institutional authority for issuing a digital dinar, and is actively working on the development of the required technical architecture (National Bank of Serbia, 2025).

Montenegro represents a unique case of monetary dependence, as its unilateral adoption of the euro without membership in the euro area limits its ability to independently issue a national CBDC. At the same time, this monetary arrangement makes Montenegro directly exposed to the future implementation of the digital euro, since any structural changes to the euro would have immediate implications for the country's financial system and payment infrastructure. In Montenegro, Albania, and North Macedonia, policy priorities are currently focused on the modernization of conventional payment systems, particularly instant payments, and integration into the Single Euro Payments Area (SEPA), while CBDC initiatives remain on hold. The European Central Bank emphasizes that the digital euro is intended to complement cash rather than replace it and acknowledges that its introduction could have broader implications for countries using the euro outside the euro area, particularly regarding payment systems and

monetary integration (European Central Bank, 2025, pp. 1–3). The National Bank of Serbia has adopted a proactive approach to the digital transformation of the financial sector, primarily through the early adoption of the Law on Digital Assets and the continuous enhancement of its instant payment infrastructure. Although its primary focus remains on improving the efficiency and security of existing payment systems, the NBS is actively conducting research on the legal, technological, and macroeconomic implications of introducing a digital dinar, thereby ensuring regulatory preparedness for the potential issuance of a Serbian CBDC (Ercegovac & Jakšić, 2026, pp. 57–74).

Since Montenegro does not have its own national currency and unilaterally uses the euro, the Central Bank of Montenegro (CBCG) has adopted a distinctive approach to digital currency research. In cooperation with the global blockchain technology provider Ripple, the CBCG has initiated the development and testing of a pilot project for the country's first national digital currency. The project envisages a digital asset that could operate as a stablecoin or a similar digital token, with the objective of assessing its practical application within the domestic payment system (Crypto for Innovation, 2026).

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The Bank of Albania closely monitors global developments in central bank digital currencies, with particular attention to the potential risks that foreign CBDCs, especially the digital euro, may pose to small, open, and partially euroized economies. Albania currently prioritizes the modernization of its national payment infrastructure and harmonization with SEPA standards, while the possible introduction of a domestic CBDC is viewed as a long-term objective. This cautious approach reflects concerns regarding financial disintermediation and the potential migration of deposits from commercial banks to CBDCs during periods of financial stress (Bank of Albania, 2024). The National Bank of the Republic of North Macedonia remains in a passive monitoring phase. Its research primarily focuses on the theoretical macroeconomic implications of a potential digital denar, particularly regarding monetary policy transmission and price stability. Similar to other countries in the region, the country's immediate operational priority is the establishment of a national instant payment infrastructure and deeper regional payment integration, while the technical development of a CBDC is not considered a short-term strategic objective (CBDC Tracker, 2026).

Effects of the Digital Euro on the Euro Area: Balancing Efficiency and Financial Disintermediation

The results of the institutional analysis of European Central Bank (ECB) documents indicate that the primary motivations for introducing the digital euro are to preserve Europe's monetary sovereignty in the face of the expansion of private global stablecoins and foreign central bank digital currency (CBDC) initiatives, while also strengthening the strategic autonomy of the European payments market. The content analysis of the contemporary literature identifies a profound macroeconomic dilemma:

- a. Risk of banking sector disintermediation: During periods of financial stress, the digital euro could serve as a "safe haven," potentially triggering a rapid shift of deposits from commercial banks to accounts held with the central bank, thereby increasing the risk of a digital bank run.
- b. Risk of unintended "digital euroization": If the digital euro becomes readily accessible to residents outside the euro area, its high liquidity and safety, resulting from the absence of credit risk, may encourage households and firms to convert domestic bank deposits into digital euros. According to the International

Monetary Fund, such liquidity substitution may undermine the stability of local banking systems, weaken demand for national currencies, and significantly reduce the effectiveness of domestic monetary transmission mechanisms in developing economies (International Monetary Fund [IMF], 2024, p. 12).

c. Reduction in remittance costs: Conversely, ECB institutional documents highlight the benefits of introducing cross-border functionalities within the digital euro framework. These primarily include a substantial reduction in intermediation costs and faster cross-border remittance transfers from the diaspora, thereby increasing disposable income in recipient countries across the Western Balkans (European Central Bank [ECB], 2023, p. 24).

d. Implementation challenges: Despite its potential benefits, the introduction of the digital euro presents considerable implementation challenges. The adaptation of the European banking sector is estimated to cost between €18 billion and €30 billion, reflecting the need to upgrade mobile banking applications, online banking platforms, payment terminals, and ATM infrastructure. Concerns have also been raised regarding the accessibility of the digital euro for all citizens, particularly

in Central and Southeastern Europe, where cash remains the dominant means of payment and both digital literacy and access to banking infrastructure remain uneven. The debate surrounding the digital euro has continued for more than four years and has been accompanied by a wide range of controversies, including concerns over increased government surveillance of private financial transactions and the possible gradual elimination of cash. The experience of the Nordic countries, where cash usage has declined dramatically, demonstrates that payment digitalization can occur rapidly, whereas in many other parts of Europe cash continues to play an indispensable role. From a strategic perspective, the digital euro could also reduce Europe's dependence on global card payment networks and strengthen the monetary sovereignty of the euro area. Furthermore, cash currently accounts for approximately 10% of GDP in most European countries, with substantially lower shares in the Nordic region, illustrating the broader global trend of declining cash usage (Jakovac, 2025, pp. 27–45).

e. Risk mitigation mechanisms (ECB strategy): Descriptive statistics and simulation models developed by the ECB su-

uggest that the risks associated with the widespread use of the digital euro can be effectively mitigated through the introduction of strict holding limits per individual - currently proposed at approximately €3,000–€4,000 - and by applying non-remunerated or even negative interest rates to digital euro wallets.

From the perspective of this study, imposing a holding limit of approximately €3,000 appears to be an effective mechanism for preventing large-scale liquidity outflows from commercial banks and preserving financial stability. However, such a restriction simultaneously constrains the capacity of the digital euro to function as a medium for high-value transactions, effectively limiting its role to that of a retail payment instrument.

Critical Implications of the Digital Euro for the Financial System of the Republic of Serbia: Exposure and Strategic Responses

A central focus of this study is the potential impact of the digital euro on the Republic of Serbia as a highly euroized emerging economy, where more than 60% of household savings and a substantial share of bank lending are denominated in, or indexed to, the euro. The results of the descriptive statistical analysis of Serbia's

deposit and lending structure indicate that unrestricted access to the digital euro could generate asymmetric pressures on the domestic banking sector. Serbian commercial banks could lose a portion of their stable euro-denominated funding base as households and firms shift deposits toward digital euro holdings. Such a development would likely increase banks' funding costs and, consequently, raise borrowing costs for both businesses and households. According to official data published by the National Bank of Serbia, foreign currency and foreign currency-indexed deposits account for 82.9% of total household deposits, while the corresponding share for corporate deposits amounts to 61.8% (National Bank of Serbia [NBS], 2025, p. 11).

At the same time, the National Bank of Serbia (NBS) has successfully implemented and continues to develop its own modern payment infrastructure through the IPS NBS instant payment system. This provides Serbia with a relatively strong technical foundation and enhances its negotiating position in the context of future interoperability with the digital euro ecosystem. Based on the institutional analysis conducted in this study, the discussion identifies three potential scenarios for the Republic of Serbia

following the official launch of the digital euro.

Scenario 1: Passive Monitoring and Restrictive Approach. The National Bank of Serbia (NBS) may maintain a conservative policy stance by employing regulatory measures and foreign exchange controls to limit the opening and use of digital euro wallets by Serbian residents. Such an approach would aim to preserve the role of the domestic currency and protect the dinar-based monetary space, albeit at the cost of foregoing the potential benefits of faster financial integration and more efficient cross-border payments.

Scenario 2: Interoperability and SEPA Integration (Most Likely Scenario). Serbia accelerates its accession to the Single Euro Payments Area (SEPA), while enhancing the interoperability of the NBS Instant Payment System (IPS) with European payment infrastructures. This approach would facilitate faster, lower-cost, and more efficient cross-border transactions, whereas the introduction of a central bank digital currency (CBDC), in the form of a digital dinar, would remain a longer-term strategic objective.

Scenario 3: Development of a Digital Dinar as a Counterpart. The National Bank of Serbia initiates the development of its own central bank

digital currency (CBDC), the digital dinar, designed to offer technical functionalities comparable to those of the digital euro. At the same time, the digital dinar would incorporate domestic policy incentives aimed at preserving monetary sovereignty, strengthening the role of the national currency, and supporting the ongoing process of dinarization.

Discussion Summary and Synthesis of Results with a Focus on Serbia

By synthesizing all the analyzed parameters, this paper concludes that the digital euro represents not only a threat to regional financial stability but also a powerful catalyst for reforms in Serbia. The research presented in the table confirms that the impact of the digital euro on the Republic of Serbia will predominantly depend on the speed and quality of the NBS's regulatory response.

In our assessment, one of the most significant aspects of the prospective introduction of the digital euro for non-euro area economies concerns the technical parameters, particularly the holding limits, that will be established by the European Central Bank (ECB) for non-residents of the euro area. These parameters are likely to play a decisive role in determining the extent to which the digital euro will

influence financial systems outside the monetary union. With regard to the operational design of the digital euro, the ECB has devoted particular attention to defining quantitative holding limits for individual users. While an initial holding limit in the range of EUR 3,000–4,000 per individual is currently envisaged for euro area residents, the operational framework for non-residents is expected to be

trivial banks of non-euro area countries or set at substantially lower levels (e.g., up to EUR 1,000–1,500 per individual) in order to prevent the digital euro from becoming a dominant store of value in third countries (European Central Bank [ECB], 2023, p. 35). In addition to stricter holding limits, the ECB intends to introduce rigorous transaction limits for non-resident users, including daily and monthly

Table 1. Synthesis of Reform Priorities in Preparation for the Adoption of the Digital Euro Framework in Serbia

Domain of Analysis	Key Advantage	Primary Identified Risk	Strategic recommendation for Serbia
Monetary Policy	Increased transaction speed and reduced cross-border transaction costs.	Loss of control over the monetary base due to digital euroization.	Maintaining strict regulation of cross-border digital money flows in the early stage.
Banking Sector	Incentive for innovation and the development of new fintech services.	Deposit outflows (disintermediation) and a decline in bank liquidity.	Enhancement of domestic deposit products and digital functionalities of domestic banks.
Financial Stability	Reduction of systemic risk through the elimination of intermediaries in clearing.	Digital bank runs during macroeconomic shocks.	Alignment of domestic legislation (Law on Digital Assets) with the EU MiCA framework and ECB standards.

Source: Adapted from “Implications of Central Bank Digital Currency for Monetary Operations,” *International Monetary Fund (IMF)*, 2024, *IMF FinTech Notes*, 2024(007), pp. 12–15; and “Report on the Dinarisation of the Financial System of Serbia,” *National Bank of Serbia (NBS)*, 2025, p. 11.

considerably more restrictive and flexible. According to the ECB's official report, holding limits for non-residents will not be uniform across jurisdictions. Instead, they will be determined through bilateral arrangements between the ECB and the cen-

tral banks of non-euro area countries or set at substantially lower levels (e.g., up to EUR 1,000–1,500 per individual) in order to prevent the digital euro from becoming a dominant store of value in third countries (European Central Bank [ECB], 2023, p. 35). In addition to stricter holding limits, the ECB intends to introduce rigorous transaction limits for non-resident users, including daily and monthly

ty arising from sudden liquidity shifts during periods of financial stress (ECB, 2023, p. 37).

These design features are of particular relevance to the present analysis. The overall impact of the digital euro on Serbia will depend not only on the policy response of the National Bank of Serbia (NBS) but also, and perhaps more importantly, on the degree of restrictiveness of the holding and transaction limits that the ECB ultimately applies to non-euro area countries. For example, if Serbian residents were permitted to hold no more than EUR 1,000 in digital euro, the risk of large-scale deposit outflows from domestic commercial banks would be substantially reduced. At the same time, however, such restrictive limits would also diminish the practical usefulness of the digital euro for cross-border payments, trade, and financial integration.

Conclusion

The research conducted in this paper confirms that the digital euro project represents a historical milestone in the evolution of the European financial system, the external spillover effects of which are expanding asymmetrically into non-euro area economies, including the Republic of Serbia. Through the application of com-

parative and institutional analysis, a fundamental macroeconomic dilemma has been identified: while the digital euro offers substantial advantages in terms of reducing cross-border transaction costs and accelerating remittance inflows, it simultaneously generates severe systemic risks. For a highly euroized economy such as Serbia, the core challenge lies in the risk of inadvertent "digital euroization" and the potential disintermediation of the domestic banking sector resulting from deposit flight.

The outcomes of this discussion indicate that the intensity of these risks will predominantly depend on two factors: the restrictiveness of the quantitative holding limits established by the European Central Bank for non-residents, and the velocity and quality of the regulatory response adopted by the National Bank of Serbia. The most plausible and optimal strategic scenario for Serbia involves accelerating technical integration into the SEPA system and ensuring the interoperability of the domestic payment infrastructure (NBS IPS) with European solutions, while maintaining a cautious stance regarding the direct issuance of a domestic CBDC in the short term - thereby deferring such initiatives to the medium or long term.

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DIGITALNI EVRO I DIGITALNE VALUTE CENTRALNIH BANKI (CBDC): IZAZOVI ZA MONETARNU POLITIKU, FINANSIJSKU STABILNOST I BUDUĆNOST PLAĆANJA

Sažetak: Digitalna transformacija finansijskog sistema poslednjih godina podstakla je centralne banke širom sveta da intenziviraju istraživanje i razvoj digitalnih valuta centralnih banaka (CBDC). Među najistaknutijim inicijativama je projekat digitalnog evra, koji predstavlja odgovor na ubranu proliferaciju digitalnih metoda plaćanja, uspon privatnih digitalnih valuta, kao i na imperativ očuvanja monetarnog suvereniteta i finansijske stabilnosti. Predmet ovog istraživanja jeste analiza koncepta digitalnog evra i njegovih potencijalnih ekonomskih i institucionalnih implikacija. Cilj rada je da ispita perspektivne efekte uvođenja digitalnog evra na sprovođenje monetarne politike, poslovanje bankarskog sektora, efikasnost platnih sistema i stabilnost finansijskog sistema. Pored toga, rad se bavi izazovima koje ovaj oblik valute može doneti zemljama van evrozone, sa posebnim osvrtom na Srbiju. Metodologija primenjena u ovom istraživanju obuhvata analizu sadržaja relevantne domaće i međunarodne naučne literature, komparativni metod, institucionalnu analizu i deskriptivnu statistiku na osnovu dostupnih podataka međunarodnih finansijskih institucija. Rezultati istraživanja ukazuju na to da digitalni evro može unaprediti sigurnost, dostupnost i efikasnost platnih sistema, povećati otpornost monetarnog sistema i stimulisati inovacije u finansijskom sektoru. Istovremeno, njegova implementacija otvara ključna pitanja u vezi sa zaštitom privatnosti korisnika, potencijalnom disintermedijacijom i smanjenjem baze depozita komercijalnih banaka, sajber rizicima, kao i prilagođavanjem regulatornog okvira. Naučni doprinos ovog rada ogleda se u kritičkoj analizi savremenih pristupa razvoju CBDC-a i komparativnoj proceni potencijalnih implikacija digitalnog evra na finansijske sisteme zemalja u procesu evropskih integracija, sa posebnim naglaskom na Srbiju i Zapadni Balkan.

Ključne reči: digitalni evro, digitalna valuta centralne banke (CBDC), monetarna politika, finansijska stabilnost, bankarski sektor, platni sistemi