# **WORLD EXPERIENCE OF DIGITAL DEVELOPMENT: PROBLEMS OF FINANCIAL SUBJECTIVITY** IN THE CONTEXT OF UKRAINIAN REALITIES

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## Kornivska V. O. World Experience of Digital Development: Problems of Financial Subjectivity in the Context of Ukrainian Realities

The aim of the article is to characterize the concept of financial subjectivity in the context of ensuring the reconstructive process, identifying the leading directions of digital financial development of Ukraine and determining their impact on the reconstructive process, as well as systematizing the world experience of digital financial transformations. To achieve the aim, the concept of financial subjectivity as the ability to exercise one's financial freedom, which is a contradictory unity of independence and dependence on the inner essence of the decision-maker, has been substantiated. Taking into account the consideration that the implementation of financial subjectivity at the State level provides for the dominance of national priorities, it is shown that the intensification of digital development of the financial sector of our country has led to the formation of trends in which financial institutions will create significant risks for the reconstruction process and development of financial subjectivity. It is substantiated how digital lending, the dominant of non-cash circulation and the introduction of the central bank's digital currency will level financial subjectivity, gradually excluding it from economic communication. At the same time, the European example of digital financial transformations is shown and its effectiveness in the context of harmonization of digital and non-digital development is substantiated. The ways to optimize the digital development of the financial sector of Ukraine are identified, the need to limit the influence of world financial regulators and prevent the experimental nature of the introduction of the central bank's digital currency is shown.

Keywords: digital financial transformations, financial subjectivity, reconstructive development, cashless economy, digital currencies of central banks. Bibl.: 24.

Kornivska Valeriia O. - D. Sc. (Economics), Senior Research Fellow of the Department of Economic Theory, Institute for Economics and Forecasting of NAS of Ukraine (26 Panasa Myrnoho Str., Kyiv, 01011, Ukraine)

E-mail: vkornivska@ukr.net

ORCID: https://orcid.org/0000-0002-0348-0404

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## Корнівська В. О. Світовий досвід цифрового розвитку: проблеми фінансової суб'єктності в контексті українських реалій

Метою статті є характеристика поняття фінансової суб'єктності в контексті забезпечення реконструктивного процесу, виявлення провідних напрямків цифрового фінансового розвитку України та визначення їхнього впливу на реконструктивний процес, а також систематизація світового досвіду цифрових фінансових трансформацій. Для досягнення мети було обґрунтовано поняття фінансової суб'єктності як спроможності реалізовувати свою фінансову свободу, що є суперечливою єдністю незалежності та залежності від внутрішньої сутності суб'єкта, що приймає рішення. Зважаючи на те, що реалізація фінансової суб'єктності на рівні держави передбачає домінанту національних пріоритетів, показано, що активізація цифрового розвитку фінансового сектора нашої країни зумовила формування тенденцій, за яких фінансові установи створюватимуть істотні ризики для реконструктивного процесу та розвитку фінансової суб'єктності. Обґрунтовано, яким чином цифрове кредитування, домінанта безготівкового обігу та впровадження цифрової валюти центрального банку нівелюватимуть фінансову суб'єктність, поступово виключаючи її із економічної комунікації. Водночас показано європейський приклад цифрових фінансових трансформацій та обґрунтовано його ефективність у контексті гармонізації цифрового та нецифрового розвитку. Визначено шляхи оптимізації цифрового розвитку фінансового сектора України, показано необхідність обмеження впливу світових фінансових регуляторів та недопущення експериментального характеру впровадження цифрової валюти центрального банку.

Ключові слова: цифрові фінансові трансформації, фінансова суб'єктність, реконструктивний розвиток, безготівкова економіка, цифрові валюти центральних банків.

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Корнівська Валерія Олегівна— доктор економічних наук, старший науковий співробітник відділу економічної теорії, Інститут економіки та прогнозування НАН України (вул. Панаса Мирного, 26, Київ, 01011, Україна)

E-mail: vkornivska@ukr.net

ORCID: https://orcid.org/0000-0002-0348-0404

igital finance has radically transformed the financial space and its purpose, turning it from an environment for mediating economic activity into a much more influential system - now it is an arena for the introduction of digital socio-institutional innovations, the development of patterns of financial behavior, the inculcation of digital culture, and the reformatting of financial subjectivity.

Digital financial technologies create better financial conditions by offering more choice and increasing the efficiency of operations, reducing transaction costs, providing cross-border financial access, and increasing the speed of economic activity.

Digital finance is as convenient as possible, and this is also its main drawback, because in pursuit of financial mobility, we often accept the loss of financial subjectivity **EKOHOMIKA** 

and delegate the authority to make economic decisions to algorithms. In this way, the space for economic freedom and responsibility is narrowing, while the growing competition in the digital finance environment is encouraging operators to implement innovations that reinforce these trends.

Topical problems of increasing risks of leveling financial subjectivity in digital development are exacerbated in the context of ongoing global destabilization caused by world-wide transformation processes. The latter have created a special ambivalent, unstable socioeconomic environment with a high level of uncertainty and asymmetry. Financial, economic, humanitarian crises and open political confrontations are becoming a sign of the modern transformation period. The war in Ukraine has shown that the contradictions of the global political process, complicated by economic and ideological conflicts, are exacerbated, demonstrating the further development of financial contradictions.

One of their most complicated forms in Ukrainian financial and institutional coordinates is the problem of financial subjectivity, which is deepened today in the context of significant financial exhaustion of our country caused by the war against the background of its dependence on the global reconstructive support.

Therefore, the global problems of leveling financial subjectivity, which have a technological etiology, are tightly intertwined with the problems of the growing financial dependence of our country and the lack of independence of the financial development, including the digital.

The issue of subjectivity, as the ability to be a subject, to initiate and implement various types of activities, is widely described in modern psychology, this is one of the key characteristics of personality development [1]. Having its origins in the individual development of each person, passing through the stages of both the logical and historical evolution, subjectivity is embodied in the civilizational development of countries. The issues of civilizational subjectivity, geopolitical, geoeconomic, international legal subjectivity have been carefully studied by the team of authors of the I. F. Kuras Institute of Political and Ethnic Studies of the National Academy of Sciences of Ukraine [2].

ubjectivity is realized at different levels of economic activity, can take different forms, at the State level it can be realized as the State subjectivity, which can be transformed under the influence of endogenous and exogenous factors, degraded or elevated under the conditions of extraordinary events for countries and their citizens. Today, the problem of subjectivity in the works of Ukrainian scholars has a special context, as it is considered through the prism of the war-induced destabilization and post-war reconstruction. A. Hrytsenko [3; 4] proves the need for nationally rooted economic development; V. Nebrat [5], among the historical determinants of the success of post-war reconstruction, substantiates the

State subjectivity of countries; O. Yaremenko considers subjectivity in the context of the evolutionary potential of balanced localization of global socioeconomic development [6; 7]. A separate area of research on ensuring the economic development of our country in the conditions of martial law and post-war recovery should be the justification of financial subjectivity.

The *aim* of the article is to characterize the concept of financial subjectivity in the context of ensuring the reconstructive process, to show the leading directions of digital financial development of Ukraine and their impact on the reconstructive process, to systematize the world experience of the digital financial transformations.

he term financial subjectivity is defined by the author of this study on the basis of previous works [8–10], outlining the concepts of financial freedom, financial lack of freedom, and for the first time drew attention to the existence of financial subjectivity.

The problem of financial subjectivity (in the first approximation - as independence in making financial decisions) is always extant - it is a part of everyday economic activity. At the same time, in the current conditions of development of segregated services, it has taken a special form of imperceptible direction of the operational activity of service consumers by service providers. Today, bank customers, online shoppers, and users of various applications constantly transfer personal data to remote service providers. Any digital footprint today becomes the important data for direct marketing, for improving the provision of any services, for the formation of customer comfort. With exclusive information about the client's digital identity (the digital footprint left by the customer as a result of social and economic activity on the Internet), service providers offer the most individualized and effective consumer and loan solutions, developing the so-called direct marketing. At the same time, direct marketing is also a way to regulate the economic and social activity of customers. Today, for service providers, consumers are objects of influence. By agreeing to the services offered, or by delegating the authority to make financial decisions to service providers (because it is very convenient), consumers lose their subjectivity.

This is an important point that determines the depth of modern socio-institutional transformations. Consumers of services agree to lose part of their subjectivity, their original essence, in order to obtain maximum comfort in the economic space.

We define financial subjectivity as the ability to exercise one's financial freedom, which is a contradictory unity of independence (making decisions of an economic and social nature without financial participation and influence of other subjects) and dependence on the inner essence of the decision-making entity. «A sovereign decision must express the subject's own interests in accordance with its substance» [11]. This approach can be used both for a market entity and for the State. At that,

the internal essence of the subject is determined by the totality of its value attitudes, institutional restrictions and long-term status goals, which are an essential component of its socioeconomic sustainability, which ensures resistance towards external challenges.

The implementation of financial subjectivity at the State level implies the dominance of national priorities. The way to resolve the contradiction of financial subjectivity is to limit the obvious dominant influence of the supranational community on internal economic and social processes, which is possible only if national priorities are comprehended and a reconstructive model is built based on the recognition of Ukrainian institutional features and economic realities.

he economic realities of Ukrainian society testify to the continuing deterioration of the socioeconomic status of the Ukrainian population, the overcoming of which should become the cornerstone, the starting point in the formation of the foundations of the reconstructive model. The initial step in this context is to ensure the unconditional satisfaction of the primary needs of the population [12] as the basis of social stability, from which the goal-setting of economic activity, social, economic, and investment activity of market entities begins.

Under these conditions, the development of the financial sector should be aimed at restoring its classical economic purpose, which consists in its functioning as an environment for mediating economic activity, redistribution of financial resources to secure the savings of the population, accumulation of capital, investment activity, and reconstructive development.

At the same time, the intensification of the digital development of the financial sector of our country<sup>1</sup> has led to the formation of trends in which financial institutions will create significant risks for the reconstruction process. Today, the transformation of financial intermediation institutions from institutions of redistribution of financial resources into payment and loan agents continues, which is facilitated by digital development.

Digital transformations of the financial space are unfolding in Ukraine. According to many indicators, in particular, the development of digital banking, neo-banking, cryptocurrency transactions and their institutionalization, Ukraine is among the countries of avant-garde digital development; This played an important role in ensuring payment transactions during the first months of the war and helped not to provoke panic.

At the same time, today's Ukrainian regulators are exceedingly active on the digital path, and certain distortions are already felt, in particular, this concerns the promotion of the development of digital lending, the persistent promotion of the dominant non-cash circulation and the introduction of a central bank digital currency (CBDC). These areas of digital development are ensured through the introduction of technologies for the movement of liquidity and information that ignore financial subjectivity, make it unnecessary, and gradually exclude it from economic communication.

Thus, in the current conditions, the search in the field of digital lending is intensifying in Ukraine. Relevant conferences are held (with the participation of representatives of the supranational community), which consider the possibilities of developing digital finance in the conditions of wartime and post-war recovery. Their main message is the need to accelerate digital development and the use of digital financial services, in particular, loans [14].

₹ till, the experience of introducing digital lending in developing countries shows significant risks of in-Creasing the debt burden on households, reducing their current and future market opportunities [15]. With the growth of the debt burden, there is a reorientation of economic activity from development prospects to shortterm needs of monthly loan repayment. Decisions about economic activity and social existence become exclusively dependent on the financial institution that granted the loan. Moreover, studies show that in order to repay the loan, the population is in danger of reducing the consumption of food and basic necessities [15]. This means that when taking consumer loans, market actors are not aware of their true essence, which includes both social and economic status, but are led by their short-term desires imposed by advertising and direct marketing of financial institutions. Therefore, such loan decisions are non-independent and non-subjective.

The reality of the development of these risks in Ukraine is evidenced by the data of the Ukrainian Association of Fintech and Innovative Companies: one of the areas that, despite all the difficulties of the covid period and the state of war, has not given up its position, is consumer lending [16]. This is happening against the backdrop of falling real incomes of the population and a catastrophic increase in unemployment<sup>2</sup>. Under martial law, this is not only a path to financial destabilization, it can provoke a socio-humanitarian crisis.

The harmonization of the digital development of the financial sector today is closely related to the task of

<sup>&</sup>lt;sup>1</sup> The digital development of the financial sector of our country is not an independent phenomenon, it takes place with the active participation of world institutions that are the promoters and implementers of the digital transition in our country. E. g., see USAID, the National Bank of Ukraine, and the Independent Association of Banks of Ukraine Challenge FinTech Industry to Develop Technology for Benefit of Ukrainian Users of Financial Services. URL: https://bank.gov.ua/en/news/all/nbuusaid-ta-nabu-ogolosili-viklik-finteh-sektoru-schodo-rozrobki-tehnich-nih-rishen-dlya-ukrayinskih-koristuvachiv-finansovih-poslug [13].

<sup>&</sup>lt;sup>2</sup> According to the Center for Economic Strategy, the real incomes of Ukrainian citizens fell by about 21% from February to December 2022, while about a third of the working-age population was unemployed. See «Dzerkalo Tyzhnia» («The Week's Mirror»). URL: https://zn.ua/ukr/ECONOMICS/analitiki-porakhuvali-kilkist-bezrobitnikh-v-ukrajini-ta-padinnja-dokhodiv-naselennja-u-2022-rotsi.html [17].

maintaining financial subjectivity both at the level of economic entities and at the level of the country as a whole. To achieve this goal, it is necessary to use the principle of expediency as a basic principle for the development and implementation of digital innovations. This, in particular, applies to the prospects for the introduction of a completely cashless economy, which is convenient for management, especially for external management, but at the same time is inconvenient for market actors.

The revolutionary character of such transformations can play a detrimental role for our economy, since in conditions of instability, the advantage of liquidity is often triggered, which, in particular, is evidenced by the current increase in demand for cash. Therefore, it is extremely important to take into account national interests, the realities of martial law, the prospects for long-term post-war financial and economic instability, and the existing payment landscape.

In this context, special attention should be paid to the European experience of developing a cashless economy. European regulators have abandoned strict bureaucratic measures and are developing a differentiated payment space that includes both cashless and cash transactions. And the development of the cashless economy itself is seen as a long-term perspective that does not exclude non-digital alternatives.

he European experience of digital financial transformations is also indicative. With the growing competition, the EU is becoming more active in the field of digital financial transformations, at the same time they are characterized by a special approach to the needs of the end consumer and the harmonization of the digital and the non-digital financial worlds. The aim of creating a European digital financial space is to create a competitive financial market in the digital age that provides consumers with access to innovative financial products while ensuring consumer protection and financial stability.

The digital financial transition is seen as a component of the EU's economic recovery against the background of the ongoing socioeconomic destabilization of both the global and national etiology. It is believed that digital financial services can be a way to modernize the European economy and turn Europe into a global digital player. Digital finance is designed to open up new ways of financing for European companies, will play a key role in the implementation of the European Green Deal and the New Industrial Strategy for Europe [18].

The main message of the European Commission's activities on the processes of digital transition in the financial sector is the harmonization of the interests of consumers of financial services, financial institutions and the State. The norms of the digital financial space should be convenient for digital operators, safe for consumers, and not contradict long-term financial stability. By making the rules safer and more consumer-friendly, the Commission

aims to promote responsible innovation in the EU financial sector, while minimizing any potential investor risks, money laundering and cybercrime risks [18].

The second important point of the European Commission's strategy is the formation of an effective financial landscape by using synergies between innovative startups and well-known financial service providers. In this way, the interests of market participants are harmonized and unfair competition is restricted.

he formation of the European Digital Financial Space is developing *in the context of broad public consultations* that preceded the adoption of the Digital Financial Package by the European Commission in September 2020 and continue today. Since 2018, the European Parliament, the European Supervisory Authorities, and the European Commission have been working together. The European Commission has organized Digital Finance Outreach, a series of events with interested parties, which took place in the EU Member States and in Brussels in the spring of 2020; public consultations were also organized to gather feedback from a wide range of stakeholders.

The digital finance package consisted of: Digital Finance Strategies; Retail payment strategies; legislative proposals on crypto assets and digital resilience.

The Digital Finance Strategy (DSF) [19] is implemented according to the following scheme: formation of the European financial data space – new financing mechanisms for small and medium-sized enterprises – better financial products for consumers. In other words, in order to create a single digital financial space that provides opportunities to reduce transaction costs and obtain the most interesting financial services for the consumer, it is necessary to form a single financial data market. On the agenda of the CFS is to reduce the fragmentation of the digital single market, provide cross-border access to digital financial services, increasing the number and quality of Fintech startups through the use of artificial intelligence and blockchain technology.

The Retail Payments Strategy (RPS) aims to provide secure, fast and reliable payment services to European citizens and businesses in order to increase the security and convenience of e-commerce transactions and at physical retail outlets. The aim of the RPS is to create a fully integrated retail payment system in the EU, including instant cross-border payments to facilitate euro payments between the EU and other jurisdictions, facilitating the emergence of national and pan-European payment solutions. At the same time, the EU is constantly holding public consultations on the Retail Payments Strategy for Europe, initiated by the European Commission, to harmonize the payment sector and effectively combine different forms of payments (from cash to digital).

The European Commission's legislative proposals for crypto assets, proposed back in 2020, were approved by the European Parliament on April 20th, 2023. The new

general rules for the supervision and protection of consumer rights in relation to cryptocurrencies – Markets in Crypto assets (MiCA) – provide for the regulation of virtual assets in the EU, protecting users and investors in this area. The Commission is implementing a pilot «sandbox mode» for market infrastructures that intend to settle transactions with financial instruments in the form of crypto assets. The aim is to allow companies to test and learn more about how existing rules work in practice.

t should be recognized that the EU's digital financial space is being formed gradually, despite the growing global competition. Legislative innovations are preceded by lengthy consultations that unfold over the years, providing legislative and supervisory bodies with systematic information on the mood of market operators and consumers in an ever-changing environment to form a harmonious payment and financial landscape in general. The «sandbox mode» is a sign of special, permanent interaction between supervisory authorities, financial operators and consumers in the digital environment for prompt communication and understanding of the prospects and risks of the digital financial world. Solving the problem of systemic financial stability is based on the awareness of the need to create an established innovative financial space that provides safe and efficient financial services to consumers both digital and non-digital.

The current experience of pilot projects on central bank digital currency is also important for Ukraine. Central bank digital currencies (CBDCs) are still under development, and there are many doubts about the economic, political, and societal implications of these revolutionary transformations. Despite the presence of more than 200 systematic analytical studies by both representatives of monetary regulators and specialized world-class scientific institutions, CBDC does not look like an unambiguous priority in their conclusions. Rather, there is some uncertainty not only because CBDC will affect crossborder capital flows, financial stability, and international financial and economic relations, but also because it can be used to achieve any political goals, it is a tool that can significantly change the balance of power in the global economic arena by changing the payment landscape.

There are few implemented CBDC implementation projects. The Chinese precedent shows that the positive effects of the introduction of CBDC occur only under conditions of long-term, systematic, gradual, space-time limited implementation. The cornerstone of the effective introduction of CBDC into circulation is general economic and monetary stability, a high level of public confidence in the State. The inactivity of the cryptocurrency market also plays an important role (in China, operations with cryptocurrencies are outside the legal field, transactions are not carried out) [20].

It should be admitted that if any of these conditions are not met, then the result is the Nigerian version of digital monetary reforms, when the lack of a dominant na-

tional interest, distrust of weak state institutions against the background of economic and monetary instability led to the refusal of subjects to use a new means of payment. In the Nigerian economy, the introduction of CBDC was a monetary experiment conducted under the leadership of the IMF, and was obviously non-self-sustaining, caused by the country's financial dependence. The investment process, which was to begin under the auspices of the World Economic Forum, required economic transparency, which was sought to be achieved through the introduction of CBDC. This practice has not yielded the expected results, even when, in response to the reluctance of the population to use CBDC, the central bank of Nigeria restricted cash transactions in January 2023 [21].

his caused a socioeconomic destabilization and a humanitarian crisis, and a working paper published in May 2023 by the International Monetary Fund concluded that Nigeria's central bank digital currency had a «disappointingly low» acceptance among the public [22]. Externally imposed reforms had collided with the country's institutional peculiarities. Countries with a low level of financial personality and a high level of financial dependence often become hostages of someone else's will.

In modern conditions, it is very important to take a civic position to understand and defend one's own interests regarding digital financial development. Thus, in the fall of 2023, a civil action was held in Slovenia to amend the legislation to protect cash as legal tender. By taking part in the action, the citizens of the country defended their right to use cash, which was succinctly formulated in the following argument: «I want to continue to pay in cash. I want to be independent of banks. I don't want others to control my payments». The initiators of the action demanded that the Government and the National Assembly immediately recognize this right and include it in the Constitution of the Republic of Slovenia, as it is key to freedom and confidentiality in trade and legal relations [23]. The precedent of Slovenia demonstrates that the socio-institutional space will not remain neutral in the process of digital transition, and obvious attacks on cash will receive appropriate reflection from the population.

In addition, it is worth taking into account the position of the world's leading countries' central banks. Recent research from the Bank of England (2022) shows that the value of banknotes in circulation remains high even two years after the pandemic, approaching an all-time high; 60% of the population holds cash as a store of value, which confirms its fundamental role. At that, the position of the Bank of England is unequivocal: «We meet the public's demand for cash by producing high-quality, durable and secure banknotes. We remain committed to this, and, together with other UK authorities, are taking action to protect cash.» [24].

## **CONCLUSIONS**

In order to optimize the digital development of Ukraine's financial sector, it is necessary to: 1) postpone the creation of a completely cashless economy and consolidate cash as an important component of the payment space; 2) control over the development of digital lending; 3) substantiation of the long-term, planned, and gradual nature of digital reforms in the monetary sphere. The e-hryvnia conception requires: 1) determining the general economic and monetary conditions for the introduction of CBDC (the digitization of the national currency will have positive effects only if it is stable, has a high level of confidence in the central bank's monetary policy and the government's recovery policy); 2) declaring national priorities for the implementation of CBDCs, limiting the influence of global financial regulators and preventing the experimental nature of introduction.

The main principle of CBDC introduction should be aimed at supporting market actors, rather than introducing restrictive measures to create a transparent economic environment convenient for financial monitoring.

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# УПРОВАДЖЕННЯ ЦИФРОВОЇ ВАЛЮТИ ЦЕНТРАЛЬНОГО БАНКУ В УКРАЇНІ: АНАЛІЗ І ПЕРСПЕКТИВИ

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### Маслов Д. С. Упровадження цифрової валюти центрального банку в Україні: аналіз і перспективи

Метою статті є аналіз перспектив упровадження цифрової валюти центрального банку в українській економіці. Е-гривня може стати альтернативою традиційним інструментам платіжних операцій, забезпечуючи простішу, захищенішу та надійнішу можливість здійснювати оплати за послуги, товари та різноманітні транзакції. У статті розглядаються питання впровадження е-гривні як цифрової валюти центрального банку в Україні. Розглянуті питання пов'язані з економічною сутністю е-гривні, досліджено еволюцію форм грошей, виділено основні характеристики цифрової валюти центрального банку, оцінено стан платіжної інфраструктури в Україні та можливості її використання для впровадження е-гривні. На основі проведеного аналізу зроблено такі висновки щодо перспектив упровадження е-гривні в Україні. Інфраструктура для безготівкових розрахунків в Україні добре розвинена. У країні діє велика кількість засобів для операцій з платіжними картками, зокрема платіжні термінали в торговельній та сервісній мережах. У сусідніх Польщі та Румунії є більша кількість терміналів у розрахунку на 100 осіб, водночас в Україні більша частка безготівкових платежів порівняно з даними країнами. І обсяг цих безготівкових операцій постійно зростає. Це пояснюється тим, що в Україні добре розвинуто інфраструктуру для платежів з картки на картку, що не потребує додаткового обладнання для операцій з платіжними картками. Порівняно меншу кількість засобів для операцій з платіжними картками можна не вважати показником менш розвиненої платіжної інфраструктури. В Україні спостерігається зростання кількості безконтактних карток і токенізованих карток. Враховуючи дані фактори, можна зробити висновок про те, що платіжна інфраструктура є досить розвиненою для впровадження цифрової валюти центрального банку, якою буде е-гривня. Впровадження е-гривні в Україні є реалістичним і може мати позитивний вплив на розвиток економіки та фінансової системи України.

Ключові слова: е-гривня, цифрова валюта центрального банку, цифрова валюта, платіжна система, цифровізація, гривня.

**Рис.:** 10. Бібл.: 17.

**Маслов Дмитро Сергійович** — кандидат економічних наук, старший науковий співробітник відділу розвитку підприємництва, Інститут проблем ринку та економіко-екологічних досліджень НАН України (Французький бульвар, 29, Одеса, 65044, Україна)

E-mail: dmitrymaslov@ukr.net

**ORCID:** https://orcid.org/0000-0002-1721-8319

Researcher ID: https://www.webofscience.com/wos/author/record/E-7081-2014

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#### Maslov D. S. Introduction of the Central Bank's Digital Currency in Ukraine: Analysis and Prospects

The aim of the article is to analyze the prospects for the introduction of the central bank's digital currency in the Ukrainian economy. The e-hryvnia can become an alternative to traditional payment transaction instruments, providing a simpler, more secure, and more reliable ability to make payments for services, goods, and various transactions. The article discusses the introduction of the e-hryvnia as a digital currency of the central bank in Ukraine. The issues related to the