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Innovative Financial Technologies and their Role in Ensuring Basic Income Payments and Social Stability

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ABSTRACT

This paper examines the impact of innovative financial technologies on social stability and the possibility of implementing basic guaranteed income (UBI, BGI) as one of the most important elements of social policy in the digital transformation of the economy. Modern financial technologies such as blockchain, digital currencies, artificial intelligence and biometrics are becoming powerful tools for implementing the concept of basic income and improving social protection mechanisms, ensuring transparency, accessibility and efficiency of social benefits distribution.

One of the key aspects of the article is to explore the potential of digital currencies, including innovative forms such as social digital currencies (SDC), to provide direct cash transfers to citizens, especially in the context of economic instability and global crises. Particular attention is paid to analysing the opportunities that digital platforms and cryptocurrencies offer for improving financial inclusion and ensuring equal access to basic social goods.

The author also considers the role of artificial intelligence in data analysis, which makes it possible to create personalised distribution models that take into account the individual needs and socio-economic status of citizens. The introduction of biometric technologies and blockchain systems for identity verification and monitoring of social payments provides new perspectives for combating fraud, improving social security.

In addition, attention is paid to the risks and challenges associated with the digitalisation of social benefits, such as data privacy issues, digital inequality and possible security threats. The article proposes an integrated approach to the regulation and standardisation of financial technologies to ensure fairness and efficiency of social programmes.

Thus, innovative financial technologies open new horizons for the creation of sustainable and equitable social protection systems aimed at improving the quality of life of citizens and fighting poverty. The article emphasises the importance of their integration into existing social policy mechanisms and in further developing the concept of basic income security as a means of ensuring economic security and social justice in the future.

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KEYWORDS: social digital currency (SDC), basic guaranteed income (UBI, BGI), financial technology, digitalisation of social support, digital currencies, blockchain, inclusion and digital economy, personalised social payments.

INTRODUCTION

In recent years, the global economy has been undergoing a period of significant change due to the digitalisation of all spheres of life. One of the most visible and promising trends is the imminent introduction of digital currencies, in particular social digital currencies (SDC), which will form the basis of new approaches in finance and social policy. In a context of growing inequality, economic instability and global crises, such innovations offer potential solutions for ensuring effective social security and realising the idea of **basic guaranteed income (BGI, BGI, UBI).**

Basic income security is a concept in which the state or international non-governmental organisations pay citizens a certain amount of money that provides a minimum level of welfare. This model is gaining ground as a tool to fight poverty and social injustice, especially in a rapidly changing labour market where many occupations are disappearing or becoming automated. However, successful implementation

of the GCO requires ways and mechanisms that can ensure that such payments are transparent, accessible and effective.

One such mechanism is a social digital currency. This is a type of digital currency specifically designed to make social payments, subsidies and support to citizens. The use of digital currencies in social programmes allows for a high degree of transparency and minimises fraud risks, as well as making the process of receiving payments faster and more convenient for citizens. Central bank digital currencies (CBDCs) and cryptocurrencies can serve as effective support tools for converting social digital currencies into national digital currencies due to their speed, low cost and accessibility.

Particular attention should be paid to how social digital currencies can be integrated into existing social protection systems, providing not only transactional transparency but also a personalised approach to the distribution of social benefits. The introduction of new financial instruments and technologies makes it possible to more accurately take into account the needs of citizens, respond more quickly to changes in their social situation and, ultimately, create a system of guaranteed social security accessible to everyone.

MATERIALS AND METHODS

In the process of preparing the paper, articles and monographs within the topic were analysed by both Russian and foreign authors, and a number of research methods were applied. The method of literature analysis allowed us to study and systematise existing scientific sources on the topic of basic guaranteed income, social digital currencies and innovative financial technologies, as well as to identify the main theoretical concepts, approaches and models that underlie the problem under consideration. By applying a systemic approach, the problem under study was presented in the context of a holistic system, including the economy, social policy, technology and social relations, and the interaction of various elements (digital currencies, social programmes, income distribution mechanisms) and their impact on social security and economic well-being was studied.

RESULTS AND DISCUSSION

In recent decades, the world has been experiencing profound changes in the field of economics due to digital transformation [1]. One of the most visible aspects of this process is innovative financial technologies such as blockchain, digital currencies, artificial intelligence (AI), biometrics, and the Internet of Things (IoT). These technologies are fundamentally changing approaches to financial transactions, social payments, and social protection systems [2]. Innovative financial technologies provide new opportunities for governments and organisations to allocate funds efficiently and transparently, increase financial inclusion and reduce administrative costs. They pave the way for the creation of more flexible and efficient social support systems that ensure equity and accessibility for all citizens.

Blockchain technology, artificial intelligence and mobile applications are emerging as major catalysts changing the traditional banking landscape [3]. Blockchain provides security and transparency of transactions, artificial intelligence improves customer service through predictive analytics, and mobile applications redefine accessibility by providing a seamless interface between customers and financial services.

A key aspect of the impact of financial technologies on banking services is their customer-centric transformation. In today's environment, a paradigm shift is taking place, with customer experience at the forefront. Mobile banking applications offer intuitive interfaces, personalised financial information and real-time transaction tracking. Integrating fintech innovations doesn't just improve the customer experience; it revolutionises operational processes, promoting unprecedented efficiency [4]. Blockchain-enabled smart contracts simplify transaction processes, reducing the need for intermediaries. Artificial intelligence automates routine tasks, reducing processing time and minimising errors. The cumulative effect is that the banking ecosystem is characterised by flexible operations and significant cost reductions [5].

In recent years, technologies such as blockchain, digital currencies, artificial intelligence (AI) and biometrics have been actively incorporated into financial and social programmes, opening up new opportunities to improve the distribution of social benefits, transparency and accessibility [6].

Blockchain, as a decentralised and secure accounting system, significantly improves the processes of registration and accounting of social payments. This technology provides maximum transparency, as all transactions are recorded in blocks that cannot be changed, thus eliminating corruption and fraud [7]. These innovative technologies are the basis for the introduction of the concept of basic guaranteed income (BGI). **Basic guaranteed income (BGI, BGI, UBI)** is a concept according to which every citizen is guaranteed a fixed amount of money, regardless of their labour status, income level or social status [8]. In the conditions of digital transformation of the economy and taking into account the development of innovative technologies, the BGI becomes more and more possible and effective tool of social policy. The implementation of BGI in the conditions of digital transformation of the economy and with the use of innovative financial technologies has many advantages. BGI can significantly reduce poverty by ensuring a minimum standard of living for all citizens. Guaranteed income helps citizens to improve their situation and develop new skills without fear of being left without a livelihood.

The BGI provides citizens with stability and certainty, which can help increase consumer demand and

hence economic growth, as well as contribute to a more equitable distribution of wealth, reducing social inequality.

Innovative financial technologies have a significant impact on social security and the possibility of implementing basic income security [9]. These technologies open new horizons for the implementation of effective social programmes, providing transparency, **accessibility, personalisation and enhanced security.** The implementation of BGI, supported by digital currencies, blockchain and artificial intelligence, is an important step in the development of social policies aimed at reducing poverty and increasing social stability. However, several technological, social and economic challenges must be overcome to successfully implement these initiatives, including issues of data protection, technology accessibility and funding sustainability.

Digital currencies, including social digital currencies (SDCs) and central bank digital currencies (CBDC) and cryptocurrencies, have the ability to provide fast and inexpensive transfers of funds to citizens, which is an important element for the implementation of the BGI. Unlike traditional banking systems, digital currencies can speed up the payment process, minimise fees and increase accessibility for people who do not have access to traditional banking services. Digital currencies can thus provide more effective social assistance in the event of economic crises, natural disasters or other emergencies.

Artificial intelligence (AI) has great potential to improve social security. It is capable of processing and analysing large amounts of data, enabling the creation of personalised basic income distribution programmes tailored to the individual needs of citizens. AI can automatically track changes in an individual's socio-economic status and adapt payments in real time. This helps to ensure a more accurate and equitable distribution of funds, as well as improve the speed of decision-making.

Biometrics provides additional opportunities for identifying citizens in social programmes. Facial, fingerprint or iris recognition systems can be used to create reliable and secure identification mechanisms that significantly reduce the risk of fraud. Biometrics can speed up the process of receiving social benefits and ensure that funds reach the right citizens. This is particularly important in the context of ensuring inclusiveness and protecting citizens' rights, as it minimises the likelihood of errors in the system.

Digital currencies are becoming an important tool for implementing effective and affordable cash transfer systems for citizens, especially in the context of economic instability and global crises. In recent years, the challenges of economic uncertainty, financial crises, and growing global inequality have emphasised the need to rethink existing social protection mechanisms. Digital currencies have great potential to effectively address these challenges by providing faster, more transparent and accessible methods of distributing funds.

In times of economic instability, such as recession, high inflation or global crises, governments can use SDC to make rapid payments to citizens. For example, in economic crises or when restrictions are imposed, government agencies or organisations can instantly transfer aid to those in need through digital platforms, enabling quick and efficient responses. BGI can underpin the realisation of SDC by providing regular payments to citizens, ensuring a minimum level of welfare in the face of uncertainty.

Cryptocurrencies offer a decentralised approach to financial transactions. The use of cryptocurrencies for social payments can help address the problem of people who don't have access to banking services by enabling them to receive funds via mobile devices or specialised platforms. This is particularly relevant for developing countries where traditional financial infrastructure may be underdeveloped.

In global crises where traditional financial systems may fail, cryptocurrencies can provide alternative channels for remittances and help deliver aid to remote or unstable regions. Decentralised cryptocurrency mechanisms can ensure that funds arrive directly and without intermediaries, reducing the risk of corruption and delays in disbursements.

Digital platforms will play an important role in extending social benefits through social digital currencies. They will provide a user-friendly interface for citizens to receive assistance through mobile apps or online services and can integrate various financial technologies, including blockchain, to ensure transparency and security of transactions.

Digital infrastructure also enables the customisation of personalised social payment mechanisms, which ensures efficient and equitable distribution of resources to citizens.

The advantages of using digital currencies for social transfers are obvious: they provide fast and cheap transfers, can be scaled for mass payments, offer a high degree of security and transparency, and can significantly reduce the costs associated with traditional social support mechanisms. In the context of global economic crises, digital currencies can be a key tool to respond quickly to changes in the situation and provide the necessary financial support to citizens[10].

Social digital currency (SDC) and central bank digital currencies (CBDC) represent two critical areas in the digital transformation of the financial system that play an important role in social protection and efficient resource allocation [11]. Although these concepts have similar elements, their purpose and implementation mechanisms may differ significantly, especially when it comes to application in social programmes and direct cash transfers to citizens.

One of the key aspects of using special social digital currencies (SDC), the issuance of which is strictly linked to a person's biometric ID for regular guaranteed social payments,

is financial inclusion. In countries with limited access to banking services or economic instability, the use of SDC will allow citizens to receive funds directly to mobile devices or through digital wallets, without having to go to a banking institution. For social digital currencies, this opens up new opportunities, especially for people in remote or socially disadvantaged areas where traditional banking services are either unavailable or poorly developed [12].

Through the use of CBDC, social digital currency (SDC) can be integrated with digital platforms that allow for the automation of aid distribution, providing a personalised approach to disbursements. This can be useful in times of economic instability, where the state needs to react quickly to changes in the social and economic situation. The use of digital currencies makes it possible to quickly adapt the amount of additional assistance to the monthly guaranteed payments depending on the needs of each individual citizen, for example, based on income, health, age or marital status.

A social digital currency cannot be limited in its purpose and is not only intended for regular guaranteed social payments, but can also be an instrument for providing interest-free loans. In this way, a social digital currency can work in conjunction with CBDC, but with additional features that provide a regular basic income to all people registered on the platform. For example, one of the models of social digital currencies - SDC BGICOIN, the issuance of which is linked to the number of registered people with personal IDs and which works in the format of a regular demurrage (commission on the balance of tokens on all accounts), allows providing guaranteed payments of a fixed amount in SDC to each person.

Overall, central bank digital currencies (CBDC) and social digital currency (SDC) are two complementary concepts that can significantly improve the efficiency and accessibility of social payments [13]. The simultaneous use of SDC and CBDC will allow for greater transparency, reduced administration costs and improved financial inclusion. At the same time, a social digital currency using these technologies provides additional opportunities for efficient distribution of funds, reducing the risks of fraud and bureaucracy.

Despite the obvious advantages, the use of social digital currency presents a number of challenges. Firstly, it requires the development of robust regulation to ensure the security and protection of citizens' personal data. Second, to successfully implement a social digital currency, it is necessary to address the digital divide by ensuring equal access to necessary technologies and Internet services for all citizens. In addition, it is important to create a system of protection against cyber threats to minimise the risks of theft and hacking.

Thus, the bundling of CBDC and social digital currency (SDC) could in the near future play an important role in modernising social protection systems and help ensure more equal and fair access to basic social benefits for citizens, especially in times of economic instability and global crises.

CONCLUSION

Innovative financial technologies such as blockchain, digital currencies, artificial intelligence and biometrics are playing a key role in transforming social protection systems and ensuring the physical realisation of the long-held humanist dream of basic garanteed income security (BGI, BGI, UBI) payments to all people without conditions or restrictions. These technologies offer new ways to distribute funds efficiently and transparently, thereby increasing social stability.

One of the most significant contributions of innovative technologies is the shift to digital social transfers. The use of digital currencies and CBDC (central bank digital currencies) allows for instant transfers, reducing waiting times for payments and providing greater accessibility for citizens, especially in times of economic crises. This improves financial inclusion and makes social transfers more accessible, even for people without traditional bank accounts.

Social digital currency (SDC), as a new form of currency specifically designed for social support of citizens, represents an important step in the evolution of social programmes. The introduction of such currencies can significantly improve the efficiency and transparency of disbursement, as well as reduce the risks of fraud and improper manipulation. The use of central bank digital currencies (CBDCs) in conjunction with social digital currencies (SDCs) as part of social transfers can provide the basis for more inclusive and accessible financial systems, especially in times of economic instability.

The main benefit of using CBDC and social digital currencies (SDC) is increased financial inclusion. By using blockchain technology, the process of distributing social payments can become more transparent and efficient. All transactions can be monitored in real time, which will ensure protection against corruption and misspending. Transparency of these transactions will increase citizens' trust in social assistance programmes and will help to increase the efficiency of use and grandiose budget savings.

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