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Prospects of Payment Ecosystem Formation in Uzbekistan

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Abstract: This article looks at the national payment system of the Central Bank's possible accomplishments and future prospects in the country's economy. Prospects for the advancement of banking procedures as well as enhancements to payment options and efficiency were taken into account. Additionally, it includes a range of strategic proposals for the Central Bank that include regulatory change, technological investment, and teamwork to position the bank as a major force behind financial stability and economic growth in determining the future course of the nation's payment system. comprised. The essay goes into great detail about the potential benefits of the national payment system as well as the challenges and opportunities the Central Bank has faced in creating a secure and cutting-edge financial infrastructure.

Keywords: National economy, banking activity, banking system, financial system, payment system, electronic payment, remote service, clearing system payment services.

INTRODUCTION.

The swift advancement of financial technology coupled with shifting global economic dynamics is forcing central banks worldwide to reconsider and enhance their domestic payment systems. Central banks play a crucial role in ensuring financial stability through their oversight of payment systems and their macro-financial perspective [1,2,3]. The evolution of payment systems has significantly impacted central banks, influencing their roles as operators, oversight authorities, and catalysts within national payment systems [4,5,6].

The emergence of central bank digital currencies (CBDCs) and stablecoins has further emphasized the need for modernized national payment infrastructures that are optimally integrated into the global payment system [7,8].

Additionally, the history of central banking underscores the importance of payment-related innovations, with the development of technologies like real-time gross settlement systems and mobile money shaping the landscape of financial services [9,10]. Therefore, the robustness of the payment infrastructure is paramount in enabling central banks to fulfill their critical function of guaranteeing the stability and effectiveness of the financial system.

It aims to reveal the future trends that will form the basis of financial practices within the country while studying the important area of development prospects of the National Payment System of the Central Bank.

The National Payment System, controlled by the Central Bank, forms the basis of the country's economic infrastructure, ensures continuous circulation of funds, facilitates trade and is the basis for the implementation of monetary policy. It is true that central banks are bolstering and

repositioning their payment systems strategically to improve accessibility and efficiency. Their primary focus is on offering specialized services, such safe interbank settlement accounts, in areas where they have a comparative advantage [11,12]. Furthermore, in order to maintain the stability of payment systems in the face of technological advancement and global consolidation, central banks are becoming more and more active in their supervision [13,14].

In order to provide underprivileged populations with better access to financial products and services, efforts are being made to build more inclusive payment systems, with an understanding of the positive network externalities that these systems can produce [15,16]. The increasing significance of central banks' function as supervisors of payment systems highlights the necessity of striking a balance between monitoring public policy and private sector development to guarantee [17].

Based on the current state of the national payment system, its strengths and areas for improvement will be realized against the background of the constantly developing financial ecosystem. Focusing on technological trends, regulatory frameworks, and international cooperation, the study aims to shed light on the multifaceted factors influencing payment system development paths. In doing so, it seeks to provide actionable insights that will enable the central bank's payment system to be more resilient, efficient, and adaptable to emerging challenges and opportunities.

Understanding the prospects for the development of the national payment system is very important for the Central Bank, because financial practices are changing rapidly. It is also a strategic process with important implications for global interconnectedness, financial inclusion and economic stability. This analysis seeks to reveal the future of the national payment system, which provides a basis for smart decision-making and proactive measures to develop a secure, innovative and critical financial infrastructure.

Literature Review.

Numerous economists have investigated the theoretical and practical features of the Central Bank's national payment system implementation, as well as the implementation challenges; numerous theoretical scientific works have been made, and definitions have been provided.

Specifically, prominent economist and former US Federal Reserve System chairman Alan Greenspan studied monetary theory and financial regulatory payment systems on the stock market in great detail. The range of retail payment options directly affects how efficiently banking operations operate, and lending transaction technology itself can enhance banking operations [18].

According to the well-known scientist W. Poole, although the participation of central banks in clearing systems varies from country to country, their main activity in the interbank system is for the purpose of settlement by commercial banks, that is, the obligations undertaken by banks in their payment trading activities. stated that it consists of changing the accounts that have to perform [19].

In a study by European economists Borio, Rousseau, and Van den Bergh on clearing practices in central bank payment systems, all G-10 central banks offer settlement services to their national clearing systems, with eight out of eleven clearing systems directly operated and nine stated that they operate directly in the clearing system [20].

Scholars have also suggested that the central bank clearing system relies solely on discretionary credit by central banks other than the Bank of Canada and the Bank of England. Although central banks are not directly involved, as in the case of the Bank of Canada, they often coordinate and encourage cooperation by holding senior positions in the banking and payer community.

Economist Calvo G. A considered in his research that the demand of economic agents for reserves in the conditions of uncertainty of the Central Bank payment system depends on their expected payment receipts and outflows [21].

Also, the daily payment activity creates a network of bilateral interbank credit relations, which must eventually be terminated by transferring the liability of a third party, i.e., the settlement instrument [22].

Although classical analysis is generally concerned with reserves, it should be noted that apart from central bank money, economic agents have many other instruments for their settlement needs. In interbank transactions, commercial bank liabilities (eg representative account) and, to a lesser extent, clearing house liabilities are the main alternatives [23]

At the same time, the use of a means of settlement in any particular payment system requires a convention between the economic agent that defines not only the party whose liability is accepted as a means of payment, but also the frequency and time of the settlement day when the obligation should be considered terminated. does. This last aspect refers to the "finality" of the settlement, i.e. the moment when the payment obligation between the two parties is deemed to be unconditionally and irrevocably fulfilled [24].

Although e-payments in commercial banks is considered to be a small business function in the banking sector, an increasing share of banks' revenues is accounted for by the contribution of these payment services [25,26,27].

Research methodology.

The research employed a variety of techniques, including empirical analysis, grouping, comparison, retrospective and prospective analysis, and scientific abstraction. The paper provided justification for the significance and necessity of utilizing the scientific abstraction approach in the development of the central bank payment system. Moreover, analytical analyses and emission models were created utilizing the central bank payment system's economic analysis techniques. As a result of the conducted analysis, the dynamic trend of the central bank payment system in financial institutions was shown. At the same time, the obstacles to this field and ways to overcome them are explained.

ANALYSIS AND RESULTS.

Rapid integration of information technology to support global development and economic prosperity is becoming increasingly urgent. The development of economic processes and the increase in the standard of living of the world's population are caused by the widespread introduction of information technologies into our daily lives.

This suggests that facilitating the unrestricted distribution of information accelerates the transition to a market-oriented economy and increases social welfare. Against the background of consistent growth of the national economy, the relevance of innovative approaches to business activity has increased significantly, in particular, special attention is being paid to e-commerce. Currently, every user of Internet technologies is trying to understand the concept of e-commerce.

Every year, the markets of the United States of America witness an average turnover of 1.5-2 trillion US dollars related to this relatively new activity, which is in the process of creating its extensive history. At the same time, extensive legal reforms were carried out on the development of the central bank payment system, in particular, based on the decision of the President of the Republic of Uzbekistan dated September 19, 2018 "On measures to develop the national payment system" PQ-3945. The interbank processing center was established in the 4th quarter of 2018, and the "Humo" payment system was launched from the 1st quarter of 2019.

The launch of this retail payment system is aimed at establishing competitive services in the field of retail payment services through bank cards. Its main goals are to significantly expand the scale of non-cash operations in the national economy and mitigate the risks inherent in the operation of retail payment systems based on bank cards.

The settlement clearing system of a central bank is a cornerstone of the financial architecture of any nation. It is instrumental in maintaining the efficiency and stability of financial operations, which in turn, supports the broader economic environment. This essay delves into the pivotal role that the settlement clearing system of the Central Bank plays, emphasizing its importance in financial transactions, risk management, and economic stability. This complex system serves as the basis for continuous settlement of accounts, facilitating the continuous flow of funds between financial institutions. The Central Bank provides a centralized clearing mechanism and increases the overall reliability and security of financial transactions. One of the important advantages of the account clearing system is its contribution to the minimization of settlement risks and optimization of liquidity management. Through automated transaction processing and real-time monitoring, the system helps prevent discrepancies and errors, and provides a robust and secure financial environment.

The settlement clearing system of the Central Bank facilitates the efficient processing of financial transactions between banks and other financial institutions. This system ensures that payments are settled promptly and accurately, reducing the time lag between the initiation and completion of transactions. By doing so, it enhances liquidity within the financial system, as funds are made available more quickly for further transactions.

Moreover, the settlement system of the Central Bank ensures transparency and accountability in the financial sector. Close monitoring of transactions and generation of accurate and timely reports helps to gain a clearer understanding of the financial landscape and facilitates effective decision-making by financial institutions and regulatory authorities. The central bank's settlement system is a key factor in strengthening a safe, efficient and transparent financial ecosystem. Its continuous improvement and adaptation to emerging challenges will be critical to ensuring the stability and confidence that underpins the broader economic landscape. The following table presents the trend of changes in the practice of kling in payment systems of the Central Bank in 2022-2023.

Table 1 Analytical information on payments received by commercial banks through the Central Bank's Settlement Clearing System during November 2022-2023¹

№	Name of the bank	Payments received in November 2022		Payments received in November 2023	
		Number	Amount (in million soums)	Number	Amount (in million soums)
1	National Bank	183 506	351 186	162 610	796 337
2	Self-Construction Bank	241 916	348 702	187 504	277 839
3	Agrobank	981 139	1 289 704	1 136 360	1 066 674
4	Microcredit bank	164 230	351 461	142 094	296 568
5	People's Bank	383 087	333 025	213 687	226 260
6	Guarantee bank	52 751	168 625	40 904	62 432
7	Business Development Bank	156 492	311 517	187 190	358 529
8	Turonbank	30 920	224 976	33 653	255 361
9	Partner bank	18 798	100 921	48 604	226 928
10	Asaka Bank	265 856	1 028 905	90 771	1 105 550
11	Silk Yolibank	33 663	116 777	36 399	161 874
12	Ziraat Bank Uzbekistan	1 016	2 061	1 238	6 335
13	Trustbank	51 309	372 267	387 718	463 695
14	Aloqabank	3 211 118	808 887	6 446 532	1 732 344

¹ It was developed independently by the author based on the data of the Central Bank.

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15	Mortgage bank	311 301	673 790	288 782	787 159
16	KDB Bank Uzbekistan	410	577	734	1 354
17	Universalbank	227	618	50 205	233 588
18	Kapitalbank	871 518	403 797	15 003	283 805
19	Octobank	11 600	265 420	653	3 252
20	Period bank	902	1 925	12 732	10 892
21	Invest Finance bank	9 965	2 794	17 469	226 053
22	Asia Alliance Bank	15 882	197 812	69 217	195 371
23	Orient Finance Bank	104 012	219 886	114 503	156 298

From Table 1 above, we can see that from November 2022 to 2023, the volume of payments received by 23 commercial banks through the settlement clearing system of the Central Bank showed an increasing trend, the volume of transactions and financial activity in the banking sector significantly increased. indicates growth. According to it, the dynamic trends of this growth can be expressed as follows. A growing economy leads to an increase in business activity and transactions.

The growth of digital payments and the adoption of online banking services will help increase the volume of transactions. If priority was given to digital payment methods during this period, this would be reflected in the increase in the volume of payments processed through the settlement clearing system of the Central Bank.

Government initiatives and incentive programs that include financial payments can lead to a flow of payments. Had such programs been implemented on time, the settlement could have contributed to the observed increase in payments through the clearing system. Changes in banking practices, such as the introduction of new financial products or services, can lead to increased transaction activity.

Also, the figure below shows the amount of transactions made through the interbank payment system of the Central Bank (see figure 1)

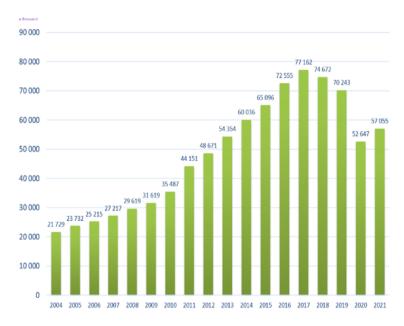


Figure 1. The number of transactions made through the interbank payment system of the Central Bank²

² It was developed independently by the author based on the data of the Central Bank.

According to the data presented in Figure 1, the volume of operations carried out through the interbank payment system of the Central Bank has undergone dynamic changes over the past years. Analyzing indicators can reveal trends such as increases, decreases or fluctuations in the number or value of transactions carried out through the interbank payment system. These fluctuations may be affected by various factors, including economic conditions, technological developments, regulatory changes or changes in market dynamics.

Adapting strategies for financial institutions and analysts in the detailed study of changes and factors of dynamic changes in the payment system for a certain period of time or significant peaks and troughs and the effectiveness of the interbank payment system in response to changing trends in transaction activity and serves as a valuable tool in ensuring its stability.

Innovations in banking are attracting more customers and businesses to use the account clearing system for their payment needs. Changes in interest rates affect borrowing and spending patterns. If there were changes in interest rates during this period, this may have affected the volume of payments processed through the settlement clearing system. In addition, a high level of market confidence and stability will stimulate financial transactions, a positive economic forecast and confidence in the financial system will lead to an increase in payments through the settlement clearing system of the Central Bank.

Operations carried out through the interbank payment system of the Central Bank have provided a number of advantages that serve the efficiency, security and stability of the financial system. According to it, the real-time interbank payment system allows real-time settlement of transactions between financial institutions. This feature minimizes the time needed to transfer funds between banks, and makes transactions faster and more efficient. The use of an interbank payment system can reduce counterparty risk, especially if it includes central bank supervision. Transactions are carried out in a safe environment, where the risk of default by the participating banks is minimized.

Transactions through the Central Bank's interbank payment system offer advantages in terms of efficiency, risk reduction, regulatory compliance, central bank support, cost effectiveness and facilitation of large transactions. Together, these benefits contribute to the smooth functioning and stability of the broader financial system.

Also, the amount of transactions made through the interbank payment system of the Central Bank is presented in Figure 2 below.

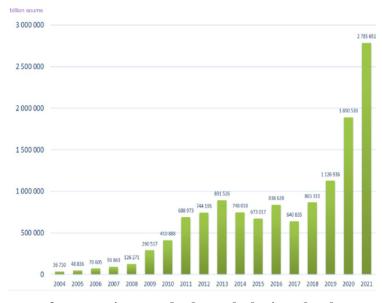


Figure 2. The amount of transactions made through the interbank payment system of the Central Bank³

³ It was developed independently by the author based on the data of the Central Bank.

According to Figure 2, the amount of transactions made through the inter-bank payment system of the Central Bank showed regular growth trends since 2018. In particular, in 2018, 865 billion soums, 1,126 billion soums in 2019, 1,890 billion soums in 2020, and 2,785 billion soums in 2021 showed positive growth trends.

Favorable economic conditions during this period may have led to increased business activity, investment, and financial transactions. With the expansion of economic activity, the demand for interbank transactions often increases, which contributes to the observed growth trends. Also, the development of Technology and the increasing number of digital banking solutions may have played an important role. As the technological infrastructure has improved, it has become easier and more efficient for financial institutions to carry out interbank transactions, which has led to an increase in the volume of transactions.

Government policies or initiatives that support digital payments, financial inclusion or economic development are important in promoting the use of electronic payment systems for efficiency and transparency in increasing transactions through the interbank payment system. At the same time, a stable economic and financial environment increases confidence among businesses and individuals, encouraging them to engage in more financial transactions. Stability has led to an increased desire to use interbank systems.

CONCLUSION.

- 1. Technological advances as a catalyst in the payment system of central banks The integration of advanced technologies such as blockchain, real-time gross settlement systems, and application programming interfaces will appear as a key factor for the future development of the national payment system.
- 2. The implementation of promising regulatory frameworks, including the creation of regulatory sandboxes and cooperation with fintech firms, appears as a key strategy. These measures are essential to create an enabling environment that encourages innovation while ensuring the integrity and security of the payment system.
- 3. Financial inclusion and reduction of transaction costs Development prospects of the payment system emphasize its role in promoting financial inclusion and reducing transaction costs. By leveraging interoperability standards and technology solutions, the central bank can extend the reach of the payment system to underserved populations, thereby contributing to greater economic participation.
- 4. The national payment system can be emphasized not only as a transaction infrastructure, but also as a strategic driver of economic growth. Continuous flow of funds and reduction of transaction costs are the basis for sustainable development and stimulate economic activity.
- 5. The central bank's proactive approach to innovation support and payment system development highlights its leadership in shaping the financial landscape. By staying ahead of technological trends and regulatory needs, the Central Bank can position the payment system as the backbone of the financial infrastructure.
- 6. The Central Bank's National Payment System Development Outlook highlights the critical intersection of technology, regulation, and strategic vision, highlighting a changing landscape. As the financial landscape evolves, the payment system is poised not only to facilitate transactions, but also to play a central role in shaping the country's economic trajectory. Continued flexibility, innovation and collaboration will be essential in realizing the full potential of the NPS in the coming years.

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