

**STATISTICAL ASSESSMENT OF THE GROWTH TREND IN THE VOLUME OF  
TRANSACTIONS CONDUCTED THROUGH THE FAST PAYMENT SYSTEM****Rakhmataliyev Muzaffar Eshdavlatovich**PhD, Associate Professor, Department of Economic Statistics, Tashkent State University of  
Economics, Uzbekistan

**Annotation:** This scientific article analyzes the growth trend of transaction volumes carried out through the Fast Payment System (FPS) in commercial banks of Uzbekistan. The study examines the dynamics of transaction values for the period 2020–2024 using statistical analysis methods. Based on official data from the Central Bank, the research identifies the factors influencing the increase in digital payment volumes and evaluates the role of the FPS in enhancing the efficiency, transparency, and speed of cashless settlements. The findings demonstrate that the expansion of the Fast Payment System contributes significantly to the digital transformation of the national economy and to the development of a cashless financial ecosystem.

**Keywords:** Fast Payment System, transaction volume, statistical analysis, cashless economy, digital banking, Central Bank, payment infrastructure, financial inclusion.

**Introduction:** In recent years, the digitalization of the banking system and the development of modern payment infrastructure have become one of the priority directions of the state policy of the Republic of Uzbekistan. In particular, systematic measures have been implemented to develop electronic payment systems, simplify financial services, and automate interbank settlements. Within this framework of reforms, the Fast Payment System (FPS) has emerged as a key mechanism for simplifying economic transactions, providing the population with convenient and secure payment services, and strengthening competition in the banking sector. The operation of the Fast Payment System is regulated by the Resolution of the Board of the Central Bank of the Republic of Uzbekistan dated January 17, 2006, No. 1/3, “On the approval of the Regulation on the procedure for conducting electronic payments through the interbank payment system of the Central Bank.” This regulation established unified standards for interbank electronic settlements, ensuring the reliability, speed, and transparency of payment processes. The adoption of this regulatory framework created a solid legal foundation for the stable functioning of electronic payment systems and enabled their integration with international practices.

Since the introduction of the Fast Payment System, payment processes have become significantly more efficient, allowing customers to perform various financial transactions in real time. Consequently, the volume of transactions processed through the system has increased remarkably each year, reflecting growing public trust in digital payment instruments. In recent years, the integration between banks and payment institutions has intensified, mobile and internet banking services have expanded, and cashless payments have become dominant in financial transactions.

The continuous increase in transaction volumes through the Fast Payment System plays a crucial role in ensuring the stability of the country’s financial ecosystem, diversifying the payment infrastructure, and accelerating the transition toward a digital economy. This system has not only optimized the operations of commercial banks but also enhanced the population’s access to banking services, thereby deepening financial inclusion.

Therefore, the statistical assessment of the growth trend in the volume of transactions conducted through the Fast Payment System is a highly relevant research topic. Such an analysis makes it possible to evaluate the system's efficiency, measure its contribution to economic development, assess the stability of the payment market, and determine future development trajectories. Accordingly, this study focuses on analyzing the recent trends in the development of the Fast Payment System and statistically evaluating the growth dynamics of transaction volumes as well as the main factors influencing them..

**Literature Review:** In recent years, profound reforms have been implemented in Uzbekistan's banking system aimed at developing the digital payment infrastructure and expanding the use of electronic settlements. In particular, the Fast Payment System (FPS), introduced by the Central Bank, has emerged as a modern mechanism enabling fast, secure, and transparent cashless payments across the country. The development of this system plays a key role in increasing the efficiency of interbank settlements, simplifying financial transactions, and strengthening payment discipline. Consequently, this subject has become the focus of extensive research by both domestic and foreign scholars. The following section reviews some of the most relevant studies analyzing the growth trends in the volume of transactions conducted through the Fast Payment System.

Among Uzbek researchers, Sh. Karimov [2], in his study titled "Statistical Analysis of Modernizing the Electronic Payment System in Uzbekistan's Banking Sector", analyzed the role of the Fast Payment System in the economy and its impact on the volume of banking services. According to the author, the introduction of real-time payment mechanisms has led to an increase in the share of cashless transactions and strengthened transparency in financial operations.

N. Qodirova [3], in her research "The Development of Digital Payment Systems and Their Impact on the Economy", emphasized the steady year-on-year growth of transaction volumes through the Fast Payment System. She linked this trend to the growing level of digital literacy among the population and the expansion of electronic financial inclusion.

B. Rakhmonov [4], in his scientific article "Assessing the Efficiency of Electronic Payment Systems in Commercial Banks", examined the operational stability of the Fast Payment System and the speed of interbank settlements. The author concluded that the increase in transaction volume serves as an important factor in ensuring the stability of the national payment infrastructure.

M. Eshonqulova [5], in her research work "Development Trends of the Fast Payment System in Uzbekistan's Financial Market", explored the impact of the system on economic growth and its role in promoting digital financial inclusion. Her findings indicate that the system's dynamic growth has accelerated customers' transition to digital banking services.

Foreign scholars have also contributed valuable insights to this field. R. Anderson [6], in his work "Real-Time Payments and the Future of Digital Banking", highlighted the advantages of real-time payment systems, noting their importance in improving financial liquidity and reducing transaction costs.

C. Li and A. Zhao [7], in their article "Instant Payments and Their Macroeconomic Effects: Evidence from China", examined China's experience with fast payment systems. They concluded that such systems promote cashless payments, accelerate monetary circulation, and enhance the efficiency of financial flows within the economy.

L. Martin [8], in his research "The Evolution of Real-Time Payment Systems in Europe", provided an analytical overview of the integration of real-time payment systems in European

countries, their technological advancements, and their alignment with international payment infrastructures.

S. Johansen [9], in the study “Digital Payment Infrastructures and Financial Inclusion”, argued that the expansion of fast payment systems significantly enhances public access to financial services. According to the author, these systems contribute to social equity and play a vital role in strengthening the foundations of the digital economy.

The review of literature indicates that both domestic and international researchers recognize the Fast Payment System as a key component of modern economic development. They emphasize that the system not only simplifies payment processes but also enhances the reliability, speed, and transparency of banking operations. While local scholars primarily focus on the practical efficiency of the system within Uzbekistan’s financial market, foreign researchers tend to analyze its technological and institutional development aspects in a broader global context..

**Research Methodology:** In this study, the growth trend in the volume of transactions conducted through the Fast Payment System (FPS) was evaluated using statistical analysis methods. Official data from the Central Bank of the Republic of Uzbekistan for the period 2020–2024 served as the primary source of information. Dynamic series analysis was employed to determine the growth rates, average annual growth coefficient, and long-term trend of transaction volumes. The temporal changes in transaction amounts were visualized graphically to better illustrate the dynamics of the system’s development. In addition, comparative, analytical, and generalization methods were applied to assess the operational efficiency of the Fast Payment System and to identify its economic implications for the financial sector.

**Analysis and Results:** As a result of ongoing reforms aimed at expanding the digital payment infrastructure and providing the population with convenient, secure, and real-time financial services, the Fast Payment System (FPS) has become one of the key components of Uzbekistan’s financial sector. This system enables customers to make payments in real time, thereby contributing to the sustainable development of a cashless economy and ensuring that interbank settlements are conducted quickly, efficiently, and transparently.

The functioning of the system is based on the interbank electronic payment infrastructure established by the Central Bank of Uzbekistan, which has been actively used in nearly all sectors of the economy since 2020. The continuous growth in transaction volumes through this system reflects both the increasing use of digital financial services among the population and the active adoption of new technologies by commercial banks.

The following analysis focuses on statistically evaluating the growth trends in transaction volumes conducted through the Fast Payment System between 2020 and 2024. The results provide insight into the expansion of digital payment mechanisms, the acceleration of financial turnover, and the overall efficiency of electronic payment infrastructure in the national economy.

**Table 1.**  
**The Volume of Transactions Conducted Through the Fast Payment System (2020–2024)**

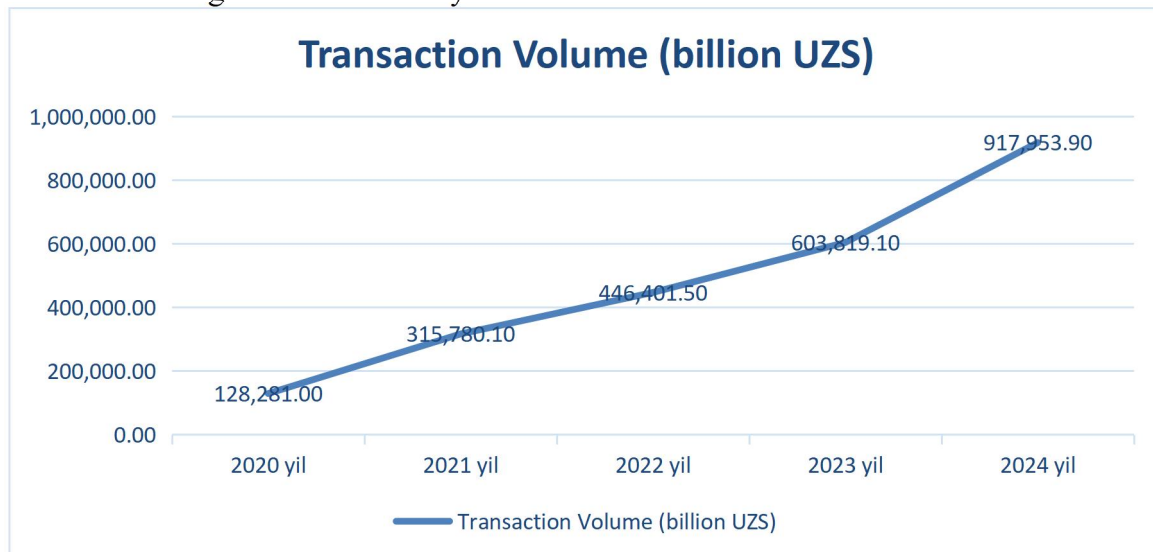
Year	Transaction Volume (billion UZS)	Growth Rate (%)
2020	128,281.0	100.0
2021	315,780.1	246.1
2022	446,401.5	141.4
2023	603,819.1	135.3

<b>2024</b>	917,953.9	152.0
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According to the data presented in Table 1, the total volume of transactions conducted through the Fast Payment System (FPS) demonstrated a steady upward trend during the period 2020–2024. In 2020, the total volume of transactions amounted to 128.3 trillion UZS, while by 2024 this figure had increased to 917.9 trillion UZS. This represents a 7.1-fold increase over five years, indicating not only the system’s rapid expansion but also a significant rise in public trust and engagement with digital payment services.

In 2021, the growth rate reached 246.1 percent, marking the initial stage of large-scale adoption of the system. Although the rate of growth slowed slightly in 2022 (141.4%) and 2023 (135.3%), it rose again to 152 percent in 2024. This renewed acceleration can be attributed to the modernization of payment infrastructure initiated by the Central Bank, as well as the active introduction of mobile banking, QR-based payments, and other digital financial technologies by commercial banks.

It is noteworthy that the expansion of transaction volumes was also driven by several macroeconomic and technological factors, including population growth, geographical expansion of electronic payment services, integration with public service systems, and the emergence of fintech startups developing innovative payment platforms. Collectively, these developments have strengthened the role of the Fast Payment System as a key pillar of Uzbekistan’s digital financial ecosystem.



**Figure 1. Annual Growth Dynamics of Transaction Volumes Conducted Through the Central Bank’s Fast Payment System (2020–2024)**

According to Figure 1, the annual growth trend of transaction volumes through the Fast Payment System (FPS) has shown a consistently positive trajectory. The most significant increase occurred between 2020 and 2021, when the transaction volume grew by approximately 2.5 times, reflecting the rapid adoption and expansion of the system during its early phase. In subsequent years, the growth rates became more stable, indicating that the system had reached a broad and sustainable user base. The results observed in 2024 confirm that the continued improvement of the system’s infrastructure and expansion of technological capabilities have once again accelerated the growth in transaction volumes.

The graphical analysis demonstrates that the upward trend has persisted annually, underscoring the economic efficiency of the system and the increasing number of users. Furthermore, the

strong growth observed between 2023 and 2024 highlights the competitiveness of the national payment system and the active digitalization efforts of commercial banks in Uzbekistan.

**Results.** The findings indicate that the Fast Payment System has become an integral component of Uzbekistan's financial system, making a significant contribution to the development of the digital economy. The continuous increase in transaction volumes between 2020 and 2024 can be explained by several key factors:

1. Expansion of digital infrastructure by commercial banks – the introduction of new mobile applications, QR-based payments, and contactless payment technologies.
2. Growing public trust in digital financial services – ensured by the Central Bank's robust supervision over the security of electronic transactions.
3. Integration of government services with payment platforms – significantly increased the overall transaction flow within the system.
4. Development of the fintech sector – innovative technologies and startups have made digital payments more accessible to the population.
5. Promotion of a cashless economy – government-led initiatives and reforms aimed at minimizing cash circulation have facilitated the widespread adoption of digital payment systems.

#### **Conclusion.**

Based on the results of the analysis, the Fast Payment System (FPS) in Uzbekistan has demonstrated a stable growth trend in transaction volumes during the period 2020–2024. This system has become a core driver of digital transformation in the national banking sector, ensuring the speed, transparency, and security of financial transactions. The sustained growth in transaction volumes reflects both the increasing share of cashless payments in the economy and the active adoption of digital financial services by the population.

The Fast Payment System is expected to play a strategic role in the future implementation of Uzbekistan's Digital Economy Strategy, the expansion of financial inclusion, and the modernization of the national payment infrastructure. Its continued development will further strengthen the resilience and efficiency of the financial system, enhance public confidence in digital banking, and accelerate economic digitalization.

#### **Recommendations.**

1. **Enhance international integration** of the Fast Payment System by establishing interoperability with global payment platforms to facilitate faster cross-border transactions and trade settlements.
2. **Strengthen cybersecurity measures** to ensure greater protection of user data and safeguard digital payment infrastructure from potential cyber threats.
3. **Automate system monitoring** through real-time data analytics and statistical control mechanisms to improve oversight and operational stability.
4. **Promote digital literacy** by organizing nationwide training programs for individuals and businesses on the safe and efficient use of electronic payment services.
5. **Foster innovation in financial products** by collaborating with fintech companies to develop new, customer-oriented digital payment solutions.
6. **Encourage healthy competition among commercial banks** by creating affordable, user-friendly, and value-added digital payment services.
7. **Apply statistical modeling techniques** such as regression analysis and index methods to forecast transaction growth and assess system efficiency in quantitative terms.

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