



IMPROVING FINANCIAL TECHNOLOGIES IN CENTRAL ASIA COUNTRIES

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Abstract:

This article is devoted to analysis of the process of implementing several financial technologies, adapted to the current condition of Central Asian countries. The provision of relevant financial services during the pandemic was jointly provided by fintech companies and banks, which launched payment services similar to fintechs. This also is considered to be essential point of the article

Keywords: SME, fintech, financial services, e-commerce, cybersecurity, financial consumer, regional cooperation, financial integration

The development and growth of financial technologies in Central Asia can increase the competitiveness of the countries in the region and create the preconditions for the formation of a regional financial hub . The favorable location between the largest global economies - Russia and China, as well as proximity to Europe, creates a number of advantages and additional potential for accelerated growth.

Despite the crisis of the global pandemic, new opportunities have emerged for the development of fintech in the Central Asian region, where more than 74 million people live. In fact, quarantine measures pushed the population in isolation to work online and purchase goods and services via the Internet, which also served as an impetus for the further formation of financial technologies that create affordable products and solutions not only for large companies, but also for the general population, small and medium-sized businesses (SMEs), allowing to significantly simplify such operations as making payments, doing business, investing, and insurance.¹

The enormous potential for further implementation and strengthening of financial technologies in the region is due to the high level

of public access to mobile communications and the Internet. Add to this the growing opportunities for wider use of digital payments, government support and post-Covid economic recovery, and the picture emerges optimistically. However, there are significant regional differences between high- and middle- income countries in access to technology, speed of adoption of financial solutions and regulatory capacity.

Risks and obstacles. Central Asia (CA) is a developing region with underutilized opportunities for financial innovation and technology. According to the Central Asia Regional Economic Cooperation (CAREC) Institute report (2021) "Financial inclusion and fintech in CAREC: constraints and prospects", limited financial inclusion and slow adoption of fintech in the CAREC region, which includes Afghanistan, Azerbaijan, the People's Republic of China (PRC), Georgia , Kazakhstan, Kyrgyzstan, Mongolia, Pakistan, Tajikistan, Turkmenistan and Uzbekistan are primarily associated with slower adoption and diffusion of advanced mobile technologies.

The potential of the Central Asian countries has yet to be realized ². Factors limiting progress in financial inclusion and financial technology

¹ Bakoeva, Gulbahor Matyakubovna. "The Essence Of Transformation Of The Banking Sector In The Context Of The Implementation Of Modern Financial Technologies." NATURALISTA CAMPANO 28.1 (2024): 2569-2575.

² Fintech in Central Asia: risks and opportunities, economic news of Uzbekistan, 2022, ([podrobno.uz](https://www.podrobno.uz/cat/economic/fintekh-v-tsentrallyy-azii-riski-i-vozmozhnosti-/?sphrase_id=3018643&ysclid=lazit82mpw529439905)) https://www.podrobno.uz/cat/economic/fintekh-v-tsentrallyy-azii-riski-i-vozmozhnosti-/?sphrase_id=3018643&ysclid=lazit82mpw529439905



adoption in the CAREC region include: the lack of a comprehensive national strategy; restrictions on physical access and income; cultural and trust barriers; institutional barriers. Other risks associated with fintech in Central Asia include the high cost of international money transfers; inefficiency in the provision of domestic payments and low level of access to finance for SMEs. The level of financial technology development is closely linked to the state of policy, regulation and financial supervision in the region, as well as reform needs.

From global to regional: successful cases of Uzbekistan and Kazakhstan. According to KPMG ³(2020), Kazakhstan is leading the fintech movement in Central Asia, thanks to a relatively developed financial sector and infrastructure, the presence of an institution such as the Astana International Financial Center (AIFC), international investment, ongoing innovation and the growth of e-commerce.

Kazakhstan is followed by Uzbekistan, which in a short period of time made a digital breakthrough with the help of payment systems and the adoption on a legislative basis of a course for the implementation and development of digital banks. Support for the development of financial technologies in the country is carried out at the state level; new digital products and solutions have appeared that have made the lives of ordinary consumers and entrepreneurs of various calibers easier. This has also influenced the growth of e-commerce. Thus, according to KPMG, in 2020 the e-commerce market in Uzbekistan amounted to \$643.9 million, and in Kazakhstan - \$2143.4 million.

The Asian Development Bank (ADB) conducted a study on access to financial services in the Central Asian region - the report "Stimulating financial technologies to meet trade finance needs in CAREC", dedicated to the study of post-Covid economic recovery. The report states that through

the growth of financial technology, countries in the region can realize their full economic potential, and, overall, fintech contributes to access to essential financial services needed to achieve financial inclusion, improve living standards and secure livelihoods. At the same time, interest in the development of this industry is most obvious in those countries that keep pace with global trends in digitalization.

In addition, Dr. Li noted the development of fintech in China, where 61% of SMEs active in the digital segment are successfully using solutions and financial technologies, thanks to the country's achievements in the development and application of payment platforms and big data management. China's example of fintech adoption among SMEs can be adapted in other neighboring countries.

Unfortunately, the development of fintech in the rest of the Central Asian region still leaves much to be desired. The success of the implementation of financial technologies in banks and payment systems of Uzbekistan and Kazakhstan can serve as a clear example for neighboring countries. Dr. Minsu Lee recommends that CAREC member countries focus on building their own financial technology framework; strengthen information and communications technology (ICT) and digital infrastructure; ensure quality regulation (e.g. cybersecurity and other technical vulnerabilities, data governance and privacy protection) and empower inclusive trade and finance. According to his report, China is at an advanced stage of financial development in both traditional and high-tech sectors, and the country has enough advanced experience to share with other countries in the region. The PRC, in turn, could play a huge role in building capacity in the region, which would help CAREC member countries form stronger trade ties with the PRC, diversifying away from Russia.⁴

The CAREC Institute staff concluded that governments in the region are encouraged to take

³KPMG (Russian: KPMG) is one of the world's largest professional services networks and one of the Big Four audit firms along with Deloitte, Ernst & Young and PwC. The international headquarters are located in Amstelveen (Netherlands).

⁴ Bakoeva, Gulbakhor Matyakubovna. "The Essence Of Transformation Of The Banking Sector In The Context Of The Implementation Of Modern Financial Technologies." *NATURALISTA CAMPANO* 28.1 (2024): 2569-2575.



a leadership role in promoting and developing quality infrastructure that will lead to increased access to financial services. At the same time, representatives of the private sector should be involved in these processes.

Fintech can help empower Central Asia and support the region's digital transformation. From offering an easier and more affordable way to manage remittances to the latest technology, fintech will become an integral part of Central Asia's economic development ⁵.

The Astana International Financial Center (AIFC) presented a study of the fintech industry in the CIS countries, Central Asia and Mongolia. In their research, they examined the features of the development of the fintech market in Russia, Kazakhstan, Uzbekistan, Kyrgyzstan, Belarus and Mongolia ⁶.

Russia

— In 2020, investments in Russian fintech startups reached \$216 million. According to Deloitte, by the end of 2021, the size of the country's fintech market will reach \$940 million.

— Banks are the main driver of the growth of the fintech market through the creation of super applications and the growing potential for the development of open banking.

— Accelerators and incubators are catalysts for the creation and development of innovations in companies, including through piloting projects and supporting the introduction of technologies to the market.

— The main problems of the country's financial technology market: the general investment climate, distrust of new financial technologies, relatively low financial literacy.

Kazakhstan

— The country's policies to promote the digital economy and innovation are evolving.

— There are two regulatory sandboxes in the country: one is managed by the National Bank and the Financial Agency, the second by Fintech Lab, launched by the AIFC.

— Growing demand for fintech products due to the relatively high percentage of unbanked consumers and high internet penetration.

— The government of the country established the company QazTech Ventures to promote venture financing instruments and support startups.

Uzbekistan

— Government support in the country is focused on the development of blockchain technology and cryptocurrencies. These fintech segments are now attracting the largest amount of foreign investment.

— The fintech ecosystem of Uzbekistan is represented by two payment processing services Humo and UZcard, more than 10 payment companies, approximately 30 banking mobile applications and one digital bank.

— E-commerce in the country is underdeveloped; most payments are made in cash.

— The venture ecosystem is in its infancy, with virtually no access to capital.

— The main problems of the fintech industry in Uzbekistan: the relatively low level of Internet, lack of government regulation and low level of public confidence in traditional banks - more than half of the country's adult population does not use banking services.

Uzbekistan is a country that has financial problems. Launching a fintech startup in the country can become economically profitable if it solves existing difficulties. However, this is somewhat risky.

Belarus

— The Belarusian Hi-Tech Park is a driver of the country's fintech development by simplifying immigration rules, exemption from exchange controls and the use of English law instruments on its territory.

— Belarus became the first country in the world to legalize transactions with crypto assets.

⁵ Fintech - digital technologies in the financial sector (hse.ru) - <https://hsbi.hse.ru/articles/fintekh-tsifrovye-tehnologii-v-finansovoy-sfere/?ysclid=lb12ovyxdc371693650>

⁶the fintech market in the CIS countries, Central Asia and Mongolia was presented | Rusbase (rb.ru) - <https://rb.ru/news/fintech-cis/?ysclid=lazi6ijhe2121182022>



— The National Bank plans to launch a pilot project to attract funds from commercial banks by issuing digital tokens.

Kyrgyzstan

— To support local startups, the National Bank is considering the possibility of using an innovation sandbox approach.

— Digital payments are relatively new in the country's market.

— The fintech industry in Kyrgyzstan is being formed by telecommunications companies that adapt their solutions to provide financial services to certain groups of the population.

— The National Bank seeks to promote the development of fintech with the help of the adopted Concept for the Development of Digital Payment Technologies for 2020-2022.

— The main problem is limited access to capital.

Mongolia

— The country's central bank has launched the use of digital currency as a new electronic payment instrument for settlements.

— SMEs make up 90% of registered enterprises in Mongolia and provide about 50% of all jobs in the country, but about 90% of these companies do not have regular access to bank financing.

— The venture system is at the development stage.

— The main problems of the country's fintech market: high costs of starting a new business, limited access to financing, low financial literacy of the population.

Fintech Association of Uzbekistan⁷ also conducted its research on the main problems of fintech in the countries of Central Asia (Table 1).

Table 1.
Challenges for the development of fintech in Central Asian countries⁸

A country	Challenges for the development of fintech :	Main associated risks with Fintech :
Kazakhstan	<ul style="list-style-type: none"> - Unfavorable government policies - Lack of foreign investment - Financial consumer protection risks associated with new products and business models 	<ul style="list-style-type: none"> Cybersecurity Risk - Currency risks - Data protection risks
Kyrgyzstan	<ul style="list-style-type: none"> - Low Internet penetration - Small market with low maturity and low competition - Unstructured government and regulatory strategy for digital financial services. - Lack of targeted and effective promotion of digital channels by financial institutions 	Same as in Kazakhstan
Tajikistan	<ul style="list-style-type: none"> - Poor infrastructure, monopoly of state telecom operators - Uncertain business environment for new players in the fintech space - Small market with low maturity - Limited access to finance and investment 	<ul style="list-style-type: none"> - Cybersecurity risks - Currency risks

⁷ Bakoeva, Gulbahor M. "PECULIARITIES OF THE CURRENT SITUATION OF THE BANKING IPO MARKET." International Scientific and Current Research Conferences. 2023.

⁸Financial markets, technological innovations and financial stability: risks and problems of regulation / S. A. Andryushin, V. V. Kuznetsova // Current problems of economics and law - 2019. - No. 3. - P. 1315–1329.



Uzbekistan	<ul style="list-style-type: none">- Low penetration of mobile communications and Internet- Lack of a clear FinTech development strategy and broader institutional support for FinTech- Limited access to finance and investment	<ul style="list-style-type: none">- Cybersecurity risks- Currency risks
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After analyzing two studies, we can list the main factors hindering the development of FinTech in Uzbekistan:

- Lack of strategic development for Fintech (although due to recent technical assistance from international financial institutions, a Fintech strategy has begun to take shape).

- Internet penetration: Uzbekistan ranks lowest in the region for 4G coverage. Only 45% of the population has access to 3G internet, compared to an average of 79% in lower-middle-income countries.⁹

- Mobile access in rural areas of Uzbekistan (77% of men and 62% of women have a mobile phone)

- Human Capital: Uzbekistan ranks 69th out of 100 countries in the Inclusive Internet Index, which measures Internet presence, accessibility, relevance, and the population's readiness (such as skills and literacy) to use the Internet. Its weakest score (76th out of 100 countries) is accessibility (cost of access relative to income and level of competition in the online market). Workers of the future will require advanced information technology skills.

According to GPFI ¹⁰, increased use of technology in the context of the pandemic has the potential to mitigate the economic impact of the crisis. Despite the fact that developed countries are already characterized by a fairly high level of financial inclusion, this was rather the merit of traditional financial services. When assessing the pandemic period, one can observe structural changes in the specifics of financial intermediation,

which is specifically reflected in the example of the use of mobile applications. The greatest growth in application usage was observed in the payments, investments and insurance segment.

The provision of relevant financial services during the pandemic was jointly provided by fintech companies and banks, which launched payment services similar to fintechs . In practice, traditional institutions in developed countries have increased their consumer base coverage by 4% due to new payment solutions, which confirms the growth of financial inclusion ¹¹. Adding the growth in the number of users of FinTech and BigTech applications , which are approximately 14% and 16%, we can say that the cumulative growth of digital accessibility has increased by 34%. It is worth specifying that, with the impact of the pandemic, the adoption of fintech services at the level of each developed country has become less related to market size or GDP per capita, since the crisis has had global consequences for all countries. However, it is noted that the further slower penetration of fintech services may be due to the demographic situation in the country, namely the proportion of the older population.

In general, since developed countries tend to grow their user base during times of crisis, we can conclude that fintech has a positive impact on financial inclusion. This in turn contributes to macroeconomic stability by reducing restrictions

⁹ Bakoeva, Gulbahor M. "PECULIARITIES OF THE CURRENT SITUATION OF THE BANKING IPO MARKET." International Scientific and Current Research Conferences. 2023.

¹⁰ Global Partnership for Financial Inclusion – Global Partnership for Financial Inclusion

¹¹Fintech in the time of COVID-19: Technological adoption during crises / Jonathan Fu† and Mrinal Mishra // Department of Banking & Finance, University of Zurich and the Center for Sustainability, the Swiss Finance Institute - 2021 - P. 62.



and providing clients with tools to overcome crises and periods of risk ¹².

In general, it can be concluded that fintech played a positive role for the financial stability of advanced economies during the pandemic, which is more likely to be rejected than confirmed. Further research requires measuring the scale of impact through these channels, since the real consequences of the pandemic can be more accurately assessed over time. However, the real need at this stage is the issue of updating the regulatory environment in connection with the acceleration of fintech innovation during the pandemic.

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