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## ELIMINATION OF PROBLEMS IN UZBEKISTAN'S BANKING SYSTEM THROUGH THE DEVELOPMENT OF THE BANK INNOVATIVE PRODUCTS' MARKET

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### Abstract

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#### Keywords:

innovation, innovative banking products, digital banking, FinTech, financial inclusion, banking innovation market.

In the article it is considered the existing problems in Uzbekistan's banking sector and ways to eliminate these problems with the help of digital banking products and the development of the banking innovation market.

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### INTRODUCTION

After the international financial crisis of 2008, distrust in banks led to the development of fintech [2]. In this example, one can see the effect of J. Schumpeter's "theory of creative destruction"[6]. But since then, fintech has developed so rapidly that fintech services have become part of the fourth industrial revolution [3]. These services, which are generally supported and welcomed by consumers, have now reached the stage where they are able to change traditional financial structures, as can be seen in the financial sector of developed countries in Europe and Asia.

Obviously, by integrating into the global financial market, the financial sector of Uzbekistan has begun to transform into a digital system. National banks are actively introducing fintech into their activities. But will these reforms help solve the existing problems? Below we will try to find the answer to this question.

### LITERATURE REVIEW

The influence of digital banking products using financial technologies is beginning to be felt not only in the banking sector but also in the whole economy of the country. Now financial inclusion is almost synonymous with the financial technologies (FinTech). We know that financial technology innovation has changed the financial architecture of the world. How these innovations impact on the economic development of countries? In this article, it is considered this issue.

The emergence and wide spread of fintech did not leave researchers indifferent to these changes. There are a number of studies Arner, D. W., Barberis, J., & Buckley, R. P. [1,2], Thakor, A. V.[7], Romānova, I., & Kudinska, M.[5], Navaretti, G. B., Calzolari, G., Mansilla-Fernandez, J. M., & Pozzolo, A. F. [4] and others.

For instance, Arner, D. W., Barberis, J., & Buckley believe that the development of the last stage of fintech occurred for different reasons in developed and emerging markets. In emerging markets, it appeared in response to development needs and due to the inefficiency of the existing financial system, along with the rapid spread of mobile communications [2].

In addition, they believe that the introduction of fintech into the financial market requires the regulator, in turn, to also introduce technologies such as regtech for effective market management [1].

Thakor, A.V. believes that fintech is used to reduce the cost of finding suitable parties to a transaction, achieve the effect of using big data, provide cheaper and safer information transfer, and reduce verification costs [7].

Romānova, I., & Kudinska, M. conducted an analysis of the FinTech market, the result of which showed that competition in the fintech services market is growing very quickly, including from non-financial organizations [5].

Navaretti, G. B., Calzolari, G., Mansilla-Fernandez, J. M., & Pozzolo, A. F. Navaretti, G. B., Calzolari, G., Mansilla-Fernandez, J. M., & Pozzolo, A. F. argue that with its powerful innovation capabilities and vitality, FinTech makes the financial industry faster and more efficient, and delivers better financial services and products [4].

Taking into account different points of view on this issue, we decided to study the relationship between indicators of the level of implementation of FinTech and problems in Uzbekistan's banking system.

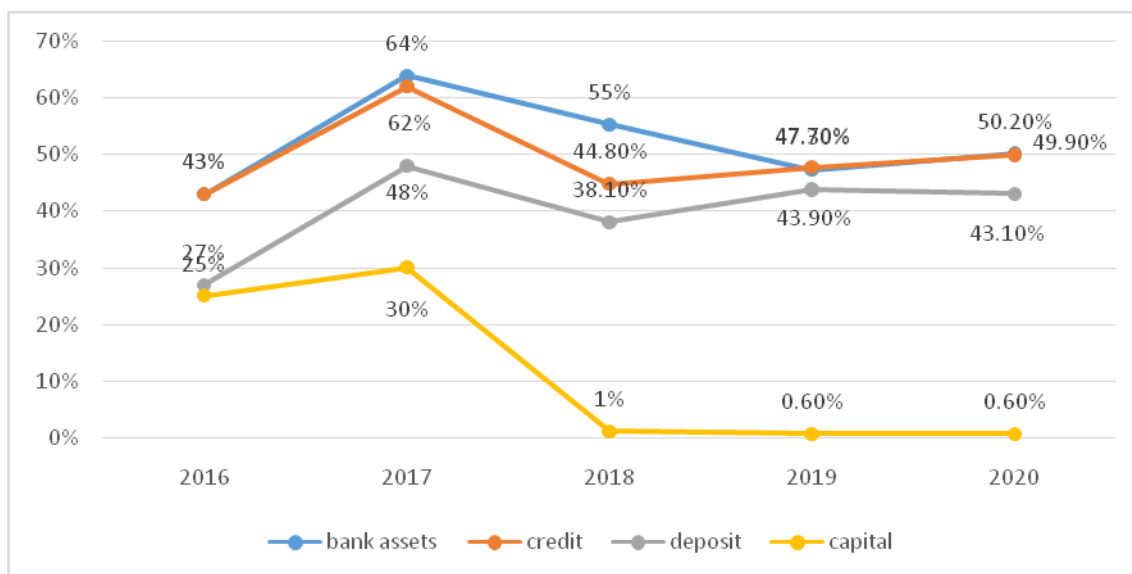
## **SEARCH METHODOLOGY**

This study explores two methodological approaches: a systematic review of relevant scientific literature and analysis of data from database of the World Bank, and the Central bank of Uzbekistan. The World Bank provides detailed indicators for 217 countries and economies around the world.

## **ANALYSIS AND DISCUSSION OF RESULTS**

The level of use of banking financial services in the countries of Central Asia is typical for Uzbekistan, one of the countries of this region, at the same time, Uzbekistan has its own financial and banking system, and its participants have special characteristics. These are:

1. Due to the high level of inflation and the low value of the national currency, a significant part of the financial market is based on the US dollar (mostly) and the euro (partially).



**Fig. 1. the share of commercial banks' assets, credits, deposits and capital in foreign currency in 2016-2020<sup>1</sup>**

The information presented in Fig. 1 is provided on commercial banks' assets, credits, deposits and capital in foreign currency in 2016-2020. In the period, the percentage of the loan and funds in foreign currency rose to 40-50%. Until 2017, more than 30% of the bank's capital was in foreign currency. In 2018 it was decreased sharply (1%), and it was just 0.6% in 2020. However, in the main indicators of the banking system, the fraction of foreign currency (mainly US dollars) still remains large.

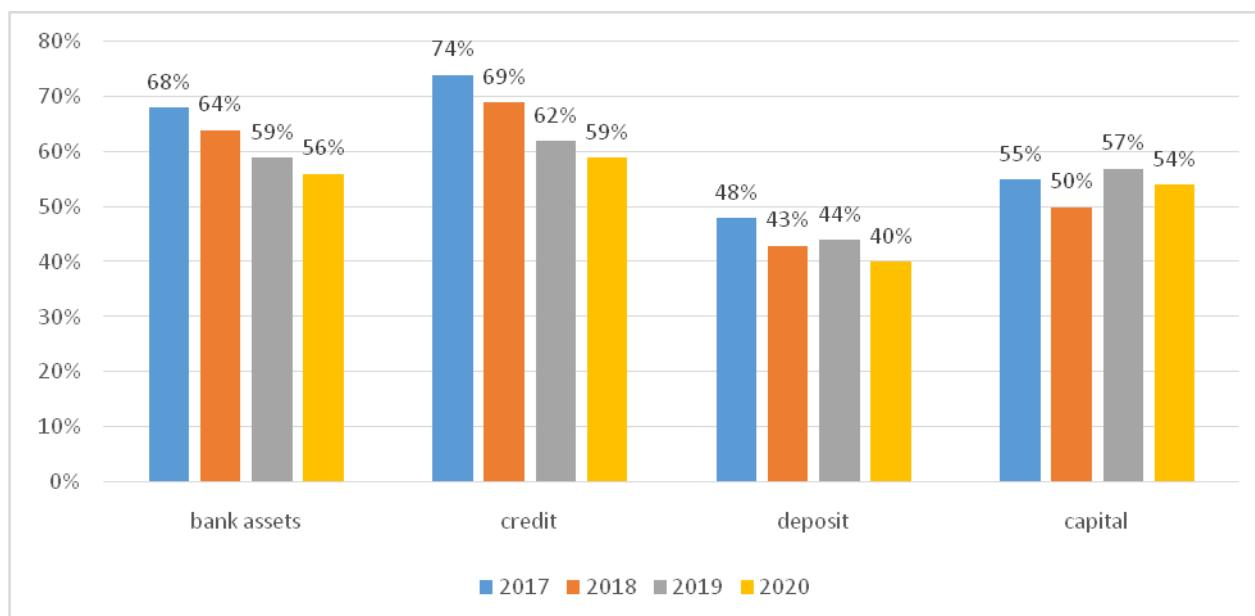
2. Due to the undeveloped capital market, the credit market remains the main source of business financing.

For 30 years of independence of the country in Uzbekistan, it has not been possible to develop the securities market. In recent years, the state accounted for 85.4% of the portion issued on the stock market. During this period, the state's shares out of 54 joint-stock companies publicly offered for sale were sold only in 11. Despite the implementation of a number of reforms in the corporate bond market, this market is not a source of attracting capital for business<sup>2</sup>.

### 3. High concentration of the banking sector

Figure 2 presents data on total assets, loans, capital and liabilities of the four largest banks in Uzbekistan during the period of 2017-2020. Though the share of assets, loans and equity of the four largest countries' banks is declining from 74 percent to 54 percent in 2017-2020, the share of these four, by key indicators, still accounts for more than half of the market. Precisely because private banks are more competitive in providing retail deposit services, these banks fraction is only more than 40% of the market. But this indicator is also significant.

<sup>1</sup> The author uses the data from [www.cbu.uz](http://www.cbu.uz)



**Figure 2. The share of the four largest banks (National Bank, UzSQB, Asaka bank and Ipoteka Bank) in Uzbekistan according to the main indicators of commercial banks in 2017-2020<sup>3</sup>**

4. Severe control over the activities of the bank by the central bank. High level of centralization and central bank's rigorous requirements can have both positive and negative effects on the banking sector.

5. Inefficient infrastructure and complex processes for meeting the requirements of the competent authorities

According to the World Bank on January 1, 2021, there are 42.4 bank branches for every 100,000 people in the country. On the same date, the number of ATMs is 48.4 per 100,000 people. These indicators are in second place in the region of Central Asia (only less than in Kazakhstan). More than 64 countries of the world have less criterion. However, the infrastructure is created inefficiently to permanently use in all regions, especially in distant regions of the country, people do not have the same opportunities as in industrialized and big cities of the country, which adversely affects the level of financial inclusion in the country<sup>4</sup>.

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regions of the country, people do not have the same opportunities as in industrialized and big cities of the country, which adversely affects the level of financial inclusion in the country<sup>5</sup>.

6. Some legislative acts are outdated, and the necessary regulatory documents for the development of the financial market have not yet been adopted. For instance, in the country it is not yet formed a legal framework and an effective mechanism for the introduction of new banking products necessary for Uzbekistan, such as mortgage-backed securities, structured securities, Islamic finance instruments. According to the law "On the Securities Market", which border is not placed on the types of securities that can be issued in the country. It is also noted that according to the Rules of issuance of securities and state registration of issues of issue securities, residents can issue structured bonds. Nevertheless, it is not established the procedure for the issue and circulation of these securities by law. - молиявий инструментларни муомалага киритиш ва уларнинг назорати бўйича, шунингдек, банк ҳисобдор бўлган регуляторларнинг сонининг кўплиги (Марказий банк, Молия вазирлиги ва б.);

7. Such artificial obstacles as a high level of bureaucracy in the introduction of financial instruments, and the responsibility of issuers to several regulatory bodies (the Central Bank, Ministry of Finance, etc.) hinders the development of the financial products market.

As part of the study, the problems of the complexity of the process of issuing financial instruments by banks into circulation in such countries as Uzbekistan, Russia and Kazakhstan were analyzed. For example, in Kazakhstan there are no fees for registration of securities, all documents are provided remotely in electronic form, tax incentives are provided to expand placement through the exchange.

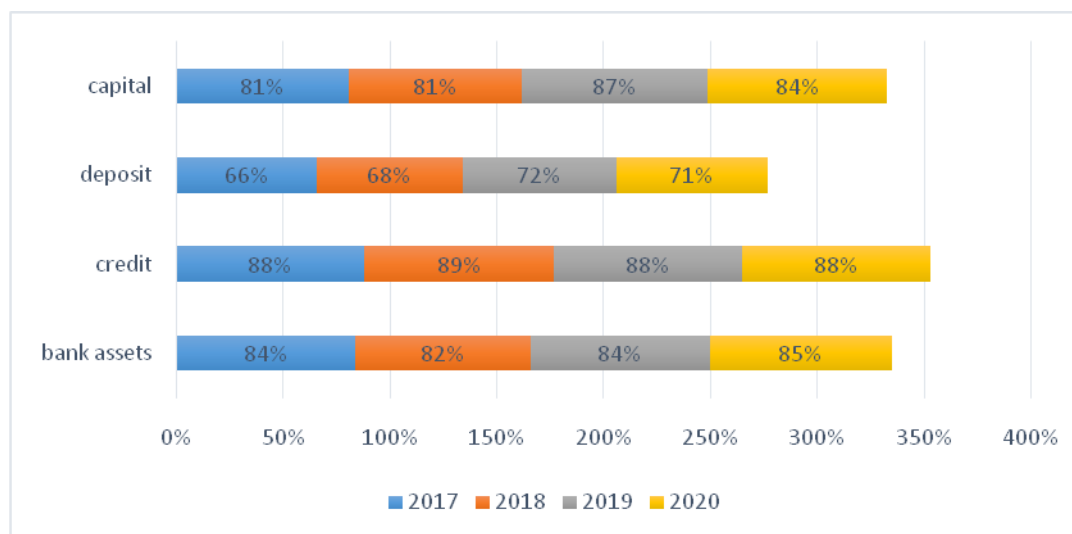
When the same processes were studied in Uzbekistan, it was revealed that all documents must be submitted to the state authority in paper form, that a period of up to 30 days was set for consideration and registration of documents (in other countries up to a maximum of 20 days), and a minimum of 25 % of issued securities must be placed through the stock exchange.

8. The weak competitive environment in the financial market:

- major fraction of the banking market belongs to banks with state shares. Fig. 2 provides information on the share of state-owned banks in Uzbekistan in 2017-2020 by key indicators. State-owned banks take the lead in all indicators.

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<sup>5</sup> The World bank [www.worldbank.org](http://www.worldbank.org)



**Figure 3. According to the main indicators the share of state-owned banks in Uzbekistan in 2017-2020<sup>6</sup>**

This situation ensures that banks with state shares occupy a leading position in almost all banking product markets.

On 11/17/2020 on the official website of the Central Bank, they published the results of the survey among consumers of banking services to assess the quality of customer service in Tashkent.<sup>7</sup>

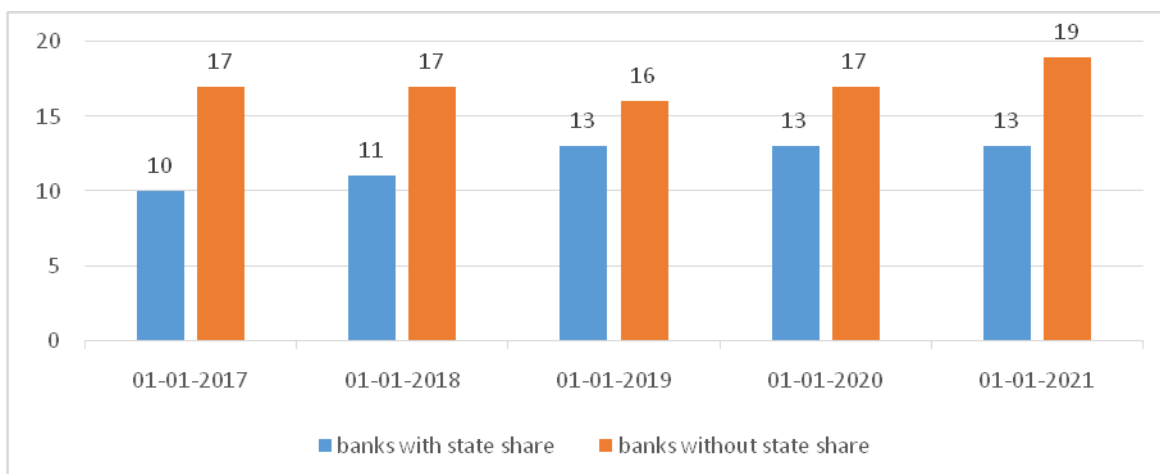
The quality of services provided by consumers in 4 banks without state shares and 1 with state share (Silk Road Bank, Asia Alliance Bank, Invest Finance Bank, Orient Finance Bank, Kapitalbank) is "good" compared to other banks, and in 6 with state share and 2 without state banks (UzPSB, Uzmillibank, Trustbank, Hamkorbank, Aloqabank, Ipoteka Bank, Turonbank, Asaka Bank) the services provided are "satisfactory". The quality of services provided by 5 bank with state share and 1 without state share (Poytakht Bank, Microcredit Bank, Qishloq Qurilish Bank, Agrobank, Narodniy Bank, and Davr Bank) was deemed "not meeting" the needs of clients.

According to the results of this survey, it is once again proved that 4 out of 5 banks recognized as "good" are private banks, and the quality of service is high in a fair competitive environment.

This problem would be solved by the privatization of the state share of banks. But the privatization of the state share in the country's banks is carried out very slowly. For example, in 2016-2020, the state share of no bank was privatized, and 5 banks were opened, of which 3 banks were with a state share and 2 banks without a state share.

<sup>6</sup> The author uses the data from [www.cbu.uz](http://www.cbu.uz)

<sup>7</sup> This survey was conducted in the form of personal questions and answers to clients of commercial banks, in which 1,092 respondents (450 individuals and 642 business entities) took part, and a survey to assess the quality of banking services in commercial banks was conducted on the basis of 4 criteria (reliability, skills, ingenuity and customer support). The Central bank of Uzbekistan [www.cbu.uz](http://www.cbu.uz)



**Fig. 4. Dynamics of changes in the number of private banks and banks with state shares in 2016-2020<sup>8</sup>**

This is illustrated in Fig. 4, which means that the number of state banks has increased over the 5 years. In 2016, the number of state-owned banks accounted for 37% of the total number of banks, while in 2020 their share was 40%.

7. discrepancy between the periods of assets and attracted capital;

**Table 1.**

**Comparative analysis of terms of deposits and loans of commercial banks in 2016-2020<sup>9</sup>**

	deposits by maturity			loans by maturity	
	demand deposits,%	short term deposits,%	long term deposits,%	short term loans,%	long term loans, %
<b>2016</b>	55,0	32,3	12,6	8,1	91,9
<b>2017</b>	52,6	38,3	9,1	4,3	95,7
<b>2018</b>	42,7	29,9	27,4	5,2	94,8
<b>2019</b>	38,7	28,9	32,4	8,5	91,5
<b>2020</b>	42,8	29,7	27,5	10,3	89,7
<b>2020/2016</b>	77,9	91,7	217,6	127,2	97,6

Table 1 data shows that there is disproportion between periods of loans and borrowings. For example, in 2016, long-term loans accounted for 91.9% of total loans, while long-term deposits accounted for 12.6%. Although this imbalance slightly decreased over 2016-2020, the share of long-term loans has been increased more than 2 times, but the portion of short-term loans is similar and the share of long-term loans has not changed much in 2020.

<sup>8</sup> The author uses the data from [www.cbu.uz](http://www.cbu.uz)

<sup>9</sup> The author uses the data from [www.cbu.uz](http://www.cbu.uz)

8. corruption, fraud and abuse in the banking system reduces public confidence in financial institutions;

In 2019-2020, 166 bank employees were brought to criminal responsibility. Also, during this period, bank employees illegally spent preferential loans in the amount of 1.7 billion soums, allocated within the framework of the project "Every family is an entrepreneur"<sup>10</sup>.

To address the above disadvantages, in particular, problems of feeble infrastructure and amiss human factors, digital transformation of banks can serve as an effective solution. In this regard, the state has taken the initiative, and reforms have been developed in recent years, including government decisions and decrees, aimed at transforming the national banking system and increasing access to financial services for population.

In recent years, the emergence of products for remote provision of services in innovative banking products by commercial banks has introduced significant changes in the behavior of bank customers, as presented in Table 2.

**Table 2.**

**Analysis of changes in the behavior of the population in connection with the emergence of innovative remote banking products<sup>11</sup>**

	<b>Population behavior</b>	<b>The basis for approval</b>
1.	The provision of remote services to the population is becoming more and more popular.	In 2013-2020, the number of remote users of the banking service system increased from 108.7 thousand to 9340.8 thousand, which means an increase of 9.3 times.
2.	Getting microloans through mobile applications without visiting banks	For 9 months of 2020, it was received 1,573.1 billion UZS microloan, and 9 964.7 billion UZS are placed on term deposits.
3.	Making deposits from mobile applications without visiting banks	For 9 months of 2020, 9 964.7 billion UZS are placed on term deposits.
4.	Carrying out conversion operations through ATMs and mobile applications	On October 1, 2020, up to 4.7 million dollars were purchased through ATMs and through mobile applications 444.5 million dollars. This is 15.4% of the total volume of currency purchased by individuals.
5.	Through the mobile application, without going to the bank branches, the main part of the loan and interest are repaid.	It was paid the principal and interest of the loan amount of 668.6 billion UZS through mobile applications without going to bank branches.
6.	Making payments by scanning QR codes	More than 14.1 thousand business entities use this system.
7.	Using smartphones through special software (tap2phone) by entrepreneurs as a payment terminal	More than 730 business entities use their mobile phones as payment terminals
8.	P2P transaction popularity	115.4 trillion UZS was credited to the bank's cards, and 17% of them were made as P2P through mobile application.

<sup>10</sup> The Central bank of Uzbekistan [www://cbu.uz](http://www.cbu.uz)

<sup>11</sup> The author uses the data from [www.cbu.uz](http://www.cbu.uz).



Banks offer their customers a wide range of remote amenities:

- all banks have their own mobile applications, with the help of which bank customers find out the balance of the card, make transfers from card to card;
- Online loans and online savings;
- online conversion operations, electronic wallets;
- making tax and other obligatory payments;
- Internet of Things (IoT Internet of Things), marketplace;
- ordering various cards, payments with mobile phones without cards (one touch technology) and x.z.ni they will have the opportunity to implement.

Analysis of bank deposits shows that clients have the opportunity to choose the appropriate type of deposit based on their capabilities and goals. The fact that when attracting deposits from individuals, they are offered through the bank's mobile applications, also causes a revival in the market for this banking product. For example, more than 50% of deposits are attracted through a mobile application.

In this study, all deposits for individuals were studied as of 04/01/2021. 151 types of deposits were found, of which 74 (49%) can be transferred through a mobile application. It also offers services such as preferential withdrawal of funds in 70 types (46%), payment of interest in 147 (97%) every month, capitalization of interest in 13 (9%), Partial withdrawal of funds in 22 (15%), additional funds in 100 (66%).

In Uzbekistan, competition between private banks existed mainly in the deposit market. But due to the decrease in public investment, state-owned banks also began to actively participate in the deposit market. On April 1, 2021, in total, the share of deposits in such banks as Agrobank (29%), Asiaalliancebank (29%), Microcreditbank (23%), National Bank (30%) exceeds 20%. Nevertheless, the leadership in this regard is occupied by private banks. For example, more than 50% of the deposits attracted by banks with private and foreign capital, such as Ravnakbank (52%), Hamkorbank (56%) and Ziraatbank (54%), belong to deposits.

## **CONCLUSION**

Based on the results of the above analysis, the following conclusion can be drawn:

1. The results of this study show that fintech can increase the use of banking services among the population. And these technologies will help increase public confidence in banks. But under the condition of weak competition and tough policy of the regulatory body, even the introduction of fintech products will not develop the financial market.

2. The introduction of fintech products requires the introduction of regtech technology for effective market regulation, but at the same time, it is necessary to revise the legislative framework and exclude conditions that are contrary to the development of the banking services market.

3. By offering banks fintech products in national currency, they will be able to increase assets in national currency. But the development of the financial market requires the formation of mechanisms for financial instruments that will attract long-term funds in the domestic market. But this requires a reduction in inflation and cost of capital.

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