

Yashil IQTISODIYOT va TARAQQIYOT

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- 08.00.01 Iqtisodiyot nazariyasi
- 08.00.02 Makroiqtisodiyot
- 08.00.03 Sanoat iqtisodiyoti
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- 08.00.17 Turizm va mehmonxona faoliyati



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ISSUES OF MINIMIZING RISKS RELATED TO MORTGAGE LENDING OF COMMERCIAL BANKS OF THE REPUBLIC OF UZBEKISTAN

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Abstract: The article analyzes the risks associated with mortgage loans of banks, the negative impact of the price bubble caused by the artificial increase in housing prices, and the issues of forming the necessary long-term resource source for mortgages. The increase in the volume of mortgage lending practices in commercial banks has both positive and negative aspects. In this article, according to the research materials and methods, the researches of a number of domestic and foreign economists on the topic are studied. This article discusses the improvement of mortgage lending practices of commercial banks and the minimization of related risks.

Key words: mortgage, mortgage loan, credit scoring, credit history, creditworthiness, debt burden, credit risk, loan portfolio, Central Bank, inflation, resource base, stress test, floating interest rate.

Annotatsiya: Maqolada banklarning ipoteka kreditlari bilan bog'liq tavakkalchiliklar, uy-joy narxlarining sun'iy ravishda ko'tarilishi natijasida yuzaga kelgan narxlar ko'pikining salbiy ta'siri, ipoteka kreditlari uchun zarur uzoq muddatli resurs manbasini shakllantirish masalalari tahlil etilgan. Tijorat banklarida ipoteka kreditlash amaliyoti hajmining oshishi ijobiy va salbiy tomonlariga ega. Ushbu maqolada tadqiqot materiallari va usullaridan kelib chiqqan holda, bir qator mahalliy va xorijiy iqtisodchilarning mavzu bo'yicha olib borgan tadqiqotlari o'rganiladi. Ushbu maqolada tijorat banklarining ipoteka kreditlash amaliyotini takomillashtirish va ular bilan bog'liq risklarni minimallashtirish masalalari muhokama qilinadi.

Kalit so'zlar: ipoteka, ipoteka krediti, kredit skoringi, kredit tarixi, kreditga layoqatlilik, qarz yuki, kredit riski, kredit portfeli, Markaziy bank, inflyatsiya, resurs bazasi, stress test, o'zgaruvchan foiz stavkasi.

Аннотация: В статье анализируются риски, связанные с ипотечным кредитованием банков, негативное влияние ценового пузыря, вызванного искусственным повышением цен на жилье, а также вопросы формирования необходимого долгосрочного источника ресурсов для ипотеки. Увеличение объемов практики ипотечного кредитования в коммерческих банках имеет как положительные, так и отрицательные стороны. В данной статье по материалам и методам исследования изучены исследования ряда отечественных и зарубежных экономистов по данной теме. В данной статье рассматривается совершенствование практики ипотечного кредитования коммерческих банков и минимизация связанных с этим рисков.

Ключевые слова: ипотека, ипотечный кредит, кредитный скoring, кредитная история, кредитоспособность, долговая нагрузка, кредитный риск, кредитный портфель, ЦБ, инфляция, ресурсная база, стресс-тест, плавающая процентная ставка.

1. INTRODUCTION

Mortgage loans are long-term real estate mortgages designed to meet the housing needs of the population. The global financial and economic crisis that occurred in 2007–2009 had a negative impact on the banking and financial system of the countries of the world, increased the demand for credit resources and, in turn, caused a significant increase in the price of loans. In addition, he pointed out the existence of a number of problems in mortgage lending practices and demanded to eliminate them and take necessary measures.

Satisfying the housing needs of the population in our country, accepting comfortable and modern comfortable conditions, and accepting affordable housing construction programs is a gratifying situation. However, the fact that commercial banks have a long-term resource base for issuing mortgage loans also requires solving the issue of attracting long-term resources.

In order to provide long-term mortgage loans to the population by commercial banks, there is a need for long-term attracted resources, and in this respect, it always creates a demand for long-term financial resources in banks. Therefore, it is important to create a refinancing system for mortgage loans in our republic and to form internal and external sources of financial resources.



In addition, there are negative situations such as an increase in problem loans on mortgage loans issued by banks, an increase in the share of inactive loans, and the appearance of price bubbles as a result of an artificial increase in housing prices, which require measures to be taken to prevent them.

2. LITERATURE REVIEW

In the post-global financial crisis research, there is evidence that household credit has a negative impact on macroeconomic indicators. In particular, an increase in the balance of household loans can provide GDP growth in the short term, but in the long term, banks will ease credit conditions for households, increasing the level of credit risks and NPL (Non-performing loans) indebtedness. After the financial crisis of 2008, demands on banks' mortgage lending practices and the creditworthiness and security of borrowers were tightened.

Researcher M. Pomazanov proposed a set of tools that can be used in practice to improve the quality and efficiency of risk management for retail lending products of banks (mortgage, microloan, consumer, etc.). Considered risk assessment based on ROC analysis in the practice of the largest banks in Russia. Based on the results of the research, the quasi-Gini indicator of the general lending process was estimated based on the decisions on rejecting and approving the applications of the borrowers, and it was based on the fact that the income of the population is the main factor in reducing risks. ^[1]

In the studies conducted by economists Andreas Fuster, Matthew Plosser, Philipp Schnabl, James Vickery, modern FinTech technologies in banks increase the volume of mortgage lending. As a result of the introduction of FinTech technologies, commercial banks and other mortgage origination institutions (lenders) increased their share of the US mortgage lending market from 2% to 8% between 2010 and 2016. FinTech lenders have been found to process mortgage applications 20 percent faster than other lenders. Faster review, processing and decision of applications than other lenders. FinTech lenders regulate supply more flexibly than other lenders in response to external factors of mortgage demand. ^[2]

According to the results of studies conducted by researchers Morris A. Davis, William D. Larson, Stephen D. Oliner, Benjamin R. Smith, it was concluded that by the year 2000, the risk of mortgage loans increased. Also, at the beginning of 2000, it was proved that the loan offer expanded due to the reduction of the spread of mortgage rates between high-risk loans in the private-label securities market (Private-Label Securities - PLS) and lenders' portfolios, and a high level of DTI (debt-payment to income) and CLTV (combined loan) -to-value played a key role in increasing risk before the financial crisis. Strict underwriting standards established during the crisis and its aftermath served to reduce mortgage risk. At the same time, although the level of credit and borrower risk is relatively low, the significant increase in housing prices over the last decade has created conditions for stressful situations. ^[3]

Raun van Ooijenc and Maarten C.J. In van Rooij's research, the onset of the 2007–2008 financial crisis was significant in shaping the understanding of mortgage contracts and the risks associated with them. The results of a special survey they developed on mortgage decisions, financial knowledge and financial advice show that homeowners are well aware of mortgage risks and consider large loans relative to the value of the home, i.e. loans with large payments relative to income, to be risky. Homeowners with subprime mortgages may face financial problems due to housing costs ^[4].

According to the research of economists Manuel Adelino, W. Frame and Christopher Gerardi, Fannie Mae and Freddie Mac, the main investors in mortgage-backed securities before the 2008 crisis, had a significant influence on the composition of collateral in this market. Mortgage-backed securities designed for Fannie Mae and Freddie Mac performed better than other equity-backed securities in the same deals, shifting potential risk. This caused the risk associated with mortgage loans to increase ^[5].

Situations similar to the above are observed today in the mortgage lending practices of the banks of the Republic of Uzbekistan. The reason is that a price bubble is emerging as a result of the increase in housing prices and the rapid growth of the balance of mortgage loans allocated by banks is causing alarming situations.

3. METHODOLOGY

It is explained by the appropriateness of the approach and methods used in the research, the formality of legal documents, used literature and internet data, annual financial reports of commercial banks, reports related to lending activities, the use of practical data of the Central Bank and the Statistics Agency, as well as the fact that it is based on econometric analysis.

Grouping, comparative and structural analysis, induction and deduction, analysis and synthesis and other scientific research methods were used in this article.



4. RESULT AND DISCUSSION

In order to meet the housing needs of the population, the resources allocated by the Government of the Republic of Uzbekistan to commercial banks for mortgage loans are financed through the allocation of budget loans and serve to provide commercial banks with stable resources for mortgage loans. In addition, commercial banks provide mortgage loans based on market conditions at the expense of their own resources.

The widespread use of new technologies in the business processes of issuing retail loans by banks and the automated analysis of loan orders reduce the operational costs of lending and increase the supply of loans. The growing population will lead to an increase in the demand for mortgage loans in the future and will require banks to digitize their mortgage loans.

Table 1: Terms of mortgage loans of commercial banks

Banks	Interest rate	Term	Amount	Initial payment	Collateral required
UzSQB	26,9%	10 year	80 million UZB sums	0%	An apartment under renovation
Hamkorbank	18,0%	20 year	416,5 million UZB sums	15%	An apartment under renovation or Mortgage of real estate being purchased
Aloqabank	18,0%	20 year	416,5 million UZB sums	15%	Mortgage of real estate being purchased
National bank of Uzbekistan	18,0%	20 year	416,5 million UZB sums	15%	Mortgage of real estate being purchased
Kapitalbank	24,0%	10 year	2000 million UZB sums	26%	Mortgage of real estate being purchased
Invest finance bank	24,99%	10 year	1950 million UZB sums	26%	Mortgage of real estate being purchased
Ipoteka OTP group	18,0%	20 year	416,5 million UZB sums	15%	Mortgage of real estate being purchased
Tenge bank	24,9%	10 year	640 million UZB sums	35%	Mortgage of real estate being purchased

Having familiarized with the conditions of mortgage loans allocated by banks, the loan interest rate is 18 percent per annum and for a period of 20 years, it serves as a source of mortgage loans at the expense of resources allocated from the budget. It is offered by private banks on a commercial basis at a rate of 24.9% to 26.9% for a period of 10 years. It can be seen that the requirements of banks regarding the initial investment for mortgage loans are also different. In order to reduce the credit risk, private banks require the formation of an initial contribution of 26-35% of the amount of the mortgage loan. Banks with a state share set an initial contribution of 15 percent.

According to the results of the analysis conducted by the US company Allied Market Research, the volume of mortgage loans in the next decade in the world will reach 27.5 billion US dollars in 2031 and almost 2.4 times compared to 2021 (11.5 billion US dollars) and average annual growth of 9.5 percent is projected.

The volume of mortgage loans allocated by the banks of the Republic of Uzbekistan showed high growth rates in the last 5 years. In particular, the volume of mortgage loans increased by 39.2 percent in 2021 (28.3 trillion soums) compared to 2020 (20.3 trillion soums), while the average growth rate in the last four years is 24 percent per year. At the same time, the increase in the share of retail loans allocated to the population as part of the total credit investments means that the debt burden of the population is also increasing.

Table 2: Dynamics in the household debts of commercial banks by types and its change

Type of loan	31.12.2019	31.12.2020	31.12.2021	31.12.2022
Mortgage loans	50.9%	51.6%	51.7%	46.0%
Microloan	8.0%	10.5%	13.6%	14.5%
Consumer loans	13.8%	22.3%	18.4%	25.0%
Loans for business development	27.4%	15.7%	16.3%	14.4%
TOTAL	100.0%	100.0%	100.0%	100.0%

From the analysis data, it can be seen that at the end of 2019, mortgage loans (50.9%) and loans for business development (27.4%) of banks accounted for a high share during the analysis period, while at the end of 2022, mortgage loans (46.0%) and The share of consumer loans (25.0%) in the total retail credit portfolio has increased.

The balance of mortgage loans allocated by commercial banks of the Republic of Uzbekistan increased by 2.3 times the balance of 2019-2022 and amounted to 46,460 billion soms by the end of 2022.

In the banking system of the Republic of Uzbekistan in 2019-2022, there is a trend of growth in the ratio of debt service calculated on allocated consumer loans of the population. This trend means that more and more of the income of individuals taking out consumer loans is directed towards paying down principal and interest payments.

By the end of 2022, the debt service ratio for consumer credit increased by 24 percentage points compared to the corresponding period of 2021 and reached 56%. The increase in the indicator of the debt burden on consumer loans of individuals is associated with a 2-fold increase in the average loan volume per borrower.

In the composition of loans allocated to the population in the republic, it shows that in 2022, 60-70% of the disposable income of the borrowers of mortgage and consumer loans will be directed to extinguish debt obligations.

In order to assess the influence of commercial banks of the Republic of Uzbekistan on the practice of lending to individuals, an econometric analysis of the relationship between them was carried out. In the study, econometric analysis was carried out using panel model and regression analysis.

In the analysis, all variables were natural logarithmized in order to reduce the difference between the variables based on the size of the banks. According to analyzes and experiments with several variables, term deposits (TD), authorized capital of the bank (SC), total reserve created for possible losses (RF), interest income (PI) as factors affecting the volume of loans to individuals (RL), interest expense (PE) and non-interest expense (NPE) were selected. The following table presents the descriptive statistics of the variables:

Table 3: Descriptive statistics of variables

Variables	Observations	Mean	Standard Deviation	Minimum	Maximum
Loans to individuals (RL)	975	2586130	3561149	0.336	17300000
Time deposits (TD)	975	3060305	3652008	0	16200000
Capital (SC)	975	1729040	2888716	0	15600000
Total reserve (RF)	975	173121.5	314534	0	1644903
Interest income (PI)	975	930031.2	1437382	0	10600000
Interest expenses (PE)	975	589128.1	941558.2	0	6032629
Non-interest expenses (NPE)	975	129192.4	232588	0	1623112

It can be seen from the data of this table that the averages of indicators of loans to individuals and time deposits during the period of analysis are very close to each other. As a result, there is a high degree of differentiation in attracting time deposits and granting loans to individuals by commercial banks. In addition, the minimum values of most variables during the analysis period were zero, because some banks left the banking market during the analysis period (for example, Turkistonbank, HI-TECH bank), and some of them started their business activities (for example, APEX bank). This means that the indicators of these banks were equal to zero in some periods. The correlation results are presented in the table below to see how the variables are related.

Table 4: Correlation matrix between factors affecting personal loans

Indicators	RL	TD	SC	RF	PI	PE	NPE
Loans to individuals (RL)	1						
Time deposits (TD)	0.8329	1					
Capital (SC)	0.7753	0.7063	1				
Total reserve (RF)	0.6354	0.5124	0.5608	1			
Interest income (PI)	0.8758	0.7735	0.7789	0.6629	1		
Interest expenses (PE)	0.8494	0.8957	0.7344	0.5393	0.8147	1	
Non-interest expenses (NPE)	0.7358	0.6763	0.5781	0.5563	0.8997	0.6851	1



It can be seen from the data of this table that the averages of indicators of loans to individuals and time deposits during the period of analysis are very close to each other. As a result, there is a high degree of differentiation in attracting time deposits and granting loans to individuals by commercial banks. In addition, the minimum values of most variables during the analysis period were zero, because some banks left the banking market during the analysis period (for example, Turkistonbank, HI-TECH bank), and some of them started their business activities (for example, APEX bank). This means that the indicators of these banks were equal to zero in some periods. The correlation results are presented in the table below to see how the variables are related.

Table 5: Correlation matrix between factors affecting personal loans

In (Loans allocated to individuals)	Coefficient	Std. err.	t-stat	p-value	[95% confidence interval]	
ln(Deposits)	0.146509	0.066471	2.2	0.035	0.010757	0.282262
ln(bank capital)	0.651667	0.153372	4.25	0.000	0.338439	0.964894
ln(Total reserve)	0.256307	0.027716	9.25	0.000	0.199702	0.312911
ln(Interest income)	0.461546	0.095984	4.81	0.000	0.26552	0.657571
ln(interest expenses)	-0.22466	0.058039	-3.87	0.001	-0.34319	-0.10613
ln(Non interest expenses)	-0.14927	0.072291	-2.06	0.048	-0.29691	-0.00163
Const	-1.6592	1.926012	-0.86	0.396	-5.59264	2.274239
The count of observations	891					
The count of banks	31					
R ²	0.69					

Based on the p-values of the regression results, it can be said that all variables are statistically significant. Based on the fact that $R^2 = 0.69$ in the regression results, it can be concluded that the model data is highly reliable.

From the regression result, it can be seen that term deposits, private capital in the bank's common shares account, general reserve created for possible losses and interest income had a statistically significant positive effect on the amount of loans allocated to individuals. It can be seen that interest and non-interest costs had a statistically significant negative impact on the volume of loans allocated to individuals. The econometric model of the dependence of factors influencing the practice of lending to individuals in the Republic of Uzbekistan is presented below:

$$RL_{it}^i = 0.146 \times TD_{it}^i + 0.652 \times SC_i^i + 0.256 \times RF_i^i + 0.462 \times PI_i^i - 0.225 \times PE_i^i - 0.149 \times NPE_i^i - 1.659 + \epsilon_{it}$$

Bu yerda:

i - selected objects; t-selected periods;

RL_{it}^i -t period retail loans of bank i;

SC_i^i -t capital of bank i in period t;

RF_i^i - t period general reserve fund of bank i;

PI_i^i -t - interest income of bank i in period t;

PE_i^i -t period interest expenses of bank i;

NPE_i^i -t period non-interest expenses of bank i;

ϵ_{it} - possible errors, in case of different t and i.

According to the results, it was empirically proven that, all other variables being unchanged, a 1% increase in time deposits increases the volume of loans to individuals by 0.15%. Also, if a 1% increase in the authorized capital of a bank leads to an increase in the volume of loans to individuals by 0.65%, a 1% increase in total reserves or interest income leads to an increase in the volume of loans to individuals by 0.26% and 0.46%, respectively. However, ceteris paribus, a 1 percent increase in interest or non-interest expenses reduces the volume of loans to individuals by 0.22 percent or 0.15 percent, respectively.

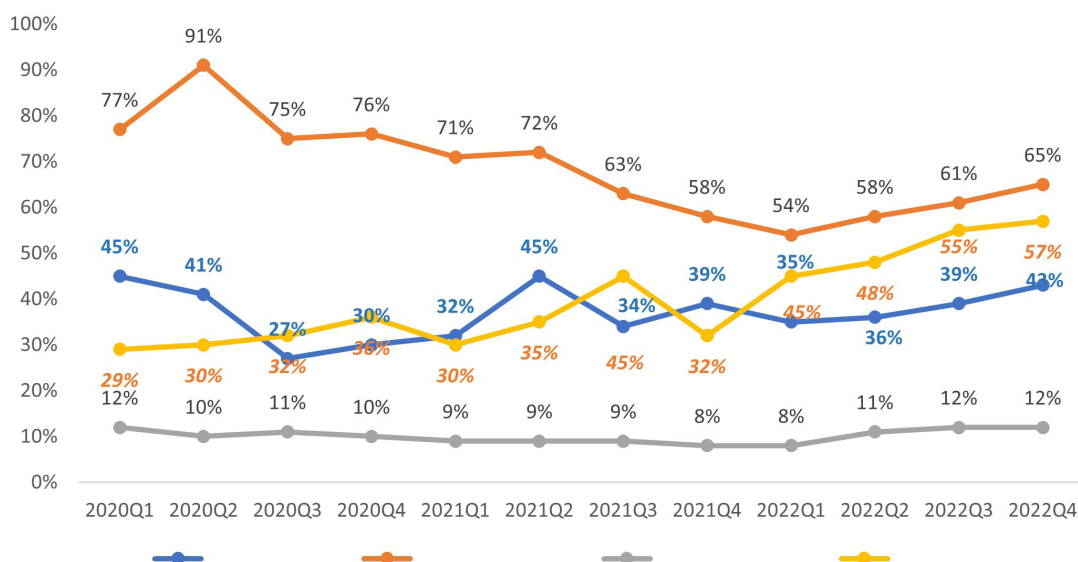


Figure 1: Debt service ratios by types of loans allocated to individuals, %

In the structure of loans allocated to the population by commercial banks in the Republic of Uzbekistan, the debt service ratio for microloans by the end of 2022 increased by 4 percentage points compared to the corresponding period of 2021 and amounted to 12%. In this case, the increase in the debt burden indicator for microloans occurred as a result of the increase in the volume of allocated microloans due to the increase in the income of microloans, as well as the increase in the interest rate of microloans (annual).

Also, the ratio of debt service on mortgage loans allocated to the population increased by 4 percentage points by the end of 2022 compared to the corresponding period of 2021 due to the increase in the average loan size per borrower and the increase in the interest rate.

At the end of 2022, the debt service ratio for auto loans allocated to individuals by commercial banks was 65 percent, which increased by 5.7 percent compared to the corresponding period of 2021.

Along with the positive aspects of the expansion of mortgage loans to the population by commercial banks, there are some negative aspects that may cause various risks in the banks' activities in the future.

The Central Bank of the Republic of Uzbekistan is implementing measures to prevent and reduce risks that may arise in the practice of allocating mortgage loans to individuals. Among the alarming and problematic issues that may arise regarding mortgage loans allocated to the population, it is necessary to indicate the following:

1. The appearance of a price bubble as a result of the rapid increase in housing prices due to the increase in the population and the increase in the supply of mortgage loans;
2. Increasing share of mortgage loans in retail credit portfolio of banks;
3. Increase in the level of debt service due to the increase in the debt burden of individuals;
4. The emergence of negative situations in the form of a possible economic crisis and various pandemics in the world.

A constant increase in housing prices, regardless of fundamental factors, causes the formation of a price bubble. In this case, a sharp increase in demand in the real estate market due to non-fundamental factors and the short-term failure of supply to meet demand creates a price bubble.

In the process of expansion of the price bubble, demand increases due to the expectation of further increase in housing prices by the population. In turn, the constant increase in prices in the real estate market will also attract investors who are looking to make a profit at the expense of the increase in housing prices in the future, and will cause prices to rise even higher, regardless of the change in fundamental factors.

In 1992-1993, Norway and Sweden had the most historic banking crises related to the price bubble in the real estate market. Before the crisis period, the volume of mortgage loans and housing prices increased significantly. However, as a result of the economic downturn, rising real interest rates and changes in the tax system, as well as reduced aggregate demand, housing prices have fallen sharply, and the level of collateralized mortgage loans has declined. This has led to an increase in the risk of mortgage loans.

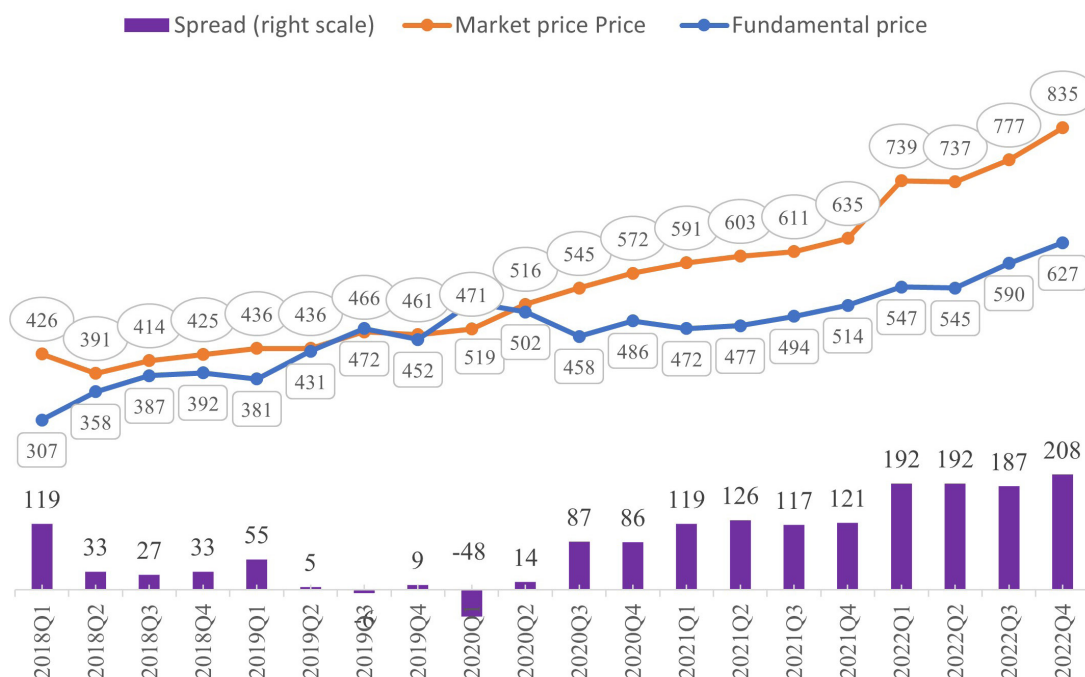


Figure 3: Dynamics of market and fundamental prices of an average unit of housing for the city of Tashkent according to the price and income model, million UZB soums

In the real estate market of the Republic of Uzbekistan, the growth of the price difference has been higher than the dynamics of the market and fundamental prices of an average unit of housing for the city of Tashkent in recent years and reached 208 million soums in the 4th quarter of 2022. This indicates that the price difference in the housing market is growing due to the high supply of mortgage loans.

During the analyzed period, at the end of 2019 and the first quarter of 2020, the difference between housing prices decreased and the market price was 48 mln. we can see that it has decreased to soums. The onset of the pandemic has had an impact on household incomes and banking problems, reducing lending and housing prices.

The fundamental value of the real estate price, determined on the basis of the ability of the population to get a mortgage loan, represents the stable level of housing prices in the situation where the level of systematic risks in the mortgage market is low and the probability of loan repayment is high.

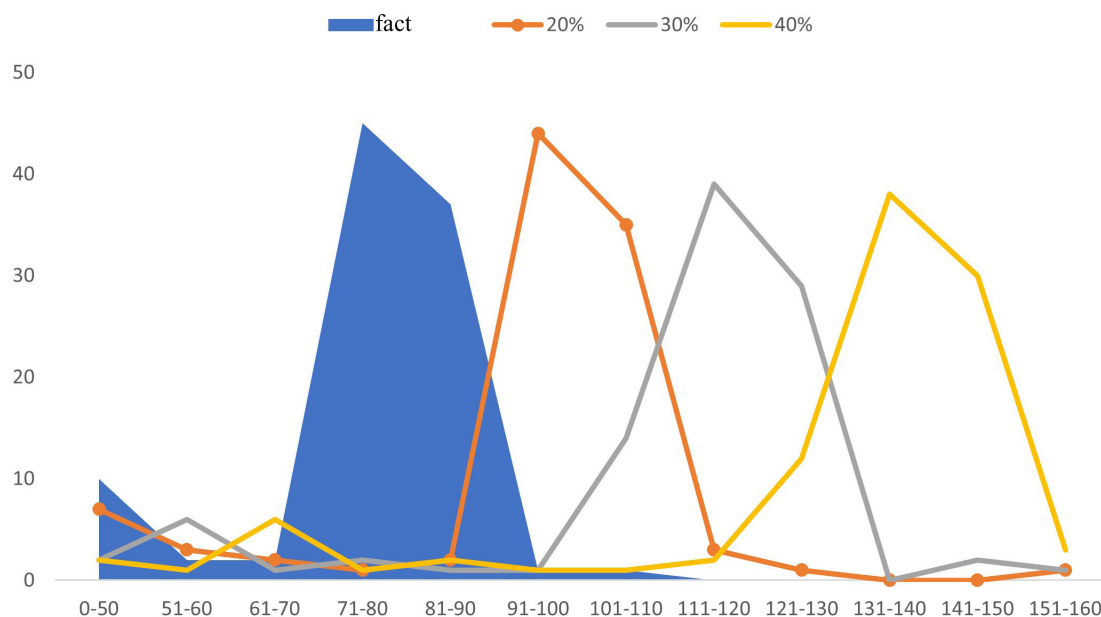


Figure 4: Distribution of the LTV indicator for mortgage loans based on the scenarios of falling house prices, 2022



Based on the data of 2022, an analysis of the sharp decrease in housing prices in the real estate market of Uzbekistan in three different scenarios (20, 30 and 40 percent) is presented. In this case, the LTV (Loan-to-value ratio) indicator, i.e. the loan-to-security ratio, was used as a basis, and its change was evaluated. As a result of the sharp fall in housing prices, it is hypothesized that loans with a loan-to-collateral ratio of more than 120 percent are more likely to be defaulted by borrowers. As a result of a 20% decrease in local housing prices, approximately 40% of mortgage loans issued in 2022 will have an LTV of over 100%. The fact that mortgage loans with LTVs above 120 percent account for 3 percent of total mortgage loans issued in 2022 means that the proportion of borrowers who are more likely to foreclose rather than pay off their mortgages is very low. In the event of a 30% and 40% decrease in housing prices, the problem of the adequacy of the amount of collateral (LTV indicator above 100%) will arise for 85% and 87% of mortgage loans issued in 2022, respectively. Also, the percentage of mortgage loans with LTV above 120% is 32% with a 30% decrease in housing prices, and 84% with a 40% decrease, indicating that these borrowers are more likely to foreclose than repay the loan. It can lead to large losses on mortgage loans allocated to banks. In this case, the fact that the amount of the loan is significantly higher than the price of the house is the main reason for not returning the loans. As a result, the share of non-performing loans and loan losses in the structure of loans will increase.

In order to minimize the risks associated with mortgage loans in commercial banks, it is appropriate to implement measures in the following directions:

1. Introduction of mortgage stress test in commercial banks.

In international practice, banks are required to analyze the economic situation, the real estate market, and the level of income and debt burden of the population and evaluate possible negative situations in order to prevent future risks and solve the above problems. In this regard, it is important to use best practices of international practice. In particular, in the experience of developed countries, the use of existing mortgage credit stress-test analysis is of great importance.

After 2008, the Canadian and UK governments introduced new regulations requiring mortgage lenders to limit their lending practices, and one of these regulations was the introduction of the mortgage stress test. Banks began using a "stress test" to make sure borrowers can afford to pay their mortgage over the entire life of the loan, not at the time of application.

A mortgage stress test is a set of rules that banks and brokers use to assess a borrower's eligibility for a mortgage loan and his ability to repay.

By trying a higher mortgage interest rate, the lender can reduce the borrower's risk of default. However, a stress test at a rate higher than the current contract rate will assess the customer's ability to borrow and thereby determine their ability to afford a home.

In addition, the mortgage stress test is also performed to prevent defaults on the customer's loan payments. Interest rates are at historically low levels and stress tests are conducted to ensure that government borrowers are able to make mortgage payments.

What happens if a customer fails the mortgage stress test or defaults. If the client's income is too low to make the mortgage payments at the higher stress test rate, or if he cannot prove that he has a stable source of income, the mortgage will not pass the stress test and the bank will not allocate the mortgage loan.

2. Comprehensive assessment of mortgage credit risks.

Banks must evaluate each mortgage agreement taking into account any level of risk factors present, the significance of the risk factors and the overall risks present in the mortgage application. It is required to form a compliance matrix for mortgage loans and comprehensively assess the client's credit risk. In this matrix, the following indicators for a mortgage loan can be cited:

- loan-to-value ratio LTV (Loan-to-value ratio);
- credit rating of the client;
- employment of the client;
- type of loan repayment;
- type and number of property;
- DTI (Debt-to-Income) level of debt-to-income ratio;
- reserves created.

Commercial banks must fully document the results of their mortgage credit risk assessment and ensure that the information used to arrive at the high assessment is valid, accurate and reasonable.



5. CONCLUSION

One of the important conditions for ensuring the stability of the banking system is the implementation by the regulator of measures related to the reduction of factors affecting the increase in mortgage lending risks. Mortgage loan risks are more specific to banks and investors. Because the credit institution takes more risk by providing its money than a borrower who buys a home that has been repeatedly checked for the presence of necessary registration documents and is insured against the borrower's inability to pay the loan. Also, unemployment related to borrowers, reduction of monthly income and other similar negative factors increase the risk of mortgage loans.

In the internal credit policy of banks on allocating loans for the purchase of real estate, requirements for setting the limits of the ratio of credit to collateral are proposed in accordance with the current legislation.

It is based on the need for commercial banks to constantly carry out macro-level analysis along with risk assessment related to allocated mortgage loans. This is based on a comprehensive assessment and monitoring of housing market conditions, price changes, and demand for housing.

References:

1. Mikhail Pomazanov (2022) Risk Management Tools to Improve the Efficiency of Lending to Retail Segments // Published: November 14th, 2022 // doi:10.5772/intechopen.108527
2. Andreas Fuster, Matthew Plosser, Philipp Schnabl, James Vickery (2018) The Role of Technology in Mortgage Lending // The Review of Financial Studies, Volume 32, Issue 5, May 2019, Pages 1854–1899, <https://doi.org/10.1093/rfs/hhz018>
3. Morris A Davis, William D Larson, Stephen D Oliner, Benjamin R Smith A (2023) Quarter Century of Mortgage Risk // Review of Finance, Volume 27, Issue 2, March 2023, Pages 581–618, <https://doi.org/10.1093/rof/rfac034>
4. Raun van Ooijenc, Maarten C.J. van Rooij (2016) Mortgage risks, debt literacy and financial advice // Journal of Banking & Finance // Volume 72, November 2016, Pages 201-217 // <https://doi.org/10.1016/j.jbankfin.2016.05.001>
5. Manuel Adelino, W Frame, Kristopher Gerardi (2017) The effect of large investors on asset quality: Evidence from subprime mortgage securities // Journal of Monetary Economics, 2017, vol. 87, issue C, 34-51
6. Baily, M., Litan, R., & Johnson, M. (2008). The origins of the financial crisis. Brookings Institution.
7. Case, K.E., Shiller, R.J. (2003). Is there a bubble in the housing market? Brookings Institution.
8. European Central Bank. (2000). Asset prices and banking stability.
9. "Financial Stability Review" 2023 prepared by the Financial Stability Department of the Central Bank of the Republic of Uzbekistan.

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