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RESEARCH ARTICLE

Development Trends of the Market of Agricultural Lending to Households in Ukraine: Analysis of Consumer and Mortgage Loans

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Abstract: The purpose of the article is to assess the conditions and identify the features of the market for consumer and mortgage lending to households based on the economic and statistical analysis of the data panel. The instrumental and methodological apparatus of the article compiled general scientific principles and approaches to economic analysis: Scientific abstraction, analysis and synthesis, grouping, typology, comparison, qualitative and quantitative expert assessments; logical and contextual methods of processing theoretical material, as well as the method of economic and statistical comparisons. The article analyzes the dynamics of consumer and mortgage loans for households in Ukraine from 2007 to 2023, and highlights their socio-economic significance. The main problems in the field of consumer lending are formulated, the resolution of which is necessary for the intensive agricultural activity of households. It has been established that, despite the accumulation of certain experiences in the banking sector, the mortgage lending market has not become massive today. It is concluded that the reasons for this situation are the difficulty in the practical application of legislative regulations aimed at protecting the interests of creditors; high level of interest rates; low level of real income of households and, consequently, low effective demand for mortgage loans; the impossibility of mass provision of long-term mortgage loans due to high risk (interest, credit, legislative); almost complete exclusion of the state from participation in the formation of a civilized market for housing mortgage lending. The prerequisites for the further development of consumer and mortgage lending to households in Ukraine are formulated. The prospects for development and the main directions for improving consumer and mortgage lending to households are determined.

Keywords: Households; A loan for the purchase; Construction and reconstruction of real estate; Share of loans; Agricultural lending; Consumer credit; Loan repayment period; Growth rates of loans

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1. Introduction

In the conditions of war, in order to increase the efficiency of their activities and maintain the growth rates of their business activity indicators, banks are looking for new directions for the development of consumer lending. In this regard, consumer credit for households is becoming one of the incentives for intensive agricultural activity and an actual area of work for Ukrainian banks.

Consumer credit is one of the main products offered by financial institutions to households. They play an important role in stimulating consumer demand, which has a positive effect on the dynamics of trade and production. Thanks to a consumer loan, a person gets the opportunity to buy goods and services that are not available to him at the current level of income. At the same time, consumer lending is associated with a number of acute socio-economic problems and risks that directly affect the welfare of consumers.

The development of consumer lending in Ukraine is a natural consequence of market transformations, which entailed a corresponding transformation of the banking sector and the credit market, the system of values and values of households. The attitude of people toward lending immediately changed, and the loyalty of the population to live on credit increased sharply.

Thus, in general, lending to the population is developing dynamically, and the emerging prerequisites for its further improvement create conditions for effective banking activities in this area. At the same time, the presence of negative trends and factors affecting the stability and stability of the banking system makes it necessary to study the state of consumer lending and analyze potential problems.

Housing conditions, along with working conditions, the state of the environment and the development of social infrastructure, are the main components of the concept of “standard of living” since they characterize the well-being of the individual, his material opportunities and individual advantages. The indicators of improvement and provision of housing in Ukraine are low compared to the indicators of countries with a developed market economy. Moreover, according to the level of income of the population of Ukraine, it is a country with low incomes, and according to indicators of the housing stock, it belongs to countries with incomes of the population above average. This means that at present, for the majority of the population of Ukraine, their own housing is a great wealth.

Today, when the state has actually abandoned the practice of providing free housing, and state programs of subsidies and concessional lending in Ukraine are almost

inactive, mortgage lending can become an effective way to solve the problem of providing housing to the population. In addition, this is a profitable business for financial institutions. It is safe to say that the demand for residential mortgage loans will exist as long as the demand for housing continues. Therefore, mortgages are actually the only segment of lending that retains significant potential for further development.

Mortgage lending is the most flexible, versatile and efficient way of financing, primarily in the largest sector of the real estate market—residential. Providing loans for the purchase and construction (reconstruction) of real estate (mortgage lending) is a form of credit relations that performs important economic and social functions and involves the interaction of many market entities.

At the same time, one of the obstacles to the further development of mortgage housing lending remains the terms of granting the loan. The current interest rate of 9.3% represents a greater financial burden for borrowers, especially for low-income families. All this determines the special practical and scientific relevance of the problem of mortgage lending.

The high dependence of households on the external attraction of funds and their low availability served as the basis for conducting an economic and statistical analysis of consumer and mortgage lending to households in Ukraine.

2. Materials and Methods

The methodological basis of the article was the theoretical basis, including the works of the classics of economic science, and research by domestic and foreign scientists on the problems of consumer banking and mortgage lending to agriculture. The use of the provisions of economic theory made it possible to expand the understanding of the mechanism of bank lending to households and the need for its development.

The article uses the following methods of knowledge and analysis of economic processes: The method of theoretical generalization—in the study of the socio-economic significance of consumer and mortgage bank lending to households; methods of statistical comparisons—in the study of the structure of consumer and mortgage bank lending to households; the method of analysis of hierarchies—when developing a draft of measures to improve banking agricultural lending to households; system method—in the analysis and assessment of the state and development trends of the Ukrainian market of consumer and mortgage lending to households; the method of correlation and regression analysis—in determining the system of indicators for evaluating the effectiveness of consumer

and mortgage bank lending to households; methods of analysis and synthesis, induction and deduction, comparison—when calculating the share and growth rates of consumer and mortgage loans of households in Ukraine for the period 2007-2023.

The authors in their article relied on the monetary statistics of the National Bank.

The article is presented by a set of theoretical provisions put forward and substantiated by the authors, according to which the development of consumer and mortgage lending to households is aimed at intensive agricultural activity, as well as at activating the processes of socio-economic development of the state, which is achieved through the implementation of theoretical and practical developments in the area under consideration.

3. Literature Review

In foreign economic literature, there are different approaches to the definition of consumer credit. So, some authors mean by it the provision of general purpose loans to individuals, others include all types of loans provided to individuals, with the exception of housing loans, and some include all types of loans issued to individuals in consumer loans^[1-3].

Scientific works of scientists-economists reveal the main provisions of the theoretical foundations of finance, credit and consumption; represent the economic nature and functional purpose of the lending process; contain a theoretical and methodological justification for lending; determine the role of credit operations in the activities of a credit institution; describe in detail the indicators of lending as a sphere of banking activity in a market economy^[4-9].

In the works of agrarian economists, the thesis about the need to provide agriculture with cheap and affordable credit, as well as providing direct state assistance, is widespread^[10-14].

Gan et al., 2012; Meng et al., 2013; Foote, Christopher et al., 2019; Mohamed et al., 2020^[15-18] are usually limited to stating the growing role of bank credit in the formation of agricultural resources, but do not delve into the existing lending mechanisms in detail.

Jiang and Yu, 2019; Bezemer, Dirk et al., 2020; Laufer, Steven, and Andrew Paciorek, 2022^[19-21] developed models of mortgage loans, the structure of the organization of the mortgage market, described the system of public housing lending and state participation in the functioning of the mortgage market.

Ferreira et al., 2014; Fürstenau and Hommel, 2019; Deng et al., 2022^[22-24] provide a description of mortgage loan models and home loan arrangements in foreign countries. At the same time, questions about the nature of

mortgage lending and the classification of mortgage loans according to various criteria, the place of mortgage loans in the structure of the financial market and the formation of the real estate financing market (mortgage market) in Ukraine, the periodization of the development of housing lending in war conditions remained outside the scope of the research.

Assessing the level of scientific development in the chosen direction, it should be noted that today there are practically no special fundamental works on the problems of bank consumer credit for households. The bulk of the research addresses only some of the issues related to the socio-economic significance and functioning of this form of credit.

The generalization of the practice of consumer lending has not yet been the subject of a special study in our country. Ukrainian commercial banks have not fully mastered the knowledge of the features of the operation of the mechanism for the development of consumer lending. The methodological support that has banking structures is mainly based on the ideas and experience of each particular bank.

The procedure for providing credit resources to agricultural producers, including households in war conditions, has not yet been studied well. To a certain extent, this can be explained by the fact that simultaneously with the change in the forms of farming in the countryside, the entire system of lending to agricultural producers was changing.

The question of the essence, varieties, and functions of a mortgage loan can be the subject of further theoretical research with the development of the mortgage business, the emergence of new forms of lending, and changes in external factors affecting this sector of the economy.

Given the insufficient development of the topic, this article is, according to the authors, an original study of consumer and mortgage market trends in Ukraine based on economic and statistical analysis.

4. Results

Consumer lending is an integral part of the money market. In recent years, the Ukrainian consumer lending market has been undergoing a stage of dynamic development. The purpose of the functioning of the sphere of consumer lending is to increase the income of banks, meet the needs of the population in goods and services at the expense of credit resources, expand the purchasing opportunities of citizens, and increase the economic potential of the country.

As you can see in Table 1, in the field of consumer lending to households over the analyzed period, there is

a moderate growth dynamics: From UAH 115.032 million in 2007 to UAH 188.811 million in January 2023. In 2021, consumer lending to households reached its maximum value—UAH 214.134 million. If January 2023 is compared with 2007, then there was an increase of almost 1.6 times over the period under review.

Commercial banks constantly strive to provide their clients with new, convenient credit services in the field of consumer lending. In Ukraine, check credit and bank credit cards are considered new types of bank consumer loans, and an additional direction in the field of lending has appeared—targeted (commodity) lending, which, thanks to its volumes, provides a sufficiently high level of profitability. The development in consumer lending affected the sales channels of banking services. In order to increase their sales, banks implement alternative sales channels, such as agency and brokerage sales schemes.

As seen in Figure 1, in the structure of bank consumer lending to households by maturity, the largest share in the period 2007-2012 and 2015-2016 take loans for more than 5 years (long-term). Regarding consumer loans from 1 to 5 years, we note more or less balanced dynamics dur-

ing 2007-2023. Although, in general, the share of these loans in the portfolio of consumer loans decreased from 38.3% in 2007 to 28.9% in 2022, that is, by 1.3 times. The share of short-term consumer loans (up to 1 year) issued to households tends to gradually increase from 16.6% in 2007 to 59.2% (maximum value) in January 2023.

In general, in the structure of bank consumer lending to households by maturity, the largest share in January 2023 is occupied by short-term loans (59.2%). The share of medium-term and long-term loans in this period is 28.1% and 12.6%, respectively.

The expansion of consumer lending has a positive effect on the development of the banking sector, opening up new niches for business, favorably influencing the social environment, solving the problems of meeting the needs of the population, and in macroeconomic terms, expanding aggregate consumer demand, which gives an additional impetus to the development of the economic system.

During the war, in order to expand their activities, banks became more loyal and accessible to households. However, under the standard agribusiness lending scheme, a credit institution is forced to require its clients to pro-

Table 1. Consumer loans provided to households, by maturity (balances at the end of the period, UAH million).

Year	Total loans to households by target direction	Consumer loans								
		total	including by terms, million UAH			specific weight of loans, %				
			up to 1 year	from 1 year to 5 years	more than 5 years	total consumer loans	up to 1 year	from 1 year to 5 years	more than 5 years	Loan growth rate, %
2007	160.386	115.032	19.072	44.007	51.953	71.7	16.6	38.3	45.2	-
2008	280.490	186.088	25.128	61.881	99.080	66.3	13.5	33.3	53.2	61.8
2009	241.249	137.113	19.219	40.584	77.310	56.8	14.0	29.6	56.4	-26.3
2010	209.538	122.942	23.138	32.297	67.507	58.7	18.8	26.3	54.9	-10.3
2011	201.224	126.192	32.324	37.338	56.530	62.7	25.6	29.6	44.8	2.6
2012	187.629	125.011	35.874	41.678	47.460	66.6	28.7	33.3	37.9	-0.9
2013	193.529	137.346	50.872	47.555	38.919	70.9	37.0	34.6	28.3	9.9
2014	211.215	135.094	51.769	40.928	42.398	63.9	38.3	30.3	31.4	-1.6
2015	174.869	104.879	33.293	29.537	42.049	59.9	31.7	28.2	40.0	-22.4
2016	163.333	101.528	34.255	27.850	39.423	62.1	33.7	27.4	38.8	-3.2
2017	174.182	122.066	42.614	45.227	34.225	70.0	34.9	37.1	28.0	20.2
2018	201.102	151.625	69.734	49.171	32.719	75.4	45.9	32.4	21.6	24.2
2019	212.515	173.702	89.156	59.853	24.693	81.7	51.3	34.5	14.2	14.6
2020	206.471	170.719	88.391	58.937	23.391	82.7	51.8	34.5	13.7	-1.7
2021	254.385	214.134	114.519	76.763	22.852	84.2	53.5	35.8	10.7	25.4
2022	221.105	188.656	109.933	54.653	24.071	85.3	58.3	28.9	12.8	-11.9
January 2023	221.606	188.811	111.799	53.128	23.884	85.2	59.2	28.1	12.6	0.08

Note: Compiled and calculated by the authors based on the data from Monetary and credit statistics ^[25].

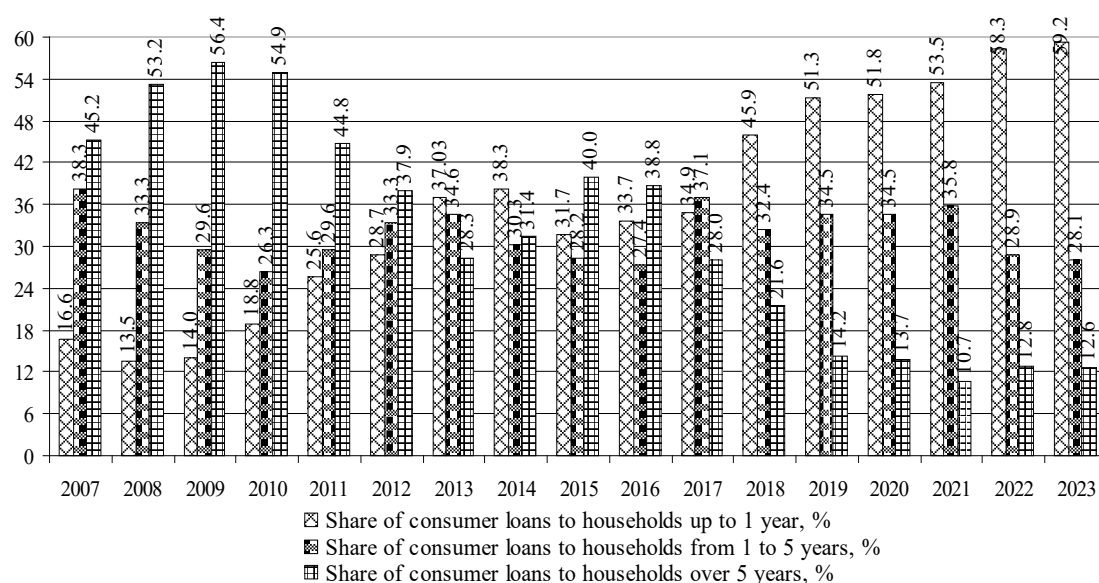


Figure 1. The share of loans to households by maturity in the portfolio of consumer loans in 2007-2023, %.

Note: Compiled by the authors based on data from Monetary and credit statistics ^[25].

vide a business plan as collateral—real estate or goods in circulation and set more stringent conditions for the transparency of financial reporting.

Despite the attractiveness of this area for all participants in the lending process, it should be noted that the mechanism of bank consumer lending to households is not well developed and, in particular, banks ignore the specifics of consumer lending to this category of borrowers when assessing their creditworthiness. Thus, the improvement of the mechanism of bank consumer lending to households, taking into account the characteristics of their activities, is an urgent problem and requires serious scientific development.

Regarding the volume of household loans for the purchase, construction and reconstruction of real estate, it should be noted that in the period 2007-2023, there is a tendency to reduce the volume of household lending in this area. If in 2007 the volume of lending in this area amounted to UAH 40.778 million, then in January 2023, this figure was already UAH 21.643 million, that is, there is a decrease in lending by almost 1.9 times (Table 2).

As seen in Figure 2, in the structure of bank lending to households for the purchase, construction and reconstruction of real estate by maturity, the largest share in the period under review is occupied by loans over 10 years (long-term). The share of these loans issued to households tends to slowly increase from 70.1% in 2007 to 80.1% (maximum value) in January 2023 (an increase of 1.1 times) over 17 years.

Regarding loans for the purchase, construction and reconstruction of real estate with maturities of 5 to 10 years,

we note a general downward trend from 2007-2023. The maximum value of the share of these loans in the portfolio of household loans for the acquisition, construction and reconstruction of real estate by maturity was observed in 2019-2021—20.5%; 20.3% and 20.6% respectively. This was followed by a decrease and in 2022 amounted to 15.6% (a decrease compared to 2019 by almost 1.3 times).

Regarding loans for the purchase, construction and reconstruction of real estate with maturities from 1 to 5 years, we note a declining trend over 2007-2023: From 9.4% in 2007 to 3.9% in January 2023 (a decrease of 2.4 times).

The share of short-term household loans for the purchase, construction and reconstruction of real estate tends to gradually increase in the period 2007-2015 from 1.2% to 9.5% (maximum value). In the future, there is a gradual decrease from 6.1% in 2016 to 0.4% (minimum value) in 2022-2023. Thus, from the end of 2015 to 2023, there has been a decrease in short-term loans to households in the banking portfolio by 23.8 times.

In general, in the structure of bank lending to households for the purchase, construction and reconstruction of real estate by maturity, the largest share in January 2023 is occupied by long-term loans of 80.1%. Loans from 5 to 10 years accounted for 15.6% during this period. The share of loans from 1 to 5 years and short-term loans is 3.9% and 0.4%, respectively.

As can be seen from Table 3, in the field of consumer lending to households in 2021, there are maximum growth volumes of up to UAH 214.134 million. Subsequently, they slightly decreased to UAH 188.656 million in 2022.

Table 2. Loans provided to households for the purchase, construction and reconstruction of real estate, by maturity (balances at the end of the period, UAH million).

Year	Total loans to households by target direction	Loans for the purchase, construction and reconstruction of real estate										Loan growth rate, %
		total	including by terms, million UAH				specific weight of loans, %					
			up to 1 year	from 1 year to 5 years	from 5 years to 10 years	more than 10 years	total loans	up to 1 year	from 1 year to 5 years	from 5 years to 10 years	more than 10 years	
2007	160.386	40.778	0.483	3.825	7.872	28.597	25.4	1.2	9.4	19.3	70.1	-
2008	280.490	88.352	1.384	5.307	15.241	66.420	31.5	1.6	6.0	17.3	75.2	116.7
2009	241.249	98.792	2.533	7.432	19.212	69.616	40.9	2.6	7.5	19.4	70.5	11.8
2010	209.538	81.953	2.291	4.195	14.961	60.505	39.1	2.8	5.1	18.3	73.8	−17.0
2011	201.224	70.447	2.385	3.643	13.024	51.396	35.0	3.4	5.1	18.5	72.9	−14.0
2012	187.629	58.427	1.552	3.778	9.313	43.785	31.1	2.7	6.5	15.9	74.9	−17.1
2013	193.529	51.447	2.263	3.450	6.896	38.837	26.6	4.4	6.7	13.4	75.5	−11.9
2014	211.215	71.803	3.782	3.236	7.620	57.165	33.9	5.3	4.5	10.6	79.6	39.6
2015	174.869	66.169	6.306	3.308	7.711	48.845	37.8	9.5	4.9	11.7	73.8	−7.8
2016	163.333	58.549	3.581	2.500	7.547	44.921	35.8	6.1	4.3	12.9	76.7	−11.5
2017	174.182	48.268	1.253	1.890	8.683	36.441	27.7	2.6	3.9	17.9	75.5	−17.6
2018	201.102	44.458	1.114	1.798	8.755	32.791	22.1	2.5	4.0	19.7	73.8	−7.9
2019	212.515	32.611	0.621	1.657	6.673	23.661	15.3	1.9	5.1	20.5	72.6	−26.6
2020	206.471	28.924	0.402	1.416	5.866	21.239	14.0	1.4	4.9	20.3	73.4	−11.3
2021	254.385	28.560	0.225	1.449	5.874	21.012	11.23	0.8	5.1	20.6	73.6	−1.3
2022	221.105	21.337	0.084	0.877	3.403	16.972	9.7	0.4	4.1	15.9	79.5	−25.3
January 2023	221.606	21.643	0.083	0.848	3.366	17.346	9.8	0.4	3.9	15.6	80.1	1.4

Note: Compiled and calculated by the authors based on the data from Monetary and credit statistics ^[25].

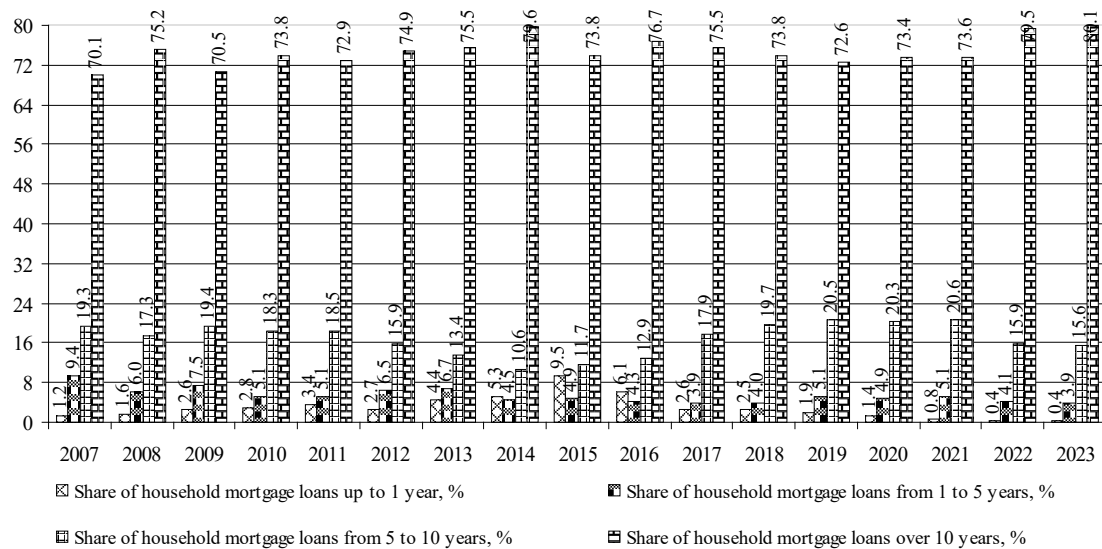


Figure 2. Share of loans to households by maturity in the portfolio of loans for the purchase, construction and reconstruction of real estate in 2007-2023, %.

Note: Compiled by the authors based on data from Monetary and credit statistics ^[25].

Table 3. Loans to households by target direction (fund balances at the end of the period, UAH million).

Year	Total loans to households by target direction, UAH million	Growth rates of total loans, %	Consumer loans, UAH million	Growth rates of consumer loans, %	Loans for the purchase, construction and reconstruction of real estate, UAH million	Growth rate of loans for acquisition, construction and reconstruction of real estate, %	Other loans, UAH million	Growth rates of other loans, %
2007	160.386	-	115.032	-	40.778	-	4.577	-
2008	280.490	74.9	186.088	61.8	88.352	116.7	6.050	32.2
2009	241.249	-13.9	137.113	-26.3	98.792	11.8	5.343	-11.7
2010	209.538	-13.1	122.942	-10.3	81.953	-17.0	4.643	-13.1
2011	201.224	-3.9	126.192	2.6	70.447	-14.0	4.585	-1.3
2012	187.629	-6.8	125.011	-0.9	58.427	-17.1	4.191	-8.6
2013	193.529	3.1	137.346	9.9	51.447	-11.9	4.736	13.0
2014	211.215	9.1	135.094	-1.6	71.803	39.6	4.318	-8.8
2015	174.869	-17.2	104.879	-22.4	66.169	-7.8	3.821	-11.5
2016	163.333	-6.6	101.528	-3.2	58.549	-11.5	3.255	-14.8
2017	174.182	6.6	122.066	20.2	48.268	-17.6	3.848	18.2
2018	201.102	15.5	151.625	24.2	44.458	-7.9	5.019	30.4
2019	212.515	5.7	173.702	14.6	32.611	-26.6	6.203	23.6
2020	206.471	-2.8	170.719	-1.7	28.924	-11.3	6.828	10.1
2021	254.385	23.2	214.134	25.4	28.560	-1.3	11.691	71.2
2022	221.105	-13.1	188.656	-11.9	21.337	-25.3	11.112	-4.9
January 2023	221.606	0.22	188.811	0.08	21.643	1.4	11.152	0.4

Note: Compiled and calculated by the authors based on the data from Monetary and credit statistics ^[25].

Regarding household loans for the purchase, construction and reconstruction of real estate, we note that the maximum growth was observed in 2009—UAH 98.792 million. Starting from 2010 (UAH 81.953 million), the volume of household lending has been decreasing, reaching its minimum value in 2022 at the level of UAH 21.337 million (a 3.8-fold drop).

The volumes of other household loans tend to gradually increase from UAH 4.577 million in 2007 to UAH 11.152 million in January 2023 (maximum growth). The minimum value of this indicator was noted in 2016 at the level of UAH 3.255 million.

As seen in Figure 3, at the end of 2022, there was a significant drop in the growth rate of household consumer loans to -11.9% (Figure 3). This was the worst result in recent years, if we do not take into account 2009 (-26.3%) and 2015 (-22.4%).

The reason for the slowdown in the growth rate of consumer lending can be called the reduction of requirements for borrowers by banks when applying for a loan, which leads to the emergence and significant increase in the number of bad loans that pose a real threat to banks. The Ukrainian legislation lacks norms that allow efficient

collection of debts on loans, which can lead to a crisis in consumer lending and problems in the banking sector.

In general, the growth rate of household consumer loans in January 2023 amounted to only +0.08%. For comparison, the last high growth rates of household consumer loans for the analyzed period were in 2008 (+61.8%).

It should be noted that the result of 2017 (+20.2%) was atypical due to the abnormal dynamics of assets in 2015 (-22.4%) and 2016 (-3.2%), when against the backdrop of unprecedented turbulence, household lending rose immediately to 20.2% in 2017. Despite what has been said, the prospects for the development of consumer lending to households remain quite high. Apart from the results of 2020 (-1.7%) and 2022 (-11.9%), the dynamics of the growth rate of household consumer loans in the period 2017-2023 were stable.

As seen in Figure 4, during the period under review (with the exception of 2008-2009 and 2014), there is a significant drop in the growth rate of household loans for the purchase, construction and reconstruction of real estate. In general, the growth rate of household loans in January 2023 amounted to +1.4%. For comparison, the last high growth rate of household loans for the purchase,

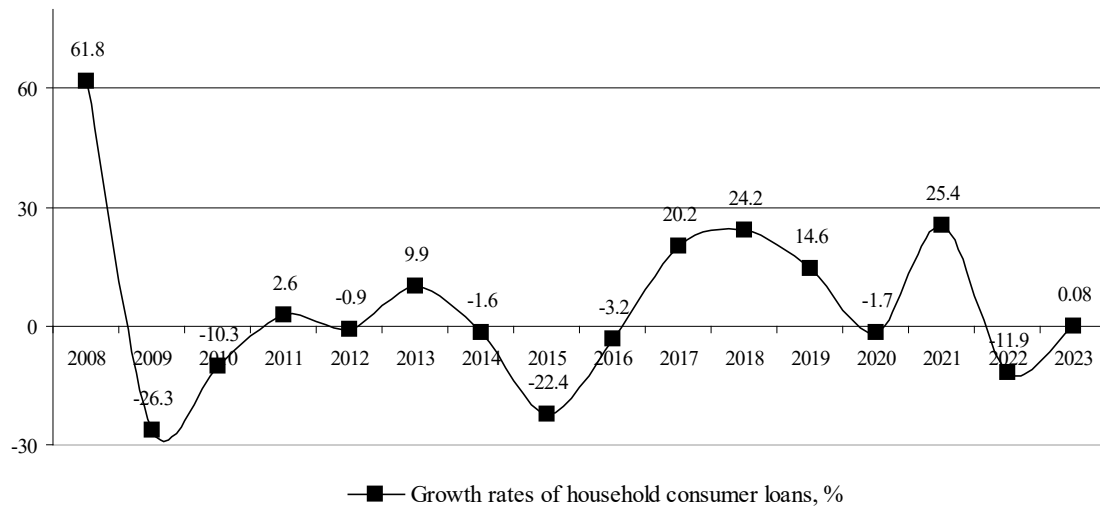


Figure 3. Growth rates of household consumer loans in 2008-2023, %.

Note: Compiled by the authors based on data from Monetary and credit statistics ^[25].

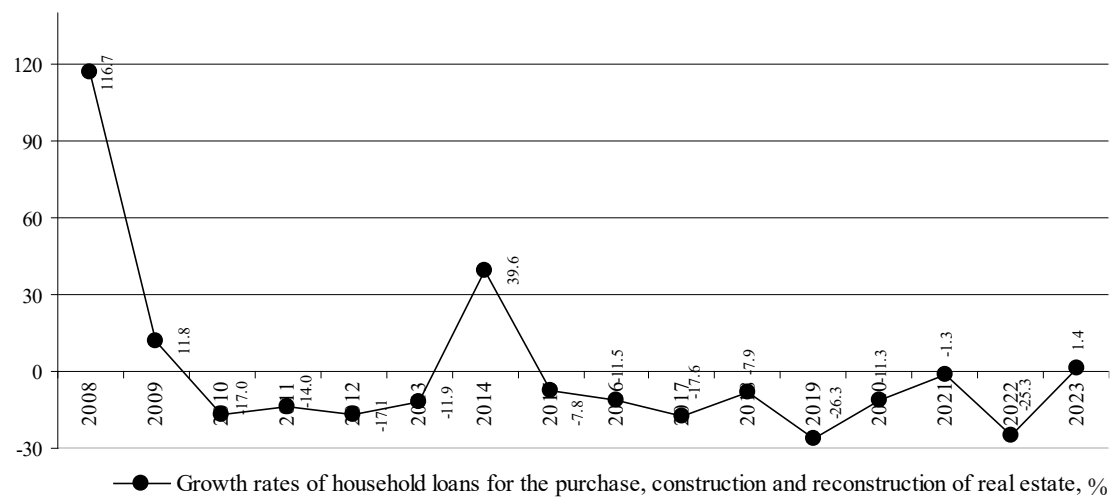


Figure 4. Growth rates of household loans for the purchase, construction and reconstruction of real estate in 2008-2023, %.

Note: Compiled by the authors based on data from Monetary and credit statistics ^[25].

construction and reconstruction of real estate for the analyzed period was in 2008 (+116.7%).

It should be especially noted that the result in 2014 (+39.6%) was atypical due to the abnormal dynamics of assets in the period 2010-2013 (-17.0%; -14.0%; -17.1%; -11.9%, respectively), when against the backdrop of unprecedented turbulence, household lending increased immediately to 39.6% in 2014. In the future, there is a significant downward trend in loans.

Thus, without taking into account the result of 2008-2009 (+116.7% and 11.8%, respectively), as well as in 2014 (39.6%), in general, the dynamics of growth rates

of household loans for the purchase, construction and reconstruction of real estate in the period under review was downward.

As seen in Figure 5, at the end of 2021, there is a significant increase in the growth rate of other household loans to 71.2%. This is the best result in the period under review. In general, the growth rate of other household loans in January 2023 amounted to +0.4%. For comparison, the last worst growth rate of other household loans was observed in 2009-2010 (-11.7% and -13.1% respectively) and in 2012 (-8.6%), as well as in 2014-2016 (-8.8%; -11.5%; -14.8% respectively).

Of particular note, the 2017 result (+18.2%) was atypical due to the anomalous asset dynamics in previous years, when other household loans increased significantly against the backdrop of unprecedented turbulence. Thus, in the period 2009-2016, there was a downward trend in the growth rates of other household loans (except 2013). Then the situation normalized: The growth rate of other household loans in the period 2017-2023 increased significantly (excluding 2022—4.9%).

As seen in Figure 6, the share of household consumer loans in the total volume of loans in the target direction is 85.3% in 2022 this is the maximum value for the period under review. It should be noted that the share of these loans issued to households tends to slowly grow from +71.7% in 2007 to +85.2% in January 2023 (an increase of almost 1.2 times) over 17 years.

With regard to the specific weight of household loans for the purchase, construction and reconstruction of real estate, we note a general tendency to decrease during 2007-2023. The maximum value of the specific weight of these loans in the total amount of targeted loans was observed in 2009: +40.9%. Then there was a significant decrease and in 2022 it was 9.7%, i.e., a decrease compared to 2009 by 4.2 times. The thing is that this is the minimum value of the specific weight for the analyzed period.

The key parameter influencing the market is the average mortgage rate. Lowering mortgage rates has two consequences:

1) The borrower has the opportunity to pay less than the same loan amount.

2) The borrower has the opportunity to take a loan for a large amount with the same amount of periodic payment. Accordingly, the demand for real estate is inversely related to the mortgage interest rate—the lower the rate, the higher the demand and price level in the market, and vice versa—the higher the rate, the lower the demand and price level. Interest rates on loans to households in the target area by currency are presented in Table 4.

The number of interest rates for households and the procedure for their payment is established by the bank and are determined in the loan agreement, depending on the main factors: The discount rate of the National Bank of Ukraine and the state of the credit market; average interest rate on interbank loans; type, term, size and degree of credit risk; stability of the country's money circulation; the price of credit resources received by the bank in the market; interest rates of banks-competitors; the level of credit risks inherent in a particular credit project. In particular, the longer the loan term, the higher the interest rate. The interest rate is also affected by the frequency of interest payments and loan repayment, the financial condition of the company, and loan security.

The results of the analysis show that there is a pronounced inverse relationship between the interest rate and indicators of the loan amount and the value of real estate: The higher the interest rate, the lower the loan amount available for the same payment and, accordingly, the value of the acquired property.

According to the National Bank of Ukraine, as of March 1, 2023, the share of problem loans in banks' loan

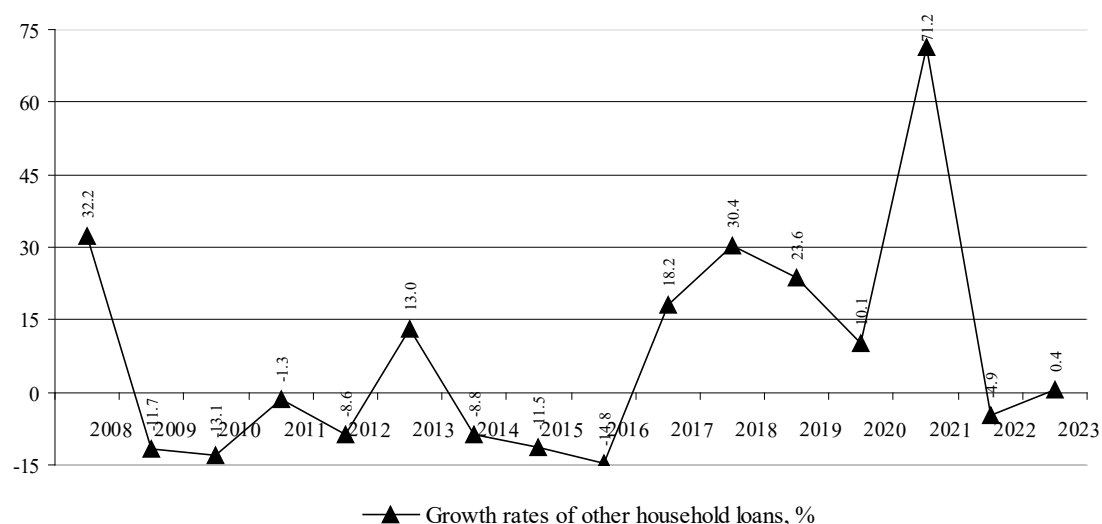


Figure 5. Growth rates of other household loans in 2008-2023, %.

Note: Compiled by the authors based on data from Monetary and credit statistics ^[25].

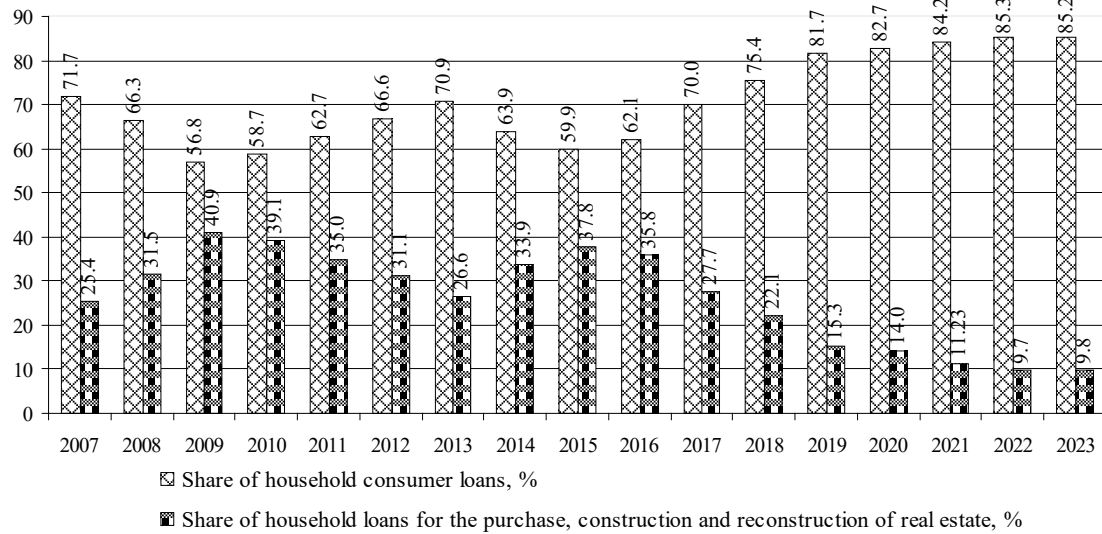


Figure 6. The specific weight of loans to households in the portfolio of targeted loans in 2007-2023, %.

Note: Compiled by the authors based on data from Monetary and credit statistics ^[25].

Table 4. Interest rates on loans to households by target area by currency.

Year	Consumer loans					Mortgage loans					Other loans				
	total	including by currency				total	including by currency				total	including by currency			
		UAH	U.S. dollar	euro	other currencies		UAH	U.S. dollar	euro	other currencies		UAH	U.S. dollar	euro	other currencies
2007	16.3	19.6	13.5	12.8	9.4	13.0	15.5	12.7	11.5	9.3	...	...	...	...	...
2008	19.8	23.4	15.0	14.7	10.5	14.0	16.8	13.5	13.0	9.6	...	...	...	...	...
2009	22.4	24.0	16.3	18.1	8.9	17.6	20.6	13.3	12.4	9.0	22.6	23.9	15.5	16.4	24.0
2010	26.5	27.4	13.5	19.0	7.1	15.2	19.3	11.9	13.2	7.6	19.6	20.6	10.9	15.8	22.2
2011	28.1	28.8	13.2	14.7	7.2	14.9	16.4	9.3	12.4	6.4	18.6	19.0	11.0	10.7	9.0
2012	28.7	29.0	12.6	11.0	8.0	15.9	17.1	11.1	11.0	6.6	21.8	22.0	13.0	11.1	11.1
2013	28.5	28.5	12.7	19.5	7.1	17.6	18.5	13.0	12.7	7.0	22.2	22.5	12.2	9.7	7.3
2014	27.8	27.8	19.2	25.1	8.1	15.9	16.9	8.5	11.8	7.7	22.8	23.2	11.2	9.6	13.0
2015	29.7	29.8	18.0	32.6	11.1	11.7	11.8	9.3	12.6	6.3	28.0	28.2	10.3	11.4	8.5
2016	31.6	31.6	26.3	40.0	15.6	12.1	12.4	7.3	9.7	6.3	27.7	28.1	5.8	7.5	—
2017	30.0	30.0	40.0	41.2	21.6	17.3	17.4	9.0	2.9	4.9	23.5	23.8	9.4	6.6	—
2018	31.3	31.3	15.8	32.0	6.2	17.1	17.5	9.3	5.0	5.3	24.2	24.3	9.0	7.4	—
2019	32.6	32.6	36.6	41.0	6.5	17.0	17.4	7.9	3.3	4.6	26.2	26.5	9.1	8.8	20.5
2020	32.4	32.4	30.5	40.6	7.0	13.1	13.3	7.1	7.9	—	23.1	23.3	8.3	7.6	—
2021	30.2	30.2	42.1	42.1	50.0	12.2	12.2	6.0	6.2	4.0	20.2	20.3	7.4	5.2	—
2022	27.0	27.0	28.9	38.4	11.8	8.5	8.6	5.8	—	4.8	18.6	18.7	6.0	3.7	—
January 2023	29.8	29.8	33.3	42.5	50.0	9.3	9.4	6.1	—	3.0	19.9	20.1	6.2	8.8	29.8

(weighted average annualized rates, %)

Note: Compiled by the authors based on data from Monetary and credit statistics ^[25].

portfolios amounted to almost 38.5% (Figure 7). Compared to January 1, 2022—30.02% (before the start of full-scale hostilities in Ukraine), the share of toxic debts increased by 8.46%.

The growth of non-performing loans has become a completely expected phenomenon against the backdrop of the destruction of agricultural enterprises, damage to infrastructure, primarily energy, and falling domestic demand. By the way, credit risk remains the main threat to the banking system.

Banks entered 2023 with the highest volume of toxic loans in the last five years. As of January 1, 2018, the share of non-performing loans in the banking sector was 54.54%, and as of March 1, 2023—38.48%.

Summarizing the results of the analysis, we note that the volume of problem debt in agriculture will grow as the war continues the uncertainty for the economy and agribusiness is very high. The increase in toxic loans has intensified after the start of regular shelling of the energy infrastructure. In 2023, a critical accumulation of bad debts may occur. As a result, those households whose assets have been damaged by hostilities or ended up in occupied territories are at risk of becoming insolvent.

Separately, it should be noted that the fact of war does not abolish the obligation to repay a loan (debt) by households. During martial law, the parties are not liable for non-fulfillment of the contract, but only for the duration of such circumstances. All obligations are renewed after the end of the war.

The presence of martial law does not cancel the pay-

ment of the loan. Households (borrowers) still have to repay all their consumer loans, which include mortgages. According to the law, the risk of damage/destruction of property is borne by its owner. If the borrower no longer has mortgaged property due to shelling and hostilities, and he took money from the bank and vouched for this property, then he is obliged to pledge other equivalent property in order to guarantee the return of the loan.

Thus, despite the war, all financial problems will remain on the person.

It can be concluded that debt (credit) does not disappear during the war. Moreover, the bank continues to accrue interest. In addition, the loss of property does not affect the need to repay the loan. However, there is only one way to compensate for damage or loss of property—it's insurance. If the factor of war is not excluded from force majeure, the insurance company must reimburse its cost. Another solution may be to apply for compensation from the state for property lost because of the war, confirming the actual costs of its restoration or the original cost.

The legislation allows temporary suspension of mortgage payments if it is not possible to pay the loan and interest. Banks do not have the right during martial law to charge a penalty or apply penalties in case of non-payment of the loan. But as soon as martial law is abolished, a person again has the obligation to service the loan. During martial law, the bank is not entitled, even if the property remains, and the loan is not paid, to collect it because of the debt. That is, they do not have the right to take, sell, and transfer property to third parties. To do this, for the

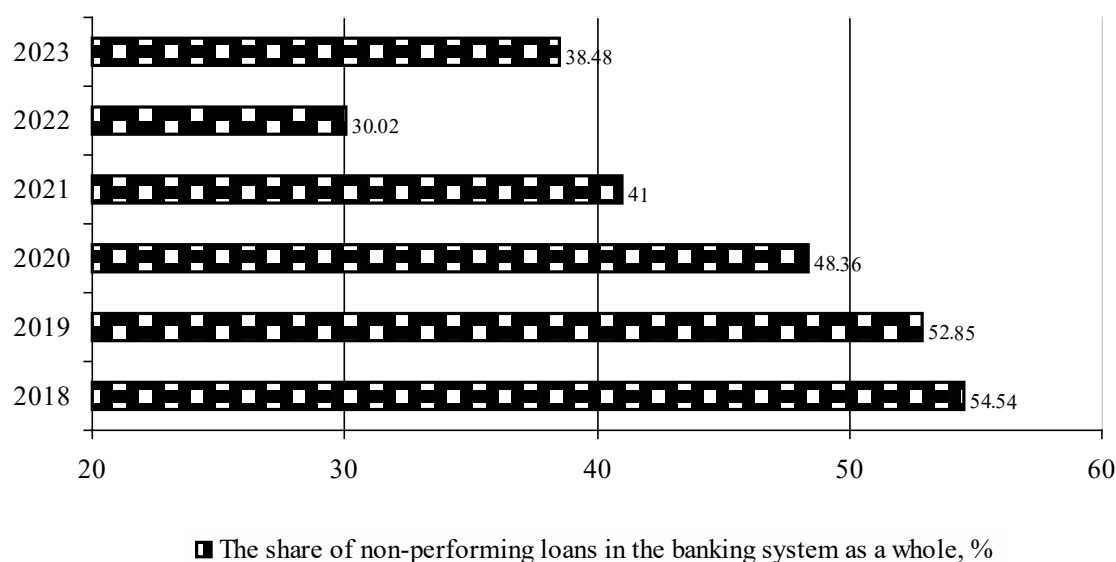


Figure 7. The share of non-performing loans in the banking system as a whole, 2018-2023, %.

Note: Compiled by the authors based on data from Monetary and credit statistics ^[25].

duration of the war, the registry was disabled, allowing notaries to carry out enforcement.

5. Discussion

The analysis of the problems of the development of banking agricultural lending made it possible to establish that the development of credit relations between banks and households in Ukraine is influenced by various factors in the formation of creditworthy demand for bank loans. The main thing is the financial condition of the borrower, the availability of liquid collateral, the reality of insurance protection, etc. Despite high volumes of lending in recent years, the needs of Ukrainian households for credit support remain largely unsatisfied. Largely, this situation is dictated by the high level of interest rates. The problem of the high cost of loans is due to the following factors: Interest rates are forced to cover the risk of non-repayment of loans, including by other borrowers; the cost structure of banks is inefficient due to the fact that interest income acts not only as a compensator for interest expenses, but also as a source of coverage for administrative expenses; there are no tools to mitigate credit risks, which reduces the effectiveness of their management.

An analysis of the existing practice of agricultural lending by banks to households in Ukraine made it possible to identify the following main approaches.

1) Banks strive to work with well-known clients, mainly those served by this bank. As a rule, banks lend to borrowers, subject to the latter's settlements through accounts opened with the lending bank.

2) Banks are gradually developing credit relations with customers, starting with small and simple loans for short periods, gradually increasing the amounts, complicating loan products and increasing the terms of lending. This tactic allows you to better evaluate the client, and check his reliability and creditworthiness.

3) Banks quite widely differentiate the terms of lending to customers depending on the type of security, loan terms, customer reliability, lending purposes, and the amount of credit.

4) Banks generally provide secured loans. As collateral, liquid inventory items (harvested or future crops), agricultural machinery, and animals are used.

5) Banks try to control the financial and economic condition of the borrower during the entire loan period, including the condition of crops, the timeliness of the necessary agro technical measures and the progress of harvesting.

6) Banks are trying to use all legal possibilities for the repayment of loans by borrowers, widely involving specialists in the economic security service of the bank and

agriculture in this work.

Speaking about the prospects for consumer lending to households in Ukraine, it is necessary to adopt a more flexible policy not only in general lending issues, but also in narrow issues (payment schemes). Despite a large number of applications for lending, most of the proposals are not implemented due to the slowness or rather rigid banking conditions for potential borrowers, as well as for loan collateral options.

Prospects for consumer lending to households in Ukraine indicate that the most profitable is the issuance of consumer loans for the acquisition of expensive liquid property. According to these loans, the additional costs of time and money are insignificant compared to the amount of the loan, and the demand for them is quite stable. The period for which the lending is carried out does not allow this property to depreciate during its operation, and the possibility of using the purchased item during the loan period gives borrowers the opportunity to take out insurance in case of an increase in prices for such products.

6. Conclusions

The Ukrainian consumer lending market was analyzed, and the main problems faced by households in the development of this area of banking business were identified. Because of the analysis of the development of the consumer lending market for households, the trends characterizing this market were identified, the main ones are:

- the dynamics of loans to households demonstrate slow growth rates. According to the National Bank of Ukraine, if in 2007 credit institutions issued loans to households for UAH 115.032 million, then in January 2023 this amount amounted to UAH 188.811 million. The absolute value of credit investments increased by more than 1.6 times;
- the leading and main role in the household lending market belongs to commercial banks, the number of banks participating in the market is expanding, including through increased regional expansion;
- the emergence of foreign competitors in the Ukrainian market.

Thus, in general, household lending develops slowly. Among the reasons for this situation is the difficulty in the practical application of legislative regulations aimed at protecting the interests of creditors; high level of interest rates; low level of real income of households and, consequently, low effective demand for mortgage loans; the impossibility of mass provision of long-term mortgage loans due to high risk (interest, credit, legislative, etc.); almost complete exclusion of the state from participation in the formation of a civilized market for housing mortgage

lending.

As a result of the study, the main directions for increasing the role of banks in the field of consumer and mortgage lending to households were formulated and recommendations were formulated for solving the following problems: Development of legislative support for banking activities in household lending; improvement of banking regulation and supervision; expansion of the resource potential of banks based on the optimization of the structure and methods of attracting resources; optimization of the bank's organizational structure through the creation of structural units necessary for the development of consumer and mortgage lending to households and the procedure for their interaction; improvement of a comprehensive system for assessing the creditworthiness of borrowers—households, including the use of a well-known credit scoring technique, taking into account military conditions and methods for reducing credit risks.

Let us formulate the main prerequisites for the further development of mortgage and consumer lending to households: Stability of the economy, reliability and efficiency of the financial and credit system; high solvency of the population and, most importantly, the active participation of the state as a guarantor of the stability of the entire system of relations during mortgage transactions; compliance with mortgage lending standards; improving the borrower assessment system; development of the mortgage-backed securities market based on international experience; increasing the transparency of the processes of allocating land for development; improving the efficiency of mechanisms and improving the quality of regulation of markets for lending to construction in progress.

Russian military aggression does not give a chance for the development of mortgage lending. The rapid growth of the US dollar and euro against the national currency (hryvnia) and the uncertainty of their further dynamics, the outflow of deposits from the banking system and the need to repay short-term loans taken by domestic banks abroad led to a liquidity crisis in the banking system of Ukraine and the cessation of lending activities of most banks especially in the mortgage industry. Those few banks that continue to deal with mortgages have tightened requirements for borrowers and lending conditions. At the same time, due to the unstable economic situation, the decline in real incomes of borrowers and the increase in unemployment, the risks regarding already issued foreign currency mortgage loans have significantly increased.

To get out of this situation and reduce the risks of existing mortgage loan portfolios, the following measures are proposed: Conversion of foreign currency loans into hryvnia; granting a deferral for the payment of the principal

debt for 3-6 months; extension of the term of loan agreements.

Author Contributions

An analysis and assessment of the state and development trends of the Ukrainian market of consumer and mortgage lending to households were carried out (A.S.). The methodological aspects of the development of the market of consumer and mortgage lending to households in Ukraine are considered (G.V.). The indicators of the dynamics of consumer and mortgage loans of households for the period 2007-2023 are given (A.S.; G.V.). The socio-economic significance of consumer and mortgage bank lending has been studied (G.V.). The main problems in the field of consumer lending are formulated, the resolution of which is necessary for the intensive agricultural activity of households (A.S.). The organizational and economic elements of the mechanism of bank lending to households are systematized and the content of a number of elements is shown based on the characteristics of consumer and mortgage loans (A.S.). The prospects for development and the main directions for improving consumer and mortgage lending to households are determined (G.V.). Based on the analysis of the formation and state of the consumer lending market, the trends in its development are determined (G.V.). The key directions of increasing the role of banks in the development of consumer lending to households are determined based on the influence of macroeconomic factors on banking activities (A.S.). Practical recommendations are formulated and measures are proposed to improve the mechanism of banking consumer and mortgage lending to households (A.S.; G.V.).

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Data Availability

The authors in their article relied on the monetary statistics of the National Bank. Statistical data confirming the results presented in the published article are posted on the website: <https://bank.gov.ua/ua/statistic/sector-financial#1ms>

Conflict of Interest

The authors disclosed that they do not have any conflict of interest.

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