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Mortgage Market Analysis: Domestic and International Experience

Abstract. *In the conditions of an economic crisis, the activation of economic activity through mortgage lending becomes crucial, and the study of the development of the mortgage market in the world is necessary for a comprehensive understanding of its impact on social, economic, and financial growth. It is also essential for determining optimal management strategies for the housing sector in a specific country. The article aims to substantiate the features of the functioning of the mortgage market in the world and in Ukraine. Investigating the peculiarities of domestic and foreign mortgage markets, the authors used a statistical method to analyze the mortgage market and government mortgage credit programs in Ukraine and worldwide. Empirical evidence in the research includes data from the Ukrainian Financial Housing Company, the Ministry of Finance of Ukraine, and the Diya platform, presented using a graphical method. Abstraction, analysis, and synthesis methods formed the basis for developing recommendations for improving government programs for developing the mortgage market for housing in the world and in Ukraine. The dynamics of mortgage loans issued in Ukraine for 2019–2022 indicate a decline in mortgage loan issuance due to unstable political and economic situations. It was revealed that the restoration of mortgage lending in Ukraine is facilitated by the Ukrainian government's eOselya program, which is aimed at providing citizens with affordable housing. The specifics of mortgage lending in different countries worldwide are disclosed. The overall trend of diversity in mortgage lending conditions in the European Union indicates significant differences in approaches to housing loans in different countries. However, some positive characteristics of the mortgage market development in the EU can serve as valuable experience for reforming Ukraine's national mortgage lending market. Among them are financial and investment capacities, low cost of loans, socio-legal protection, macroeconomic stability, transparency, informational clarity, and unified regulatory approaches.*

Keywords: *mortgage, housing market, benefits, interest rates, instruments, efficiency, state programs, eOselya.*

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Аналіз іпотечного ринку: вітчизняний та іноземний досвід

Анотація. В умовах економічної кризи важливого значення набуває активізація економічної діяльності через іпотечне кредитування, а дослідження розвитку іпотечного ринку в країнах світу є необхідним для повного розуміння його впливу на соціальний, економічний та фінансовий розвиток, а також для визначення оптимальних стратегій управління житловим сектором у конкретній країні. Метою статті є обґрунтування особливостей функціонування іпотечного ринку в Україні та інших країнах. Вторами використано статистичний метод з метою здійснення аналізу іпотечного ринку та державних програм іпотечного кредитування в Україні та країнах світу. Емпіричними доказами у дослідженні є дані Української фінансової житлової компанії, Міністерства фінансів України, платформи Дія, які представлені за допомогою графічного методу. Методи абстрагування, аналізу, синтезу стали підґрунтям розроблених рекомендацій щодо напрямів удосконалення державних програм розвитку іпотечного ринку житла в країнах світу та Україні. Представлено динаміку виданих іпотечних кредитів в Україні за 2019-2022 роки й встановлено спад у видачі іпотечних кредитів через нестабільну політичну та економічну ситуацію. Виявлено, що відновленню іпотечного кредитування в Україні сприяє державна українська програма «єОселя», яка спрямована на забезпечення громадян доступним житлом. Розкрито особливості іпотечного кредитування в різних країнах світу. Встановлено, що загальна тенденція різноманітності умов іпотечного кредитування в Європейському Союзі свідчить про значні відмінності в підходах до кредитування житла в різних країнах. Однак деякі позитивні характеристики розвитку іпотечного ринку в ЄС можуть слугувати цінним досвідом для реформування національного ринку іпотечного кредитування в Україні, серед таких: фінансово-інвестиційні потужності; низька вартість кредитів; соціально-правовий захист; макроекономічна стабільність; транспарентність та інформаційна прозорість; уніфіковані регуляторні підходи.

Ключові слова: іпотека, ринок житла, пільги, відсоткові ставки, інструменти, ефективність, державні програми, «єОселя».

PROBLEM STATEMENT

The development of the mortgage market on a global scale is marked by significant impacts on the social sector and the economy as a whole. The issue of housing affordability not only defines personal comfort and well-being but is also crucial for economic stability. Investigating this topic is relevant in the current context as it allows an assessment of how mortgage markets contribute to addressing the population's housing needs.

LITERATURE REVIEW

Among Ukrainian scientists, Ye. Bublik, T. Voronkova, O. Koshelenko, V. Garbuzova, O. Garazha, N. Dunas, L. Melnyk studied the peculiarities of mortgage market development. Legal aspects and characteristic features of mortgages have been explored by N. Bonchuk [1], while I. Dotsenko has scrutinized the mechanism of state support for mortgage lending in his works [2].

N. Bonchuk notes that today, mortgages are crucial in attracting capital investments across various economic sectors. The essence of mortgages is viewed through the spectrum of groups, encompassing legal, economic, and financial categories. Economically, mortgages represent a

sum of money provided under the collateral of real estate, giving rise to credit relations. As a financial category, mortgages serve as a means of securing obligations where the subject of the mortgage is real property. From a legal standpoint, a mortgage is the pledge of real estate or immovable property to obtain a special mortgage loan [1].

I. Dotsenko emphasizes significant factors that make mortgage conditions attractive abroad, including low-interest rates on mortgage loans, influenced by low official rates the country sets [2].

H.Ö. Dursun-de Neef studies the link between banks' geographic specialization and the growth in their mortgage lending [9]. Analyzing post-pandemic trends in the mortgage lending market, A. Sharma states that as the world becomes increasingly digital, it has become necessary for mortgage lenders to adopt technology that can help them make instant decisions, optimize loan pricing, respond quickly to the market, and improve customer experiences, putting them in a better position to compete and win [12].

Therefore, the mortgage market is constantly developing and acquiring new characteristics, which is connected with the reaction to modern challenges.

RESEARCH OBJECTIVE

This article aims to substantiate the peculiarities of the functioning of the mortgage market in the world and Ukraine.

RESEARCH METHODS

In exploring the characteristics of domestic and foreign mortgage markets, the authors utilized the statistical method to analyze the mortgage market and government mortgage credit programs in Ukraine and worldwide. Empirical evidence in the research is derived from data provided by the Ukrainian Financial Housing Company, the Ministry of Finance of Ukraine, and the Diya platform, and it is presented using graphical methods. Abstraction, analysis, and synthesis methods formed the basis for developing recommendations on improving state programs for developing the housing mortgage market in the world and Ukraine.

RESULTS

The functioning of the housing mortgage market is a complex process that involves various aspects of financing and addressing the housing needs of the population [3, p. 55].

In Ukraine, the Cabinet of Ministers Resolution dated January 27, 2021, No. 63, titled "Certain Issues of Reducing the Cost of Mortgage Loans," is in effect. This Resolution outlines the conditions, criteria, and

mechanisms for reducing the cost of mortgage loans through financial state support for borrowers. The provision of financial state support to borrowers is carried out by the Entrepreneurship Development Fund, which approves a program to reduce the cost of mortgage loans. This program may include additional conditions for authorized banks and specify the terms of state support within the limits defined by this Resolution. The provision of the envisaged state support can be carried out in conjunction with state support provided following legislation by local state administrations and local self-government bodies using local resources [4].

In most countries worldwide, the state plays an extremely important role in the housing sector of the economy. It determines the strategy for the development of mortgage lending, establishes the legal basis for its functioning, develops mechanisms for social protection for borrowers, and actively participates in creating the necessary infrastructure for the market [5].

Considering the foreign experience of state regulation of the mortgage housing credit market, it should be noted that, in most countries worldwide, obtaining housing through credit is the primary way to address housing problems.

When analyzing the mortgage market in Ukraine, let's present the dynamics of issued loans from 2019 to 2022 in Table 1.

Table 1. Dynamics of Issued Mortgage Loans in Ukraine for 2019-2022

Year	New mortgage loans granted to individuals during the reporting period, numbers				
	Total	Including those issued by five banks that granted the most mortgages during the reporting period.	Including a breakdown of the purpose of mortgages for the purchase of housing, namely:		Including those with a fixed interest rate
			on the primary real estate market	on the secondary real estate market	
2019	5204	5096	855	4349	3799
2020	5529	5169	733	4796	2084
2021	10593	9714	1132	9461	3927
2022	2009	1915	120	1889	1149

Source: Constructed by the authors based on data from the National Bank of Ukraine [6].

According to the data in Table 1, several conclusions can be drawn regarding mortgage lending in Ukraine from 2019 to 2022. The number of new mortgage loans increased in 2020 compared to 2019, possibly due to increased demand for housing or improved economic conditions. In 2021, there is a significant surge in the number of issued loans, indicating a market activation and increased interest in mortgages from the population. However, in 2022, a substantial decline in the number of issued loans occurred, possibly associated with economic and political challenges.

Funds allocated for the purchase of housing on the primary real estate market prevail, but there is also notable demand on the secondary market. The reduction

in the number of issued loans on the secondary market in 2022 may be linked to changes in consumer preferences or limited supply in this market. Mortgage programs with fixed interest rates have become popular among borrowers, possibly driven by a desire for payment stability and protection against potential interest rate changes.

Notably, in 2022, Ukrainian banks granted 2009 mortgage loans totaling 1.96 billion UAH, indicating a significant decline compared to the previous year. The number of contracts entered into decreased by 5.3 times, and the monetary volume of mortgage lending decreased by 4.3 times.

According to monthly surveys of banks, the majority of mortgage loans in 2022 were issued in January–February, before the full-scale Russian Federation's war against Ukraine. From September onwards, mortgage lending gradually resumed, facilitated by the state support program "There is a Home." Analyzing the purpose of mortgages granted to individuals during the reporting period reveals that the majority of loans are allocated for the primary real estate market. Additionally, mortgage programs with fixed interest rates have become a popular choice among borrowers.

In general, amidst fluctuations in mortgage lending in 2022, it is notable that state programs have had a significant impact on revitalizing interest in mortgages. However, there is also a decline due to restrictions associated with political and economic instability.

The analysis of mortgage lending data in Ukraine indicates that the market is influenced by changes in economic and political circumstances. The fluctuations in the number of issued loans reflect important factors such as housing demand, economic stability, and bank strategies. Trends like fixed interest rates and the prevalence of loans in the primary real estate market stand out. In 2022, the implementation of state support programs played a crucial role in the recovery of mortgage lending after a decline in the spring-summer period.

In specific countries, the mortgage system is considerably simplified and offers favourable opportunities, even for foreign citizens. Spain and Turkey are considered leaders in this context. However, access to mortgages for foreigners is not guaranteed by all banks in these countries. For instance, in Spain, mortgage lending for non-residents is available only at selected banks such as Bankinter, Santander, Bankia, and Caja Murcia. In Turkey, only three banks – Fortis Bank, DenizBank, and Garanti Bank-provide mortgage loans to foreigners. Additionally, other countries like Italy, Cyprus, the United States, and France offer favourable conditions for mortgage lending to foreigners, creating a conducive environment for obtaining mortgages with competitive terms.

There are European countries where obtaining a mortgage can be extremely challenging or even impossible. Bulgaria is a notable example, with high interest rates and substantial initial down payment requirements, making mortgages less accessible for many Ukrainians. Switzerland and Greece also present challenges. Greece faces a post-crisis situation affecting lending conditions, while Switzerland has historically shown particular scrutiny towards foreigners, complicating the mortgage application process. Moreover, there are countries where such financial services are not provided at all, including Tunisia, Vietnam, Thailand, and others. This highlights significant variations in the availability of mortgages, influenced by market conditions and the strategies of each country.

The required set of documents for obtaining a mortgage is nearly the same for all countries and includes

a personal identification document, such as a passport, social security card, or driver's license issued in the country where the loan is sought. Additionally, proof of income is a crucial requirement, typically involving employment verification for the last 2–3 years and a tax clearance certificate confirming no outstanding debts and income tax declarations. Other commonly requested documents include information about bank accounts, other loans, and financial obligations. Banks abroad might require a statement from the current account and sometimes recommendations from other financial institutions.

The last few years have seen significant changes in international mortgage lending, revising both the minimum and maximum loan amounts that can be granted. For example, in Spain, banks were willing to lend 100% of the property value just two to three years ago, but this limit has now been reduced to 60%. Similar changes have occurred in Israel and Germany. Cyprus and the UK have increased the maximum loan amount to 70%, and in France, it has risen to 80%. Due to more favourable conditions, these alterations make mortgage financing more attractive for many, including foreigners. Occasionally, foreign banks may even consider granting mortgages for larger amounts, but such cases are rare and often require additional documentary evidence.

Banks not only determine the maximum but also set a minimum mortgage amount, and these restrictions usually apply predominantly to non-residents. This is because loans for foreigners entail more risk and typically require more technical complexity. In Bulgaria and Turkey, where the cost of real estate is relatively low, the minimum loan amounts range from 5,000 to 30,000 euros, respectively. In French banks, this threshold is 80,000 euros. Countries like Cyprus, Spain, Greece, and Portugal set a minimum threshold of 100,000 euros, while Swiss and British banks offer the highest limit, almost 400,000 euros. Additionally, the loan repayment term is an important condition. The USA has the widest range of terms, ranging from 1 to 30 years, while Turkey offers limited terms from 5 to 15 years. Other world banks offer approximately similar conditions, with terms varying from 5 to 20–40 years.

One drawback of international mortgage lending is that until the loan is fully repaid, the borrower does not own the property. This means that the right to ownership of the property remains with the bank or fund until the mortgage is fully paid off.

Analyzing Ukraine's foreign policy and its key ally, the European Union, other aspects, such as mortgage interest rates practised in EU countries, must be considered (Figure 1).

Analyzing the conditions of mortgage lending in the countries of the European Union, various interest rates and terms can be identified, revealing the availability of housing loans for the population.

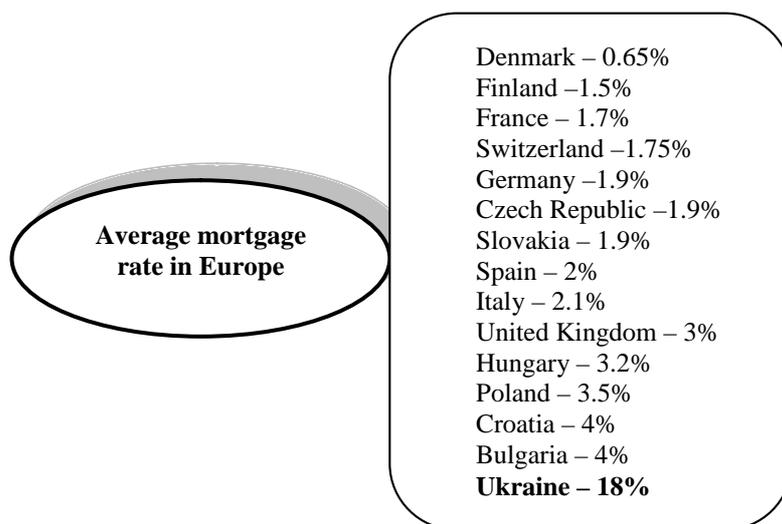


Figure 1. **Average Mortgage Interest Rate in Europe**

Source: National Bank of Ukraine data [6].

In Denmark, there is a trend toward issuing even interest-free loans, especially for loans with a term of up to 20 years. It's also worth noting the availability of loans with a negative interest rate, which is a unique phenomenon globally. In Finland, interest rates typically stand at 1.5%, and loan terms range from 20 to 35 years. For foreigners, it is important to demonstrate financial stability through numerous documents. Switzerland allows both residents and foreigners to obtain mortgages, with loan terms extending up to 100 years. Slovakia offers loans ranging from 1 to 30 years, and there is also the possibility of obtaining a mortgage without income verification, subject to certain differences. In Germany, the initial down payment is approximately 40%, and it's essential to have an account with a German bank and reside in the country. The Czech Republic considers the income of the entire family and can provide mortgages to foreigners with residence documents [9–14].

A common trend is the diversity in the conditions of mortgage lending in different EU countries, considering age restrictions, the size of the initial down payment, loan terms, and other factors. This indicates significant variations in approaches to housing loans in the European Union.

Based on the provided information, several positive characteristics of the mortgage market development in the European Union can be formulated, which are interesting for reforming the national mortgage lending market in Ukraine:

Financial and investment capacities: EU markets have significant financial and investment opportunities to increase the volumes of long-term mortgages, promoting the development of the housing loan market.

Low credit costs: Many EU countries experience relatively low mortgage rates, there is a relatively low cost of mortgage loans, which can be an important factor in ensuring the affordability of housing loans in Ukraine.

Social-legal protection: A high level of social-legal protection for the population, especially regarding social

rental housing, can serve as valuable experience for reforms in the fields of housing construction and mortgage lending in Ukraine.

Macroeconomic stability: The level of macroeconomic stability and a decent level of wages in EU countries contribute to citizens' life planning and investment in real estate.

Transparency and informational transparency: A high level of transparency and informational transparency in the mortgage market helps avoid speculation and ensures trust among market participants.

Unified regulatory approaches: Unified regulatory approaches to the standardization of collateral valuation in the field guarantee the trust of mortgage market participants and prevent speculation and double standards.

Considering these positive aspects, Ukraine can take into account the experience of the European Union in developing and implementing reforms in the field of mortgage lending to improve housing affordability for citizens and stimulate the real estate market.

Since October 2022, Ukraine has implemented the state program eOselya, aimed at providing citizens with affordable housing. Initially, the program was open to military personnel, law enforcement officers, educators, medical workers, and researchers. Participants had the opportunity to obtain a mortgage at a reduced rate of 3%, compared to banking rates ranging from 15% to 25%.

An important stage in the program's development was the expansion of eligible participants. From August 1, 2023, other groups of citizens were added to the list of privileged categories, who can now benefit from the opportunity to get a mortgage at a rate of 7%. This decision aims to increase the number of people who can take advantage of the program's benefits and access affordable housing.

Figure 2 outlines the lending terms under the eOselya program.

Terms of providing loans under the eOselya program	Privileged interest rate for the entire loan term – 3%
	Maximum loan term – 20 years
	Minimum down payment – 20%
	Banks participating in the program provide loans: JSC "Oschadbank", JSC CB "PrivatBank", PJSC "CB "Globus Bank", JSC "UkrGasbank", JSC "Sky Bank" and JSC "SENS BANK"

Figure 2. Lending Terms under the eOselya Program

Source: Constructed by the authors based on data from the Affordable Housing Credit Program “eOselya” [8].

Therefore, the program provides certain lending conditions for participants, contributing to the provision of affordable housing. The mortgage program eOselya has proven to be an effective tool in supporting access to housing in Ukraine. Over the period from October 6, 2022, to December 7, 2023, 5554 mortgage loans were issued, for a total amount of UAH 8211.9 million. These figures reflect significant demand for housing among the population and the program's effectiveness in providing financing. This success may indicate several key aspects of the eOselya program [3].

There has been steady growth in issued mortgage loans since November 2022. This trend indicates increased citizens' interest in the eOselya program and the expansion of its popularity. The highest number of issued loans is observed in November and December 2023, as well as in August and September 2023. These periods may indicate increased demand for housing in the mentioned months.

CONCLUSIONS

The analysis of mortgage lending in Ukraine indicates a significant impact of changes in economic and political circumstances on the market. Changes in the number of issued loans reflect the influence of factors such as housing demand, economic stability, and bank strategies. Fixed interest rates and the popularity of loans on the primary market determine specific trends. An important stage in 2022 was the implementation of state support programs, which contributed to the recovery of mortgage lending after the impact of the spring-summer period. The overall trend of diversity in mortgage lending conditions in the European Union indicates significant differences in approaches to housing loans in different countries. However, some positive characteristics of the mortgage market development in the EU can serve as valuable experience for reforming Ukraine's national mortgage lending market. Since October 2022, Ukraine has implemented the eOselya program to provide citizens with affordable housing. The individual success of the program is determined by risk management efficiency and adaptability to changes in the economic environment.

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