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FINANCIAL LEVERAGES OF THE REGULATION OF RESIDENTIAL CONSTRUCTION

ABSTRACT

The increasing level of population coverage with housing has traditionally been among the most relevant and challenging issues for the national economy of Ukraine. The military conflict, now in its second year, is changing the priorities of the public housing policy and requiring the search for new efficient methods of restoring the lost housing stock and regulating housing construction. The article addresses the volume of capital investment in residential construction in Ukraine and explains the financial framework for residential construction regulation. World best practices in the use of financial instruments in the regulation of the industry are systematized. The authors' view of the system of financial leverage of residential construction regulation is offered. The analysis of the housing affordability indicators shows that the average household income is insufficient to purchase housing and repay a mortgage. Meanwhile, the research indicates that a mortgage is one of the most common financial instruments for the purchase of housing for Ukrainians. The analysis of the level and dynamics of mortgage interest rates shows that they are 4.6 times higher in the euro than in the EU countries. The study of modern housing practices in Ukraine emphasizes the need to introduce new principles of sustainable financial regulation in residential construction. The article substantiates a set of these principles and recommends their implementation. The assessment of modern realities and consequences of hostilities in Ukraine reveals significant losses of housing stock (about 40%) and the need to change the priorities and tasks of public housing policy. An examination of the country's recovery and post-war housing programs allows the identification of the principles of transparency, openness, inclusivity, energy efficiency, resource efficiency, and sustainability as key strategic priorities in financial regulation.

Keywords: residential construction, regulation system, instruments, housing stock, military conflict, mortgage, financial leverage

JEL Classification: L74; G23; G28; L51

INTRODUCTION

Housing policy constitutes an essential element of socioeconomic development programs in any country where the quality of life and social well-being are the key strategic values. The right to housing, being one of the fundamental rights, must be protected by the state and secured by the appropriate socio-economic guarantees. The problem of securing qualitative and affordable housing has been among the most acute in Ukraine for many years. It requires appropriate solutions, especially those, related to the financial framework and regulation of housing.

The military conflict is now in its second year, growing in urgency and questioning the future state housing policy. The response to the existing challenges and threats in housing requires the consolidation of efforts of the government, local authorities, private investors, and construction agencies to develop and implement measures addressing new residential construction and the recovery of the damaged housing stock. The residential reconstruction must consider the need for respective social infrastructure and roads. Meanwhile, maintenance of residential construction inclusiveness, consideration of the individual needs of residents and their families, and guaranteeing the Ukrainians' right to safe, qualitative, and comfortable housing are fundamentally important issues. Modern realities and the daily loss of the national housing stock due to hostilities require

the search for efficient and unconventional tools to regulate residential construction in Ukraine. An exceptional place is granted to the search for potential financial sources of compensation for housing and new construction, which are currently critical for the Ukrainian population. Therefore, the government and municipal authorities are trying to implement a set of measures in strategic planning, stimulation, and application of the compensation mechanisms to secure the impact of motivators for all participants of the residential reconstruction, war relief, and extensive national housing stock reproduction processes.

LITERATURE REVIEW

Financial factors are among the most popular tools for residential construction and residential real estate market regulation in global practice. J. Braun et al. divide financial leverages of the residential real estate market regulation depending on the origin and price impact mechanism into 1) affordable housing support leverages (grants, subsidies, tax preferences, and subsidized land); 2) leverages by the type of ownership (rented or acquired housing) [1].

Loans are the most common financial leverage in the regulation of resource, investment, and capital markets, as well as the key tool in the regulation of the country's financial system, including in residential construction [2]. M. Ermilova and N. Gryzunova emphasize that mortgages continue to constitute a significant share of the U.S. GDP at quick recovery of the national financial system [3]. D. Aikman et al. consider mortgages in the context of the macroprudential regulation system [4]. M. C. Chiuri and T. Jappelli verify the relationship between the affordability of mortgages and the employment rate distribution by the age of borrowers, which is especially obvious among youth [5]. D. Soman and A. Cheema reveal a high mortgage sensitivity to the system of macroeconomic factors of stability in the national economy [6].

The analysis of credit expansion conducted by M. Lundholm on the example of Swedish households demonstrates the upward trend in socio-economic heterogeneity of the indebted households and reveals growing foreclosure risks subject to growing heterogeneity [7]. J. M. Quigley and N. Popadynets systematically examine the housing affordability and the behaviour of households depending on the loan-to-value ratio regulation factor in mortgage lending. The results show a close correlation between the pledge cost and the rental housing cost [8, 9, 10, 11]. Similar studies carried out by J. E. Reite et al. and B. Danylyshyn et al. reveal that an increasing number of households have failed to refinance unsecured debt with a mortgage in recent years, which shows the reasonability of improving the mortgage lending mechanism [12, 13, 14].

The researchers prove that the active development of mortgage lending can significantly increase the risks of financial crisis and possible default [15, 16]. The results received by S. Alpanda and S. Zubairy verify the lower performance of national monetary policy in the period of sharp growth of household mortgage debts in the USA [17]. At the same time, increasing debts substantially add to the risks of the emergence of a housing bubble [18].

W. F. Bassett and W. B. Marsh show that the trends of declining commercial real estate lending volumes and growing housing lending volumes have evolved in recent years [19].

The models of financial regulation for the residential real estate market examined by M. Oxley et al. reveal that along with the money of future homeowners, the funds of corporate organizations also play a significant role in European residential construction [20]. The need for cooperation and partnership development, capital consolidation, and risk distribution in construction is emphasized by S. Deep et al. [21]. The model of housing market financial stability developed by T. T. Yang et al. also shows that the residential real estate market demonstrates higher stability parameters subject to joint mortgage lending service by construction companies and credit institutions [22].

The analysis of the impact the price as a financial factor produces on the housing market and housing affordability holds a significant place in multiple studies [23]. M. Iacoviello proves the dependencies between the cost of housing, collateral, and borrowing capacity of indebted households [24]. Moreover, housing prices have an essential impact on consumption capacity and quality of life, according to V. Burrows and A. Cristini [25], Shteingauz, D., Kuznyetsova, A., & Achimovich, D. [26]. Higher housing prices in the modern economy lead to credit expansion, which, in turn, impacts their future growth [27]. K. Kuttner and I. Shim have expanded these studies and revealed that growing taxes on housing significantly limit the growth of housing prices and reduce the lending pace [28].

Meanwhile, the 2008 financial crisis determined almost the same share of mortgage and unsecured housing loans non-payment by households. It is evidence of about the same risks of the use of mortgages and unsecured loans as financial leverages in housing market regulation [29].

Loan affordability and the expansion of credit principles of housing acquisition in European countries have generated a close relationship between demand, supply, and prices for credit means in the construction market. The results of studies conducted by F. Lai et al. show a close relationship between such financial indicators as household debt rate and housing price. Meanwhile, growing household debt (in domestic practice – consumer debt) generates a steady trend of growing housing, construction, reconstruction, and maintenance prices [30].

AIMS AND OBJECTIVES

The purpose of the study is to determine directions for regulating the construction of residential real estate using financial levers in the modern conditions of the country's recovery. To achieve the goal, the following tasks were set and completed:

- the essence of the financial system in the field of housing construction was investigated;
- the author's methodological scheme of the system of financial support of construction management is proposed;
- the financial levers of regulating the construction of residential real estate are determined;
- an analysis of mortgage lending was carried out and indicators for assessing the level of mortgage housing affordability were determined;
- promising drivers of regulation of residential real estate construction in the country are proposed.

METHODS

The authors' methodological scheme of the financial framework of construction regulation is substantiated based on the systematization of scientific literature and domestic legislation on the regulation of the financial framework of residential construction. The systematization of scientific and methodological foundations and realities of domestic and world practice allows to offer the authors configuration of the financial mechanism of residential construction regulation. The article sets the task to verify the hypothesis about the affordability of housing for the Ukrainian population considering the actual level of the annual income of an average family and mortgage rates. The monitoring and analysis are focused on the assessment of the weight and dynamics of the change of the main indicators such as interest rates on mortgage loans in the EU countries and Ukraine, the dynamics of the volume of housing loans, the cost of housing, the income of the population, and price and income indices. Statistical index methods, methods of parameter estimation in dynamics, and methods of indicator growth rate were used in the process of analysis. The study covers the period from 2010 to 2021. The index method is used to calculate the growth rate of housing price, income, and mortgage cost indices. The calculations are based on the formula:

$$k = \frac{I_1}{I_2'} \quad (1)$$

where k is the coefficient of the respective indicator; I_1 is the rate of the respective indicator in the reporting year; I_2' is the rate of the respective indicator in the base year.

During the analysis, the attention was focused on key parameters of housing affordability, including the instruments of institutional policy and the management level, the amount of public spending on grants and financial assistance to homebuyers, the level of tax exemption, the amount of public spending on housing subsidies, the amount of public spending on support of social rental housing as a percentage of GDP, the system and efficiency of measures to support affordable social housing, the level of funding of housing improvement and repairs, and the institutional regulation of the housing rental market.

Based on statistical and economic data, the levels of affordability of mortgage loans for the population of Ukraine and the EU countries are compared. The sources of the analysis include the data of the State Statistical Service of Ukraine, Eurostat, and the authors' monitoring of prices in the housing market by regions of Ukraine. Part of the data was obtained based on a survey conducted among eight leading banking institutions providing mortgage loans to the population. The application of the method allows to determine the rates, terms, and conditions of the provision of mortgage loans to the Ukrainian population. The hypothesis about the excessively high level of economic affordability of housing for the Ukrainian population, which hinders the solution to the housing problem, is proven.

The main principles and potential drivers of the creation of a consistent financial framework for the regulation of residential construction in Ukraine are determined based on the results of the authors' studies, the method of scientific abstraction, and the systematization of scientific sources.

RESULTS

The population of Ukraine considers housing to be one of the most promising directions of investment, which provides an opportunity to obtain long-term benefits both in the form of improvement of housing conditions for a family and ensuring a steady income from the lease of property. According to Cedos, Ukraine is one of the countries with the highest share of privately-owned housing – more than 90% [31]. The global home affordability study from the international company Roofing Megastore shows that Saudi Arabia, South Africa, USA, UAE, Palestine, Oman, Iceland, Cyprus, and Qatar were the countries with the highest rate of home affordability in 2021. Ukraine isn't among the top 50 countries with affordable homes [32]. According to the Organization for Economic Cooperation and Development (OECD), the highest rates of home affordability among the EU countries are in Romania, Greece, Lithuania, Bulgaria, and Hungary [33].

Capital residential construction in Ukraine is currently among the least attractive investment directions. It accounted for about 7.6% of the structure of total capital investment in the national economy in 2021. The funding of residential construction projects in Ukraine is the most active in the following activities: construction – 68.7%, real estate transactions – 27.4%, and professional, scientific, and technical activities – 4.7% [34]. 91% of the financial flows directed to the creation of the financial framework for residential construction account for the funding of new construction.

The development of the domestic housing market in Ukraine in recent years has been accompanied by a few institutional and financial problems related to inefficient foundations of housing distribution, low level of housing affordability and solvency of a significant part of the population, lack of systemic state policy of housing provision, and low efficiency of current housing programs and projects. Finding sources of funding for housing also remains a significant problem. The military conflict that has been ongoing in Ukraine since February 2022 has severely damaged the national housing stock. According to the Ministry for Communities and Territories Development of Ukraine, more than 135,800 residential buildings were destroyed in Ukraine during the year of hostilities, including 15,600 apartment buildings. The total area of damaged housing stock in the first six months of the war was 74.1 million sq. m. (39.7% of the country's total housing stock, estimated at \$55.5 billion). Nearly 72,000 houses were partially destroyed. The competent authorities received more than 66,000 applications for compensation for lost or damaged housing in the first two months of the war. Moreover, more than 27% of social infrastructure facilities were destroyed (worth \$ 26.6 billion) [35].

Today, the Government of Ukraine is taking a few measures to create conditions for the recovery and reconstruction of the lost housing stock. The National Council for the Reconstruction of Ukraine prepared the Draft Plan for the Reconstruction of Ukraine. It is focused on the recovery and stimulation of regional development, substantiation of relevant mechanisms of residential construction regulation, maintenance of energy efficiency and civil protection, and development of life support infrastructure [36]. In the medium term, the Plan provides for the development of social and temporary housing stock. In the long run, the issues of completing the housing privatization, improving regional housing programs, and creating a stable non-profit municipal housing stock are to be resolved. The development of non-profit housing is defined as a strategic priority of the implementation of social housing policy in Ukraine for the future period. Openness and transparency, European integration, sustainable development, energy independence, inclusivity, and civil protection are selected as the key principles of the accomplishment of the project tasks. The deadline for the implementation of all tasks of the Ukrainian Housing Stock Recovery Plan is 2032. UAH 35 billion will be allocated from the State Budget of Ukraine in 2023 to achieve these goals [37].

Moreover, to create favourable conditions for attracting investors and construction companies to residential construction, the government has simplified the procedure for importing building materials, optimized the rules for customs clearance of building products, and announced a series of institutional measures to simplify procedures for the construction of social housing. The mechanisms of benefits, incentives, and bonuses for private construction companies are being developed to secure social housing for the population, especially for those affected by the military conflict. The following mechanisms are being processed: purchase of a part of housing from developers from the funds of the state or local budgets, funding, and reimbursement of expenditures of private construction companies for the reconstruction of damaged housing, and stimulation of active implementation of technical methods of rapid and alternative construction.

The financial framework for the implementation of housing projects in Ukraine functions through the Construction Financing Fund and includes construction companies, management companies, and buyers of real estate. The funding system is

based on contractual relations grounded on the general treaty for the construction of the respective objects, mortgage contracts, commission contracts, and deferred ownership contracts (Figure 1).

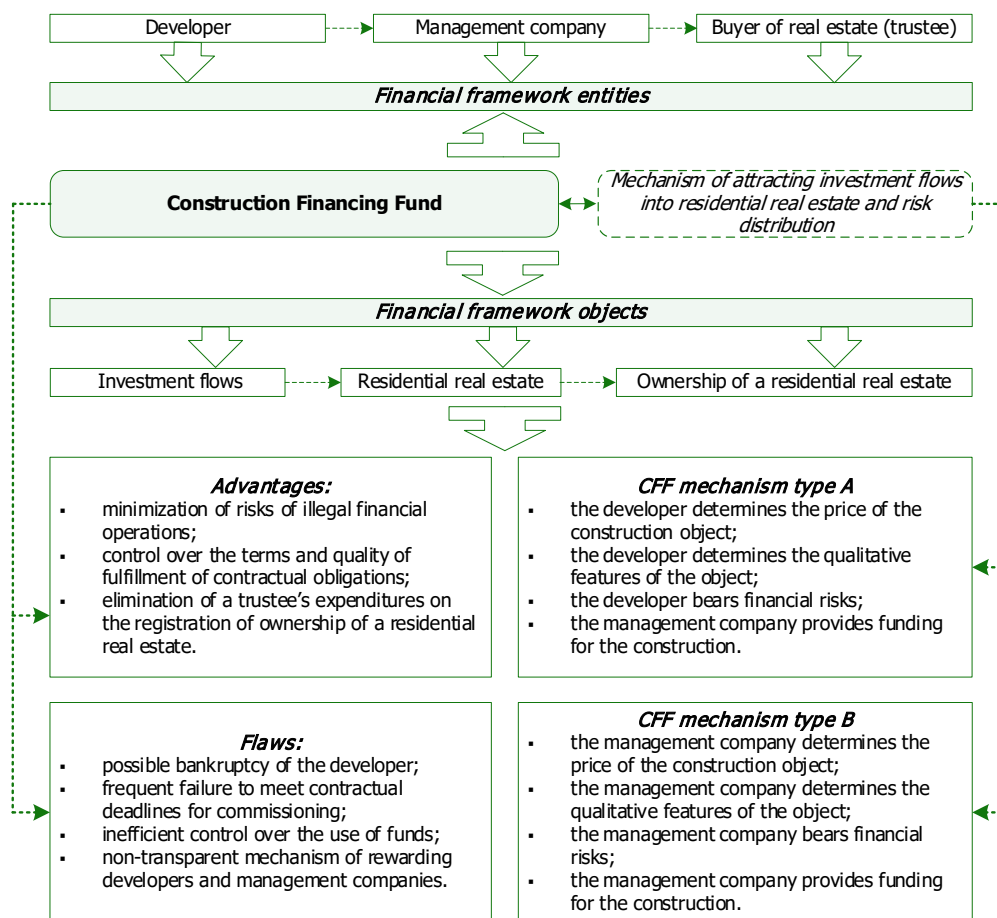


Figure 1. The financial framework for the residential construction regulation based on the CFF mechanism. (Source: compiled by the author based on [38])

The central place in the financial framework for the regulation of residential construction is occupied by an organizational-economic mechanism. The leverages of impact on the achievement of the set goals are the core of this mechanism. A set of leverages constitutes a combination of the instruments of regulation impact on an object. Their nature is determined by regulation methods, current regulations of the legal framework, and the system of business factors of the market environment. The main properties of the leverages of state regulation of residential construction include 1) regulating activity from the perspective of and through the key trends in the development of socio-economic processes in the country; 2) the need for the substantiation of a mechanism of leverage combination at the levels of national and local regulation; 3) creation of a system of leverages that are strategically directed at improving the efficiency of the state housing policy.

The global financial crisis of 2008 caused the need to search for efficient instruments and leverages for ensuring the stability of the real estate market, subject to ensuring transparency, reducing the level of investment risk, and protecting the investors' interests. Martin Hoesli, Stanimira Milcheva & Alex Moss consider three leverages as the main financial instruments of this regulation. Basel III regulatory initiative is oriented on the affordability of bank loans for the construction industry, which is characterized as one of the most credit-intensive economic activities. Construction companies invest in real estate assets using a high level of financial leverage, which provides opportunities to obtain additional income. In this type of financial regulation, the banks impact the investment flows and results of investment companies by changing the interest rates.

Other leverages of financial regulation are based on the Alternative Investment Fund Management Directive (AIFMD), which addresses the cost of risk hedging in investment projects using derivative financial instruments.

The European Market Infrastructure Regulation (EMIR) is a widespread method of financial regulation of the residential real estate market in EU countries. Its main leverage is derivatives, the cost of which impacts the cost of debt capital [39].

Loans for residential real estate constitute a significant share in the structure of credit portfolios of European banks. According to the European Central Bank, as of the 1st quarter of 2022, the share of outstanding mortgage loans to households amounted to 33.5% of the total loans (EUR 4.1 trillion). Despite the high risk for banks, the volume of mortgage loans in the EU tends to grow. Since 2015, the volume of granted mortgage loans has increased by 20% compared to the volume of traditional commercial loans (15%) [42]. As of late 2021, the total amount of mortgage loans in the euro area was EUR 5.215 trillion, and the average interest rate was about 3.17% (Figure 3). The share of loans for housing in the structure of loans provided to households in European countries was 78.2% in 2022 [43].

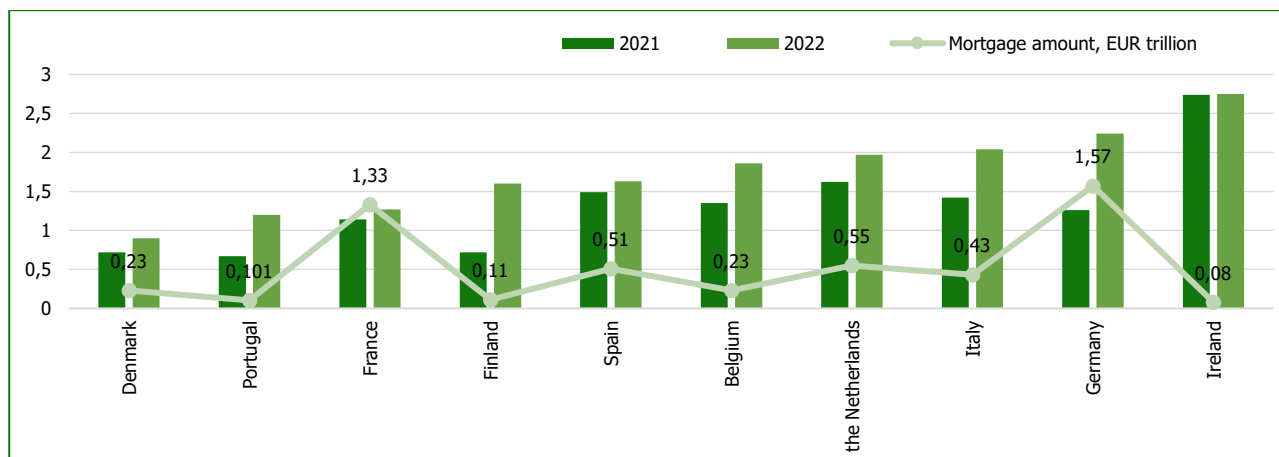


Figure 3. Mortgage interest rates, % and amount of household lending in EU countries (2021-2022). (Source: compiled by the authors based on the data [44])

In Ukraine, as of late 2021, the total amount of mortgages amounted to UAH 10.554 billion, including UAH 9.206 billion of loans granted in national currency and UAH 1.347 billion of the equivalent amount of loans granted in foreign currency. The average mortgage interest rate in local currency was 15.9% in the primary real estate market and 13.8% in the secondary market. Most mortgages for the purchase of housing were granted in Kyiv and Kyiv region, Kharkiv, Odesa, Lviv, Dnipropetrovsk, Zaporizhzhia, and Chernihiv regions [45]. Mortgage interest rates for households in Ukraine are almost twice as low as for other consumer loans, but much higher than in EU countries (Figure 4).

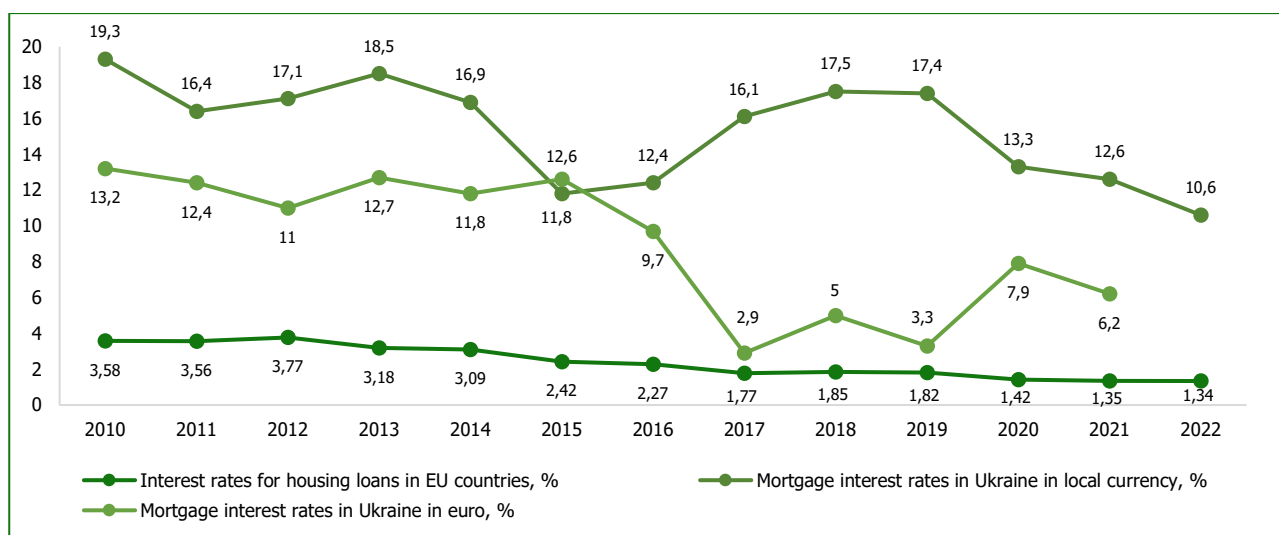


Figure 4. Mortgage interest rates in Ukraine, %. (Source: compiled by the authors based on [45])

Of the total amount of credit flows received by households in commercial banks about 12.1% were directed to the purchase, construction, and reconstruction of real estate. From February to November 2022, the volume of the financial market of mortgage loan funds recovered somewhat and reached UAH 26.3 billion, of which UAH 0.3 billion were mortgage flows up to one year (1.2%), UAH 3.8 billion – loans for 1 to 5 years (14.6%), and UAH 22.1 billion – long-term mortgage loans for more than 5 years (84.1%).

Analytical comparisons of the amount of mortgage loans in Ukraine and in EU countries show that mortgages for the purchase of housing in Ukraine are significantly limited and hardly affordable. According to experts, the amount of mortgage loans in the Czech Republic is about 25% of the GDP, in Poland – 20%, and in Ukraine – 0.7% [43]. From 2021, new conditions of mortgage lending have been established in Ukraine within the framework of the state program "Affordable Mortgage". In accordance with the established conditions, the cost of the mortgage loan is 7% per annum (15% of the initial advance payment). Moreover, the personnel of the national defence security sector, medical personnel, educators, and researchers can receive a loan at 3% per annum for 20 years (with 20% of a down payment). The Program provides an opportunity for partial individual compensation of the loan cost with state financial resources through the Entrepreneurship Development Fund. The maximum area of a residential real estate object is 50 sq. m and an additional 20 sq. m per each subsequent family member (52.5 sq. m and 21 sq. m under the special program for the established categories of citizens) [46]. Meanwhile, the cost of a residential real estate object is subject to restrictions. It should not exceed UAH 2.5 million, estimated cost, and construction cost determined by the Ministry of Communities and Territories Development and adjusted by the respective regional coefficient. Restrictions also extend to the age and type of the mortgage object (not less than 10 years, according to the terms of the loan agreement).

At the same time, the market of credit resources has its features and peculiarities of functioning. According to the NBU, in 2021, the number of banking institutions granting mortgages to individuals was at most 13 entities per month. In 2022, their number reduced on average to 3 per month. High level of risk in mortgage lending forces banks to use insurance instruments that affect the terms of lending.

Economic affordability of housing (purchase and rent) is largely determined by the level of income and solvency of the population. Evaluation of household income in Ukraine shows that the average monthly wage per household in 2021 was UAH 14,247 (EUR 463), and despite a consistent upward trend in recent years, it remains very low for the purchase of housing for most households in the country. The share of spending on improving the housing conditions of the population remains extremely low due to the lack of funds for meeting these primary material needs (Table 2).

Table 2. Indicators of the evaluation of mortgage affordability for households in Ukraine. (Source: compiled by the authors based on [47])

Indicators	2010	2014	2017	2018	2019	2020	2021
Household expenditures, UAH	2773.1	3692.0	6223.6	7438.1	8900.8	8883	10558
Housing expenditures, UAH	265.8	363.7	833.1	1000.0	1321.1	1352.8	1692.7
Share of housing expenditures, %	9.6	9.9	13.4	13.5	14.8	15.2	16.0
Average expenditures on the purchase of the real estate, UAH	16.8	1.2	7.8	16.8	41.4	0.55	7.20
Share of expenditures on the purchase of the real estate, %	0.6	0.1	0.1	0.2	0.5	0.1	0.1
Average expenditures on major repairs and construction of housing, UAH	21.7	19.7	22.3	23.9	39.6	23.86	33.05
Share of expenditures on major repairs and construction of housing, %	0.8	0.5	0.2	0.3	0.4	0.3	0.3
Average cash income, UAH	3377.2	4470.9	8013.1	9720.2	11850.7	12247.8	14247.2
Share of expenditures on housing, purchase of the real estate, and repairs of housing in income, %	8.9	8.6	10.8	10.7	11.8	11.2	12.2

Order № 53 of the Ministry of Communities and Territories Development as of February 17, 2022, establishes and recommends the use of the average cost of residential construction in Ukraine starting from 2020. The average cost of 1 sq. m of apartments in a building in Ukraine is UAH 16,003. The cost is the highest in Kyiv – UAH 18,704. Meanwhile, the results of monitoring show that the indicators of the cost of a housing unit in practice are much higher and had a rapid upward trend in 2016-2021. According to specialized agencies, the cost of 1 sq. m of housing in Kyiv is UAH 35,000, and it has increased by 48.7% in 2020-2021. Economy-class housing is the cheapest, and its cost amounts to UAH 24,000 per 1 sq m. [48]. In 2022, despite the external factors of instability of the housing market, the cost of housing increased by 8% in the primary market and by 11% in the secondary market [49].

The ratio of the growth rate of the cost of housing purchase in the domestic real estate market and the growth rate of the income of the population shows an actual inability of most households to buy housing on their income. Mortgage loans remain the real financial leverage, with the growth of interest rates have slowed down recently (Figure 5).

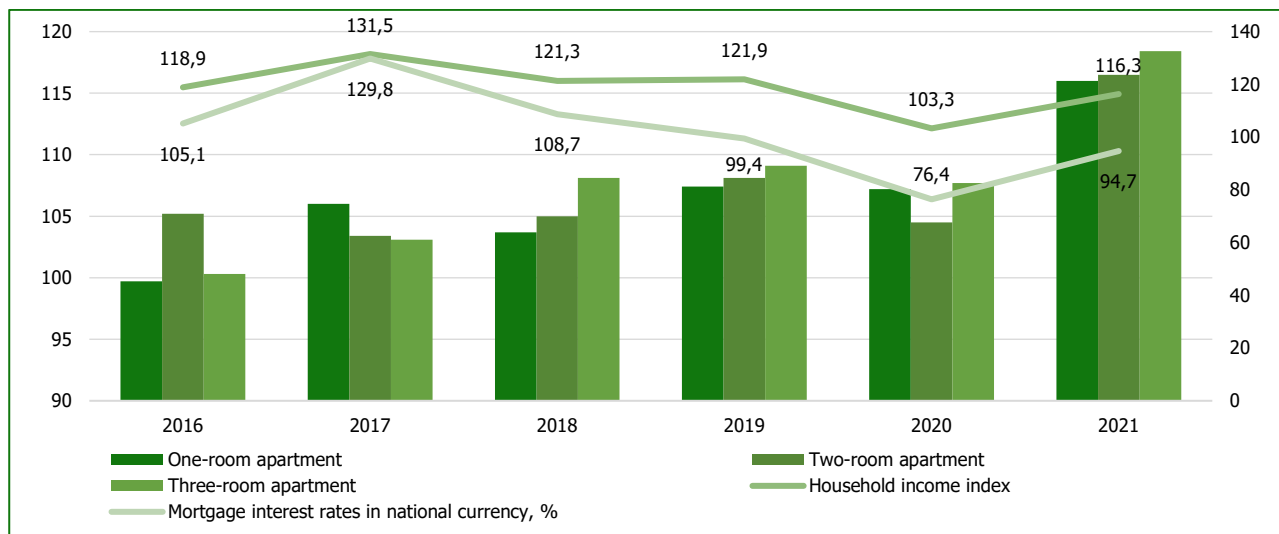


Figure 5. Relationship between growth rates of housing, income, and mortgage loan cost indices in Ukraine, %. (Source: calculated by the authors based on [45])

The study allows us to conclude that mortgage lending, as the leading financial leverage of regulation of housing policy in Ukraine, is hardly affordable due to the low income of the population. It should be accompanied by flexible leverages of financial support from the state. The socio-economic policy aimed at solving the problem of improving the affordability of housing for households in Ukraine should be based on the principles of sustainability and inclusivity and organically combine the market and state financial leverages of the regulation of residential construction. National and regional programs for the development of residential construction should become a part of strategic programs of urban and rural development.

A complex strategy of the regulation of residential construction should cover systemic environmental aspects (energy efficiency, modernization, and application of the principles of circular economy in construction), social aspects (spatial planning of construction for inclusivity, provision of housing for socially vulnerable groups of the population, and inclusive residential real estate management), and a set of economic (including financial) drivers, which are bound to secure the realization of the intended sustainable development goals.

This study shows that the economic policy of housing in Ukraine demonstrates asymmetric effects and is determined by the local level and specifics of the regional context. Financial leverages, especially the cost of housing, income level, and opportunities for mortgages for the population, are quite sensitive to regional construction markets and local policy of regulation of the development of the residential construction market. It shows the need to establish a system of residential construction regulation in Ukraine focused on local features and local self-governance policy. The monetary policy of the government should create efficient motivators for regional participants of the residential real estate market, which should be accompanied by local decisions, programs, and incentives for the development of residential construction at the level of local (region and oblast) governments.

The high-risk commercial banks bear in mortgage lending, which is related to the low level of household income, should be compensated by a consistently low NBU discount rate for commercial institutions participating in social construction programs. The government's compensation policy stipulated by national affordable mortgage programs is insufficient and requires increasing the level of compensation guaranteed by the state. To some extent, it will help to reduce the inclusive gap in mortgage rates for the population of Ukraine and bring the mortgage practice closer to European realities. Fiscal measures, especially the preferential treatment of a part of the income of construction companies and financial institutions that actively participate in the programs of sustainable development of residential construction and programs of inclusive provision of housing for the population, are efficient financial leverages for further regulation of the housing market (Figure 6).

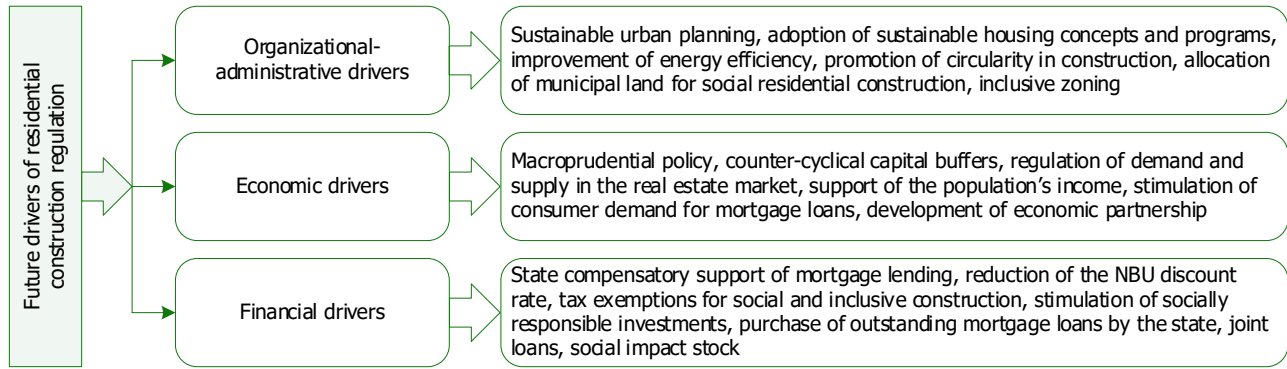


Figure 6. Promising drivers of residential construction regulation in Ukraine.

The schemes of joint loans, which combine public (local) financial resources and the resources of the population for mortgage loans, can be promising for the future national practice of residential construction regulation. These schemes stipulate an opportunity to provide collateral for future real estate worth less than required by commercial banks. Part of the value of the collateral is funded by the state bank at an interest rate below the market mortgage rate. The rest of the collateral is later paid by housing mortgage. Meanwhile, the interest on the loan obtained from the state is not paid in the first years, and the period of the public loan is 20-25 years.

Considering the realities of the residential market and investment real estate market in the housing sector of the national economy, it is worth suggesting the use of securities (bonds) of social nature. This financial instrument provides for directing private investment flows to social construction while implementing local (regional) sustainable housing development programs. The government (local governments) guarantees that the principal amount is covered subject to a successful implementation of the construction project. Tax exemptions can be used as an additional bonus for investor-bondholders.

Housing partnership programs, which are based on attracting financial resources of national and international investment funds, social organizations, and private partnership funds, are of exceptional importance for institutional regulation of residential real estate. Ukraine's participation in global projects and programs of sustainable housing should create pre-conditions for the activation of the income from investment flows into the industry and the use of the powerful capacity of global social housing grants.

DISCUSSION

Studies of the mechanisms and levers of the global practice of financial regulation of the real estate market have shown that in recent years there has been a tendency to reduce the volume of bank lending to commercial real estate and increase the volume of credit provision for the housing sector [19].

We agree that financial regulation based on current LTV housing market coefficients, which show the ratio of the value of collateral and bank credit and regulate the volume of demand and the cost of rental housing, is also active for modern European practice (Denmark, Norway, Sweden). Thus, based on the research conducted by J. R. Endre et al. showed that in recent years, an increasing number of households cannot refinance unsecured debt with the help of a mortgage loan, which indicates the feasibility of improving the mortgage lending mechanism [12].

At the same time, because of the 2008 financial crisis in European countries, the volume of non-payments by households both for mortgage lending and for unsecured loans for residential real estate was determined by an almost equal share, which indicates that the risks of using mortgage loans and unsecured loans as financial instruments are approximately the same. levers of regulation of the wire market [29].

At the same time, we emphasize that credit availability and the spread of credit principles for obtaining ownership of the residential real estate in European countries have led to a close interaction between demand, supply, and prices for credit resources in the construction services market. So, according to the results of research by F. Lai et al. We can see that there is a close direct relationship between such financial indicators as the household debt ratio and the prices of residential real estate objects. At the same time, the growth of the household debt ratio (in national practice – consumer debt) causes a steady trend towards rising prices for housing, its construction, reconstruction, and repair [30].

In the global practice of financial regulation of the residential real estate construction market, the results of the institutional reform of K. Dodd and B. Frank, aimed at reducing the risks of the financial system by controlling key financial institutions and companies, are of particular importance. The result of such control is the publication of a list of significant banking and financial institutions with a high level of capitalization. Inclusion in such a list formed the potential of trust and financial stability of these institutions and expanded crediting opportunities for construction companies.

Thus, we believe that one of the most common financial levers for regulating the construction of residential real estate is mortgage lending, which we agree with researchers P. J. Morgan et al., considered in the context of the system of macro-prudential regulation [50].

CONCLUSIONS

Implementation of the tasks of the national housing policy has always been among the most complicated and important issues of public and regional regulation in Ukraine. Ukraine is a country with a high share of private housing (over 90%), but the problem of realization of constitutional rights to housing for the population of Ukraine has traditionally been one of the most pressing and urgent. The share of expenditures on housing and purchase of real estate among the population of the country was on average about 12%. Meanwhile, the purchase of housing for most of the population is a rather complicated long-term life goal. Since the beginning of the hostilities, the problem of housing provision for the population has acquired new dimensions and challenges. During the year of hostilities, about 40% of the national housing stock was destroyed or damaged. A significant part of the population needs assistance from the state for temporary accommodation and reconstruction of lost housing. A financial framework for residential housing regulation through a special fund, which brings together participants in the construction process on a contractual basis, has been established in Ukraine. However, the mechanism of operation of this fund needs improvement and changes in terms of the introduction of tools for regional regulation of residential construction, the creation of additional motivations for private investors, and the promotion of social housing construction. Investments in new construction account for over 90% of the structure of capital investments in the construction industry. Reconstruction and repair of the housing stock is a major problem. The housing rental sector is almost unregulated in the Ukrainian housing market.

Mortgage loans remain the most efficient financial instrument for the purchase of housing for the population of Ukraine. The average interest rate on mortgages in Ukraine is 15.9%, which is several times higher than in the countries of Europe. Due to the continuous growth of mortgage interest rates, their total amount had a clear downward trend and in 2022 amounted to UAH 26.3 billion. Meanwhile, over the last five years, the cost of housing in the real estate market in Ukraine has increased significantly, and the growth rate has been higher than the growth rate of income of the population.

The study of the best practices in the world reveals a few financial instruments in the practice of state regulation of residential construction, which can promote the solution to the housing problem. Among the financial instruments, which can be useful considering the specifics of the functioning of the housing market in Ukraine, the following are recommended for application: state compensatory support of mortgage loans, tax exemptions for construction companies that ensure the social housing construction, support of housing investments, purchase of outstanding mortgage loans by the state, use of joint credit schemes, expansion of the practice of public-private housing partnerships. These measures should be supplemented based on current realities and considering the possible leverages of elimination of the consequences of the military conflict, which is now in its second year. Significant losses in the housing stock have caused fundamental changes in the housing policy of the government. Its main directions for strategic perspective include the completion of housing privatization, improvement of regional housing programs, and the creation of non-profit municipal housing funds. To address these tasks, UAH 35 billion will be allocated from the state budget for 2023. The changes in the national housing policy caused by the war in the country should secure the restoration and reconstruction of the housing stock, guarantee the realization of the right to housing, and ensure compliance with the main principles of European housing policy: transparency, openness, inclusivity, energy efficiency, resource-saving, and sustainable development. The implementation of these principles and the accomplishment of the planned tasks will bring Ukraine closer to democratic transformations and strengthen its integration into the single European economic and social space.

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ФІНАНСОВІ ВАЖЕЛІ РЕГУЛЮВАННЯ БУДІВНИЦТВА ЖИТЛОВОЇ НЕРУХОМОСТІ

Підвищення рівня забезпечення населення України житлом традиційно є однією з найбільш актуальних та проблемних для національної економіки тем. Широкомасштабний воєнний конфлікт, який триває в Україні вже другий рік, змінює пріоритети державної житлової політики, вимагає пошуку нових ефективних методів відновлення втраченого житлового фонду та регулювання будівництва житла. У роботі проведено дослідження обсягу капітальних інвестицій у житлове будівництво України, обґрунтовано систему фінансового забезпечення управління будівництвом об'єктів житлової нерухомості. Проведено систематизацію світової практики використання фінансових інструментів регулювання цієї галузі. Запропоновано авторське бачення системи фінансових важелів державного регулювання житлового будівництва. Аналіз індикаторів доступності житла для населення показав, що середній рівень доходів домогосподарств є недостатнім для придбання житла та погашення ставок за іпотечним кредитуванням. Разом із тим, дослідження показали, що іпотечний кредит є одним із найбільш поширених фінансових інструментів придбання житла для українців. Аналіз рівня й динаміки ставок іпотечного кредитування виявив, що в Європі вони в 4,6 рази вищі, ніж у країнах ЄС. Дослідження сучасної практики житлового забезпечення в Україні показали необхідність запровадження нових принципів сталого фінансового регулювання будівництва житла. Сукупність таких принципів обґрунтована й рекомендована до імплементації в цій статті. Оцінка сучасних реалій та наслідків бойових дій в Україні показала значні втрати житлового фонду (близько 40%) та необхідність зміни пріоритетів і завдань державної соціально-житлової політики. Дослідження програм відновлення країни та ліквідації наслідків війни в житловому будівництві дозволили виділити як ключові стратегічні пріоритети фінансового регулювання принципи прозорості, відкритості, інклюзивності, енергоефективності, ресурсозбереження та сталого розвитку галузі.

Ключові слова: житлове будівництво, система регулювання, інструменти, житловий фонд, воєнний конфлікт, іпотека, фінансові важелі

JEL Класифікація: L74; G23; G28; L51