

Journal of Geology, Geography and Geoecology

Journal home page: geology-dnu-dp.ua

ISSN 2617-2909 (print)
ISSN 2617-2119 (online)

Journ. Geol. Geograph.
Geology,
30(1), 190–200.
doi: [10.15421/112117](https://doi.org/10.15421/112117)

S. P. Zapotoskyi, V. A. Zapototska, O. M. Trusij, V. F. Pasko

Journ. Geol. Geograph. Geoecology, 30(1), 190–200.

Social and affordable housing in Ukraine: mechanism and practices of provision

Sergii P. Zapotoskyi, Viktoriia A. Zapototska, Oksana M. Trusij, Volodymyr F. Pasko

Faculty of Geography, Taras Shevchenko National University of Kyiv, Kyiv, zapototsk@ukr.net

Received: 21.09.2020

Received in revised form: 13.10.2020

Accepted: 07.12.2020

Abstract. The purpose of this publication is to research the state and mechanisms of formation of social and affordable housing in Ukraine and to determine the basic scientific and practical principles of improving housing. The study examines the theory and practice of providing housing for citizens in Ukraine. The concepts of “free”, “social” and “affordable”

housing are studied and the practice of mechanisms of their formation in European countries is given. The legislative base of formation of social and affordable housing in Ukraine is briefly described. The general level of demand for housing in our state is outlined. To study the level of housing affordability for the population of our country, the authors used the adapted UN HABITAT methodology, taking into account the Ukrainian realities. We have taken as a basis a young family with two working people with average incomes for the region minus expenses at the subsistence level. At the same time such a young family have mostly one or two children and the priority of their purchase will be a small one-two-room apartment (or a two-bedroom apartment with a modern approach to construction) with an area of 43 sq.m. The results of the assessment of housing affordability obtained in this way show a general tendency to increase in the housing affordability index in Ukraine. At the same time, the real indicators of affordability are still quite low and characterize a fairly long period of cash savings of the population to obtain housing. The average value of affordability is 9.2 years in 2019, which is almost 6 times higher than the indicators of 2007. The value of affordability in the state varies considerably. It is found that the cities of Kyiv, Zaporizhia, Dnipropetrovsk, Kyiv and Sumy regions have the highest affordability indicators. The lowest values are typical for the Western region of the state, in particular Zakarpattia, Chernivtsi, Ternopil, Lviv, Rivne and Volyn regions. They are in the range of 11.5-16 years, which is almost 4 times different from the best indicators. The connection between housing affordability and the volume of construction and its commissioning and GDP growth rates is estimated. The state of mortgage lending in the state is analyzed. It has been found that there are currently more than 20 programs to support citizens in purchasing housing in Ukraine, but the effectiveness of most such programs is questionable and requires state support. Ways to implement an effective housing policy and its main components are proposed.

Key words: social housing, affordable housing, demand for housing, housing construction, mortgage lending, housing programs, housing policy

Соціальне і доступне житло в Україні: механізм та практика забезпечення

С.П. Запотоцький, В.А. Запотоцька, О.М. Трусій, В.Ф. Пасько

Географічний факультет Київського національного університету імені Тараса Шевченка, Київ, zapototsk@ukr.net

Анотація. Метою даної публікації є дослідження стану і механізмів формування соціального й доступного житла в Україні та визначення основних наукових та практичних засад вдосконалення житлового забезпечення. В дослідженні розглянуто теорію і практику житлового забезпечення громадян в Україні. Досліджено поняття «безкоштовного», «соціального» і «доступного» житла та приведена практика механізмів їх формування в країнах Європи. Коротко охарактеризовано законодавчу базу становлення в Україні соціального та доступного житла. Окреслено загальний рівень попиту на житло в нашій державі. Для дослідження рівня доступності житла для населення нашої держави авторами застосована адаптована методика ООН ХАБІТАТ з урахуванням українських реалій. За основу взята молода сім'я, в якій є двоє працюючих людей з середніми для регіону доходами мінус витратами на рівні прожиткового мінімуму. При цьому така молода сім'я матиме здебільшого одну чи дві дитини і в пріоритеті їх купівлі буде невелика одно-двокімнатна квартира (або ж двоспальна квартира за сучасним підходом до будівництва) площею 43 м.кв. Отримані в такий спосіб результати оцінки доступності житла показують загальну тенденцію до зростання індексу доступності житла в Україні. В той же час реальні показники доступності є ще достатньо низькими та характеризують досить довгий період грошових накопичень населенням для отримання житла. Середнє значення доступності складає 9,2 роки в 2019 році, що майже в 6 разів вище показників 2007 року. Значення доступності в державі досить суттєво варіюється. З'ясовано, що найвищі показники доступності мають місто Київ, Запорізька, Дніпропетровська,

Київська та Сумська області. Найнижчі значення властиві для Західного регіону держави, зокрема Закарпатської, Чернівецької, Тернопільської, Львівської, Рівненської та Волинської областей. Вони знаходяться в межах 11,5–16 років, що в майже 4 рази їх відрізняє від кращих показників. Оцінено зв'язок доступності житла з обсягами будівництва й прийняття його в експлуатацію та темпами зростання ВВП. Проаналізовано стан іпотечного кредитування житла в державі. З'ясовано, що в Україні на разі існує більш як 20 програм підтримки громадян при придбанні житла, проте ефективність більшості таких програм сумнівна та потребує державної підтримки. Запропоновано шляхи реалізації ефективної житлової політики та її основних складових.

Ключові слова: соціальне житло, доступне житло, попит на житло, житлове будівництво, іпотечне кредитування, житлові програми, житлова політика

Introduction.

The issue of housing is a complex and interesting aspect of the research. This problem is extremely relevant for social geography, because the impact of the territory on housing is undeniable, and the housing cost and the attractiveness of its construction is determined by socio-geographical factors, including location and affordability, comfort and neighborhood, functionality and quality. The last two components are the basis of construction cost price, while the others are just price components and significant surcharges to it. Big cities of the state are the centers of attraction for residents of the periphery and that is why the cities' housing potential makes it possible for such centers to be realized and attract inhabitants.

The issues of housing affordability for the population, providing housing for vulnerable groups of the population and low-income residents who need social support and assistance are a particularly important aspect of this theme. Housing affordability is an object of study for social geography and is formed under the influence of the housing cost and the possible income of citizens to obtain it. The first and the second components have a territorial manifestation and they are implemented in different ways within the state in general and the regions in particular. The possibilities of applying an effective state policy at the national and regional levels are gaining considerable importance in order to resolve effectively this problem and the capabilities of a developed society in this matter. Today housing is a basic necessity. Housing performed only a protective function in the period of primitive society; now housing determines the living standards of the population and fulfils not only a protective function, but also the function of strength and energy renewal, the conditions of social reproduction. Thus, the study of the formation mechanisms of affordable and social housing based on the social and economic conditions of society requires a scientific approach and understanding of domestic and foreign practices.

Material and research methods. Significant experience and practices of housing market formation, housing provision, housing affordability and mechanisms of its functioning are fully disclosed in developed European countries, the USA, Canada

and some Asian countries. Peter Boelhouwer in his book «Housing Systems in Western Europe: theory and practice» describes in detail the housing market experience in Western Europe (Peter Boelhouwer, 2010).

A thorough study of social housing in Europe has been conducted by researchers (Kathleen Scanlon, Christine Whitehead, Melissa Fernández Arrigoitia, 2014). The authors reveal the current policy and practice of social housing on the example of European countries. The scholars pay special attention to the analysis of the social housing system on the example of Austria, Denmark, Great Britain, France, Germany, Hungary, Ireland, the Netherlands and Sweden and the countries of Central and Eastern Europe. The researchers identify European trends in the social housing sector and opportunities for innovation and improvement in their study. The main topics of the authors are the role of social housing in the process of urban regeneration, privatization of social housing, financing models and the impact of the European Union state aid rules on the definition and financing of social housing.

In 2015, Kathleen Scanlon, Christine Whitehead, Melissa Fernández Arrigoitia in the article «Social housing in Europe. European Policy Analysis» thoroughly study the issues of the formation of social housing and European housing policy. The authors note in their work the importance of social housing in terms of investment in construction and regeneration, and in providing sufficient affordable housing for a wide range of European citizens. The researchers explain who lives in such housing and under what conditions, show the reasons for these trends and the consequences for the future provision of social housing. In particular, the authors evaluate how social housing contributes to the normal access of the residents to adequate standard housing at a price they can afford in different regions of the European Union (Kathleen Scanlon, Christine Whitehead, Melissa Fernández Arrigoitia, 2015).

The book «Estates on the Edge: The Social Consequences of Mass Housing in Northern Europe» (Anne Power, 1997) describes the decline and restoration of government-funded housing for low-

income citizens in Northern Europe. The publication reveals the models of ownership, management and social housing permits, the interaction between landowners, investors, developers and other agents.

József Hegedüs, Martin Lux and Nóra Teller research the mechanisms of social housing in transition countries, they disclose the social housing policy in Central and Eastern Europe. The researchers describe the paths taken by the countries, considering changes in policies, working conditions of institutions and decisions taken to meet the housing needs of vulnerable groups of the population. They highlight the differences between the countries due to delay in reforms, assess the consequences of the peculiarities of the socialist economies and their effects on the formation of housing policy in Soviet times. The research examines changes in the housing policies of the countries that have recently become members of the European Union and the trends corresponding to such changes (József Hegedüs, Martin Lux, Nóra Teller, 2012).

Limitations, opportunities and financing mechanisms for social housing in the United States are described in detail in this article (James E. Wallace, 2010). The author gives examples of the forms of federal financial support for affordable housing and the role of developers and local public housing agencies in providing affordable housing.

Kathryn P. Nelson compared the amount of rented housing and the number of renters, taking into account their income. She claimed that during the 1980s, there were growing surpluses of apartments affordable to the renters with incomes between 50 to 80 percent of average income. By contrast, she concluded that housing shortages were high for the households with incomes below 30 percent of the average income (Kathryn P. Nelson, 2010).

Significant research into social and affordable housing is conducted by Russian scientists, where the issue of housing the population is a matter of the utmost urgency. Nikolaev S. in the article «Social housing at a new stage of improvement» argues that the problems of housing insecurity and material possibilities of the population cause increased demand for economy class housing not only in the sector of public financing of construction programs, but also in the private investment sector. The author considers possibilities of evolution of economy class housing within the term of physical wear and tear. (Nikolaev S., 2013).

Selyutina L., Evseeva E., Martinova A., Nektov V. and Nikolyuk E. consider the main directions of housing policy in the field of expanding social acces-

sibility and improving the living conditions of low-income citizens. They think it is necessary to develop non-commercial forms of rental housing and attract investors in different ways to its construction. The authors argue the need to create conditions for bringing investors in this area (Selyutina L., Evseeva E., Martinova A., Nektov V., Nikolyuk E., 2015).

Shingalin A. (Shingalin A., 2014) in the article «New trends in the development of housing in a socially oriented market economy» proves that the implementation of mass modernization of the existing factory base of housing can provide the construction of the necessary social housing in the state. The transition of the existing and technical re-equipment of the housing base to the construction of social housing is an important condition for this.

Selyutina L., Bulgakova K., Bessonov M. and Paigusov A. confirm that the strategically important task of the state is not only to provide affordable housing for citizens, but also to create a comfortable and high-quality living environment. The authors of the research provide further ways to solve problems and prospects for the development of the social housing sector with the interaction of local authorities, business and communities. The authors pay special attention to the social and economic significance of this specific area, which includes production and services for the population. Solutions of the state program of providing housing for the population have been analyzed by the authors. It is necessary to create attractive conditions for housing developers, ensure affordable lending for the construction industry, so that housing construction remains the driving force of the construction industry and the economy as a whole (Selyutina L., Bulgakova K., Bessonov M., Paigusov A., 2016).

However, the housing market of our country and the housing policy of Ukraine differ significantly from the housing market and the policy of European countries. The main reasons of this situation are the excessive share of real estate in private ownership, outdated housing stock and the absolute unregulated rental market. In addition, there are no directed housing policy and housing market mechanisms. At the same time, the problem of providing housing for the population is quite acute, social and affordable housing formation has remained a problem in Ukraine in recent decades. This determines the relevance and timeliness of the subject of this study.

The aim of the research is to study the state and formation mechanisms of social and affordable housing in Ukraine, evaluate them and give recommendations for improvement. The research methodology of social

and affordable housing involves the analysis of world practices of providing housing for the population, assessment of the domestic regulatory framework on this topic and analysis of housing supply and demand.

Evaluation of housing affordability for the population can have many variations, depending on the availability of statistical information and the specifics of the housing market. Each of them has both advantages and disadvantages. Traditionally, the initial or basic index of housing affordability is the index that is calculated according to the UN method – HABITAT (Official site of the UN HABITAT) in foreign and national scientific literature. This index is determined by the number of years required for the average family, on condition that income is directed to housing (1).

$$AI = C/I, \quad (1),$$

where AI – is the affordability index; I – is the average household income earned by one person, UAH per year; C – is the average housing cost, UAH.

The National Association of REALTORS of the USA determines the affordability index according to the formula that takes into account the income required to obtain and service a long-term mortgage

$$AI (I1 \cdot 100\%) / I, \quad (2)$$

where I1 – is the average family income, monetary units; I – is the income which is necessary for obtaining and service of a long-term mortgage loan required to purchase a medium-value housing, monetary units.

The adapted HABITAT method is used in the Russian Federation, it assumes that the household consists of 3 persons, and the area of the apartment is 54 sq.m.

$$AI = (Cm \times 54) / (I \times 3 \times 12), \quad (3)$$

where Cm – is the cost of 1 sq. m.; I – is the average household income, rubles; 54 – is the area of a conditional apartment, sq. m.; 3 – is the number of household members, persons; 12 – is the number of months per year (Selyutina L., Bulgakova K., Bessonov M., Paigusov A., 2016).

This method is more adapted, but it does not take into account the consumer spending of households at least at the subsistence level. The housing affordability ratio, which includes current household expenditures, is called modified.

There are a number of other methods of determining housing affordability through the calculation of available savings, the opportunity to invest the part of income in assets, if there is available housing that can be sold. According to the standard

UN methods, the assessment of housing affordability is carried out using the affordability coefficient AI and is used for inter-state comparisons of the population living standards. It is calculated as the ratio of the average (median) price of a typical apartment to the total annual income of the average (median) household and shows the number of years during which a family can accumulate from current income the amount needed to buy an apartment. A typical apartment is an apartment the total area of which is equal to the value of the average housing of the population for a given country (it is 30 sq. m. per person in Eastern European countries, 40 sq. m. per person in Western European countries, 70 sq. m. per person in the US), multiplied by the average household size. Thus, according to the standard method, the affordability coefficient of the residents AI is calculated on four variables, expressed by the average (median) values for the given country: the prices of 1 sq. m of housing, size (total area) of an apartment according to the current level of providing housing for the population, annual per capita income, size (number of members) of the household.

We try to adapt the above method in our research, taking into account the following characteristics. As a basis we take a young family in which there are two working persons with average income for the region minus expenses at the subsistence level. In this case, the young family has mostly one or two children and they are planning to purchase a small one or two-room apartment (or a two-bedroom apartment with a modern construction approach) with the area of 43 sq. m. Developers carefully study housing demand, and they consider that such an area corresponds to the area of most requested housing today. In particular, analysts say that 62% of one-bedroom apartments in new buildings have an area from 35 to 50 sq. m., i.e. the average size of such apartments is 43 sq. m. The average 1-bedroom apartment is about 40 sq. m, in the economy-class and comfort-class apartments, and 47 sq. m. in the business-class. As it can be seen from the above data, the most popular may be a comfort-class apartment in a residential complex with the area of 43 sq. m. Considering the above facts the housing affordability formula is

$$AI = (Cm \times 43) / (I \times 2 - (2 \times 12 \times SL)), \quad (4)$$

where Cm – is the cost of 1 sq. m.; I – is the disposable income per person, UAH; 43 – is the area of an apartment unit, sq. m.; 2 – is the number of working household members, persons; 12 – is the number of months a year, SL – is the subsistence level of the citizens income.

The main methods of this study are literary, ana-

lytical and statistical, comparative, balance sheet and regulatory. The QGIS geographic information system has been used to visualize the data.

Results and their analysis.

The concepts of «social» and «affordable» housing are not fully regulated and these concepts are often used as synonyms in Ukraine. At the same time, «social» housing is regulated by the Law of Ukraine «On Social Housing» from 2006. «Social» is housing of all forms of ownership from the social housing stock (except social dormitories), which is provided free of charge on the basis of a fixed-term lease agreement to the citizens who need social protection. Social housing is not subject to rent, reservation, privatization, sale, gift, buy-out and mortgage. The social housing fund is formed by the local authorities through the construction of new housing, reconstruction of existing and re-equipment of non-residential buildings, donated housing or housing confiscated on the basis of court decisions or declared ownerless, making over a share of living space in new buildings by the developers to local authorities, the use of private housing stock on the contractual arrangements, etc.

The relevant «Realization procedure of the rights of vulnerable citizens to receive housing» provides an opportunity to receive social housing for the citizens whose average monthly income (per family member) does not exceed the statutory subsistence level. Accordingly, the Kyiv City Council adopted a decision «On the establishment of a social housing fund» in early March 2010. However, such a decision provided district administrations with the power to organise a queue, and stipulated the impossibility of social housing privatization, i.e. a significant corruption component was initially established. Moreover, the experience of most European countries shows that residents can buy social housing later under the conditions of living in it for a certain period of time.

The idea of social housing is generally understandable. First of all, it helps to resolve the housing issue for the citizens who, due to health problems, lack of work or limited income, are unable to purchase housing at market prices. In general, the principles of providing social housing are similar in different countries around the world. However, there are some differences both in price criteria and in the level of citizens' income. Single mothers, large families, retirees with a small pension are the priority categories that primarily receive state assistance in resolving housing issues in all European countries.

In addition, there is a distinction between notions

«free» housing and «social» housing. Mostly these concepts are not identical in European countries. The main criterion for providing social housing is income per family member. It is believed that a family or a single adult should not spend more than 25-35% of the total income on rent or mortgage payments. This concept is called «social» or «commercial» housing affordability. If the item «payment for housing» exceeds 30-35% in the income structure of an ordinary family, this is a sufficient argument for obtaining «social» housing. The state must help these citizens to bear the housing cost in the form of housing subsidies or by providing housing with a fixed low rent.

«Social» housing programs have been actively created at the state level since the 1950s and 60s in Europe. Today, social housing has a significant share of the housing stock of developed European countries. For example, in France 20% of apartments in new buildings are given to low-income citizens under the law. In Germany, 25% of the housing stock is used for social needs, 23% in Austria, 21% in the UK, 36% in the Netherlands, 27% in Denmark, 30% in Spain, 27% in Sweden.

As a rule, social housing is managed by the municipalities, cooperatives or housing associations. At the same time, modern social housing in European countries does not consist only of small apartments. Today, social housing can be apartments, as well as houses, which in their consumer characteristics are not inferior to apartments that are offered at market prices. The main thing is that the municipality can rent housing below the market price, but not provide the equivalent of free state lifelong ownership.

The main condition for the organization of providing social housing for the population is to build a lot of housing cheaply. Then there is the question of construction financing. The experience of Great Britain is very interesting in this direction. Social housing is rented out, and the profit from the rent payments is immediately used to build new homes. In Germany, money from the privatization of social housing is immediately used for its new construction. In general, the experience of European countries shows that creating favourable conditions for public and private partnership is the key to social housing construction to a significant extent. And the permission to privatize social housing for certain terms of its use and other conditions allows to social housing to become affordable, successfully solving housing problems of the citizens and creating comfortable living conditions for the residents.

The concept of social housing appeared in Belarus in 2013. It is provided on the conditions

of an indefinite loan. Disabled people, orphans, large families, people who are homeless as a result of emergencies or natural disasters can apply for it. Social housing can neither be privatized, nor rented out, nor sold, it is owned by the state.

In fact social housing is not built in Ukraine. The norm of receiving 15–20% of apartments for free transfer from developers to the citizens was fulfilled earlier. However, such distribution was often corrupted and did not allow for the effective formation of a social housing stock. Since 2011, according to the Law of Ukraine «On Regulation of Urban Development» «it is prohibited to require from the construction client to provide any services, tangible or intangible assets, including the construction of facilities». In addition, the obligatory payment of a share contribution to the development of the local infrastructure by the construction client will be abolished from 2021. There is no general information in Ukraine on social housing volume and demand for it in the country or in the regions. The appropriate policy of providing social housing for the population is unclear and fragmentary.

The formation of affordable housing in Ukraine has a long history. Thus, in 2007 the Presidential Decree «On measures to build affordable housing in Ukraine and improve housing» was adopted. The Law of Ukraine «On Prevention of the Influence of the Global Financial Crisis on the Development of Construction and Housing», «Procedure of Providing State Support to Provide Citizens with Affordable Housing» and the Law of Ukraine «On Amendments to Certain Legislative Acts of Ukraine on Housing» were adopted later. According to the corresponding documents, «affordable housing» includes residential apartments and houses and they are built with state support. In general, these legislative acts provide allocation of 0.5% of the GDP annually for the construction of affordable housing, provision of one-time state aid to citizens, rental housing for a period up to 30 years with the subsequent possibility of its buy-out, free land plots for the construction of such housing. State aid determines the payment of 30 percent of the construction (purchase) cost of affordable housing and/or the provision of preferential housing loans by authorized banks.

Demand for housing in our country is considerable. According to analysts of the Confederation of Builders of Ukraine (CBU), 6 million Ukrainians need their own housing now, i.e. almost one in seven Ukrainians need housing. Also, «70% of the housing stock in Ukraine is old and dilapidated. At the same time, 7.5% of the housing stock, which is 75 million m²

according to official data, is completely uninhabitable. Only 11% of the population lives in relatively new housing (built after the 1990s)». According to the data of the State Statistics Service «Socio-demographic characteristics of households in Ukraine in 2018», 53.7% of Ukrainians live in overcrowded apartments and houses, and the share of satisfied residents (53.8%) and very satisfied (1.8%) with their living conditions is 55.6%. 95.3% of housing is privately owned, and state and employment related housing make up 0.5 and 0.3% of all housing. There is no official figure for the population's housing needs today. This statistic has not been updated after 2015 when the figure was 650 thousand families and singles. However, it is difficult for most residents of our country to improve their living conditions because of the low income and the lack of effective housing policy, including affordable housing loans. To assess housing affordability, we can use the UN HABITAT method, adapted to the realities of our state.

It is calculated according to the official data of the group of companies UVECON (the cost of residential real estate) and the data of the State Statistics Service of Ukraine.

* The index of housing affordability (years) is calculated according to the housing cost in the regional center. The calculation was made as the average value of the housing cost in Kyiv region, Boryspil, Brovary, Bila Tserkva.

Therefore, according to the obtained results (Fig. 1), we can observe a general trend towards increasing housing affordability in Ukraine. At the same time, real affordability indicators are still quite low and characterize a fairly long period of savings by the population to buy housing. It should be noted that in 2007 there was a so-called «price bubble» in the country, which was characterized by excessive housing prices. At the same time, the income of the population was too low to be able to solve their housing problems in a short period of time. Housing affordability for the population was growing significantly in the end of 2019. The average affordability value is 9.2 years, which is almost six times higher than in 2007. The affordability index in the state varies considerably. The highest indicators are in Kyiv, Zaporizhzhia, Dnipropetrovsk, Kyiv and Sumy regions. The lowest values are typical for the western region of the country, in Zakarpattia, Chernivtsi, Ternopil, Lviv, Rivne and Volyn regions. They are in the range of 11.5 – 16 years, which distinguishes them four times from the best indicators. Housing is considered affordable within a period of three years according to the world practice.

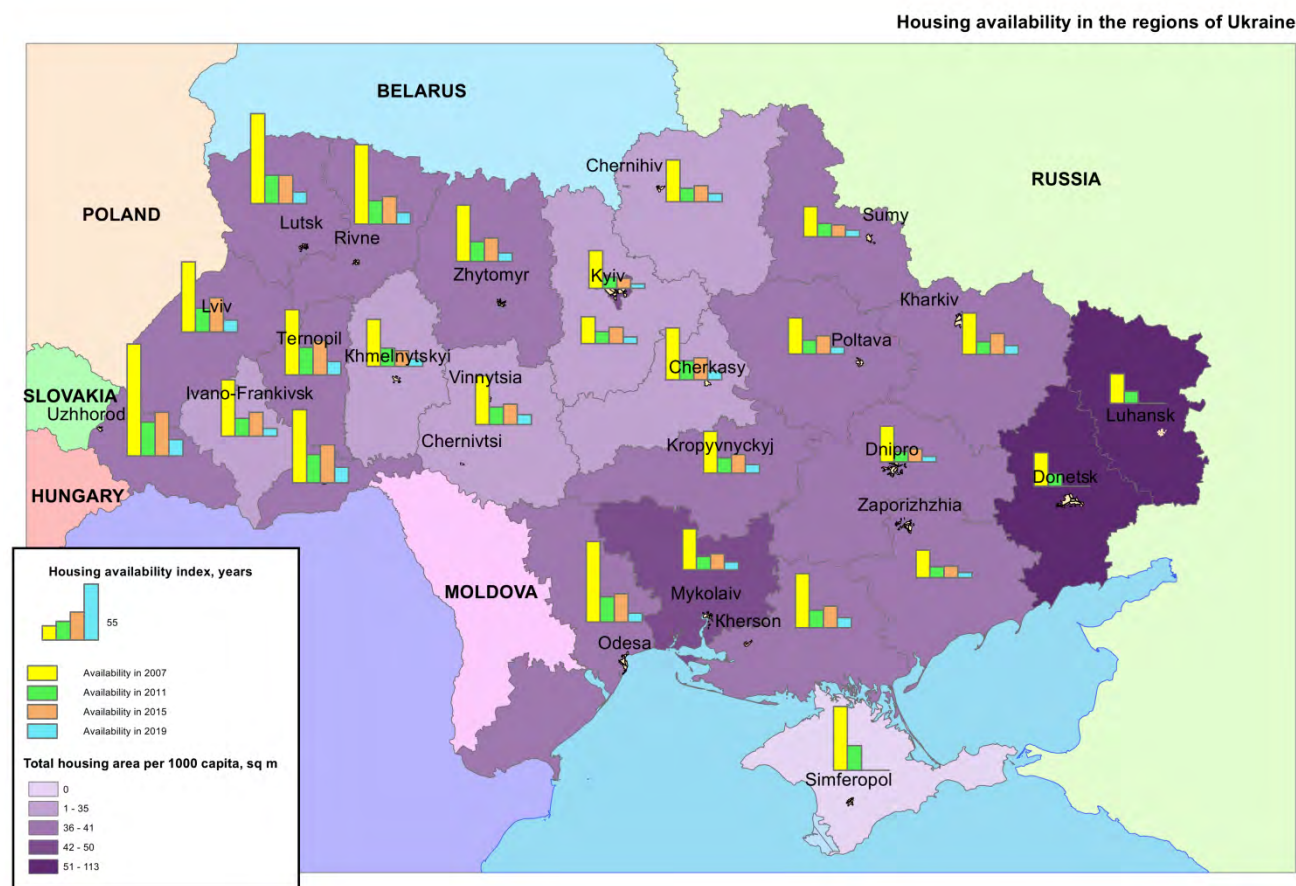


Fig. 1. Housing affordability in the regions of Ukraine, years

Such affordability is directly related to the volume of housing construction and commissioning. Speculatively high prices in the early 2000s led to positive growth trends in housing construction and commissioning.

Therefore, we can see a sufficiently dynamic growth rate of construction volume considering the

crisis in the state's economy in 2008-2009 and in 2013-2015. At the same time, high rates of housing construction and its commissioning were observed during the crisis of 2013-2015.

The relative indicator of the construction volume and housing commissioning is significant, which shows the level of housing demand and the

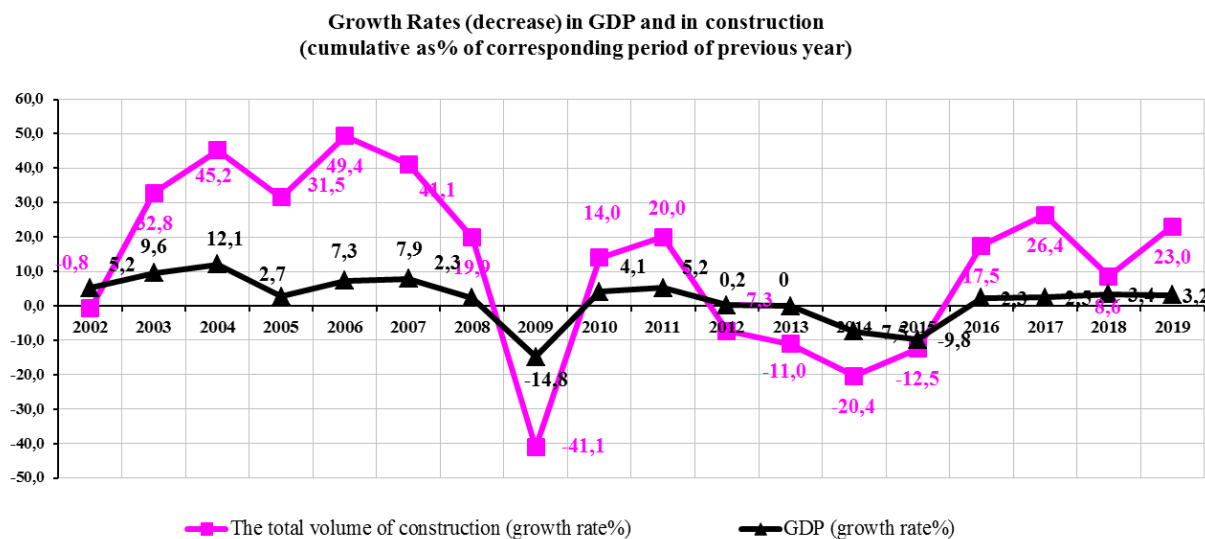


Fig. 2. Dynamics of GDP growth (decrease) and volume of construction work
Compiled according to the State Statistics Service of Ukraine.

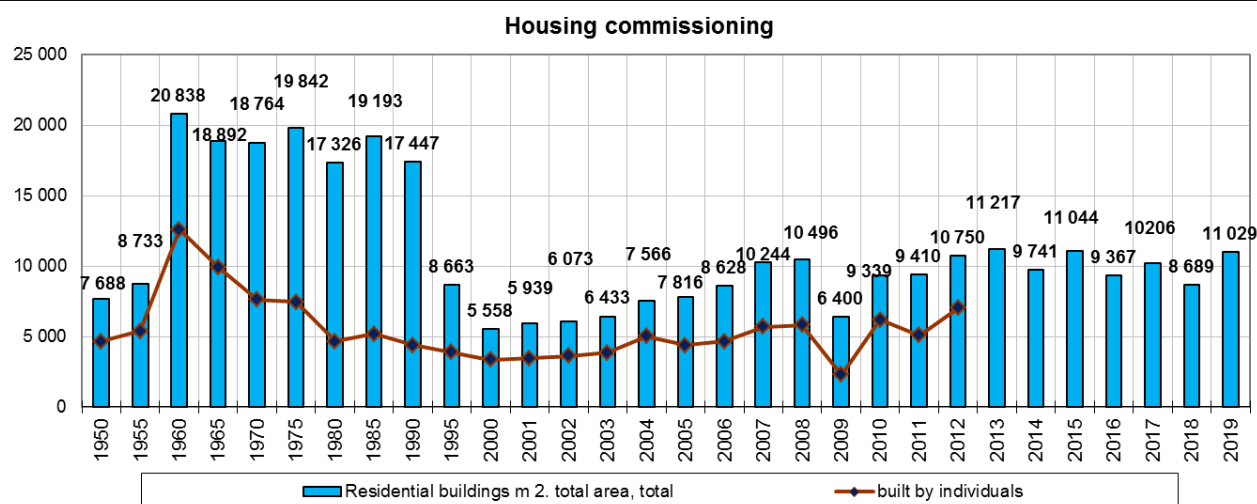


Fig. 3. Housing commissioning. Compiled according to the State Statistics Service of Ukraine.

attractiveness of the territory for living. P.O. Masliak in his article «Quantitative assessment of the socio-geographical location of the territory» argues (Masliak, 2019) that the assessment of per capita housing construction in the regions of Ukraine has made it possible to identify «radical changes in the assessment of the socio-geographical situation of different regions of Ukraine for the last five years». According to the author, such changes are in the reorientation of all social processes in the western region of the state. The scientist considers that «the western part of our country is consciously and subconsciously considered as a safe territory, which not only now but also in the future will not be affected by war». In addition to security, the income inhabitants of the western region, including the currency they earn abroad, also remain an important factor. Thus with average Ukrainian values of the indicator for putting accommodation into use per 1,000 people in 263.5 sq. m, the leaders are Kyiv (1052.2), Ivano-Frankivsk (550.4), Chernivtsi (544.7), Lviv (517.2), Odessa (459.2), Volyn (424.3), Zakarpattia (404.7) regions and the city of Kyiv (381.2). Luhansk (9.8), Donetsk (15.3), Zaporizhzhia (53.2), Kirovohrad (76.5) and Mykolaiv (99.6) regions are among the outsiders. The construction growth in general has a positive effect on housing affordability.

Mortgages were at the rates of 18-20% per annum in our state in the end of 2019, which was high enough for their mass introduction for the purchase of accommodation. Lower mortgage rates (14-15%) are possible only if the borrowers meet a number of requirements and are available only to certain categories of the citizens due to certain requirements of banks for mortgages. Real mortgage rates in 2020 ranged from 18% (as financing by state banks for partial construction projects) to

25% (micro-mortgages, when the borrower needs a small amount for a purchase at a rate of 10-15% of the property value). However, the housing market expects rates of about 10% per annum, but the experts consider that the main reasons for the complexity of their implementation are the moratorium on recovery of property on foreign currency loans, insecurity of creditors' rights and non-transparency of the primary housing market. The share of mortgage transactions was only about 3% of total transactions in the market last year.

Supporting citizens through government programs is an important condition for ensuring housing «affordability». There are currently more than 20 programs to support citizens in purchasing housing in Ukraine now. However, they do not meet the overall housing demand at a sufficient level, and their financing is often on a residual principle. The first program is soft loans for young people. 64.3 million UAH has been allocated for this program to compensate only existing loans in 2020. The program has financed only existing loans from the state budget since 2015. At present, the financing of subsidized loans to young people is implemented only by local budgets at the level of local housing programs. The crediting program for IDP and ATO (JFO) has been suspended and does not work due to lack of funds. The Cheaper Mortgage Program has not been funded since 2015. The program of partial compensation of the interest rate of commercial bank loans to young families and single young citizens for construction (reconstruction) and purchase of housing has been financed since 2009 only under previously concluded agreements. Financing of new loan agreements is not provided by the State Budget on the ACAB Credit Program in 2020. This indicates that nonpriority state support of the housing sector lacks regulation.

Commissioning of housing

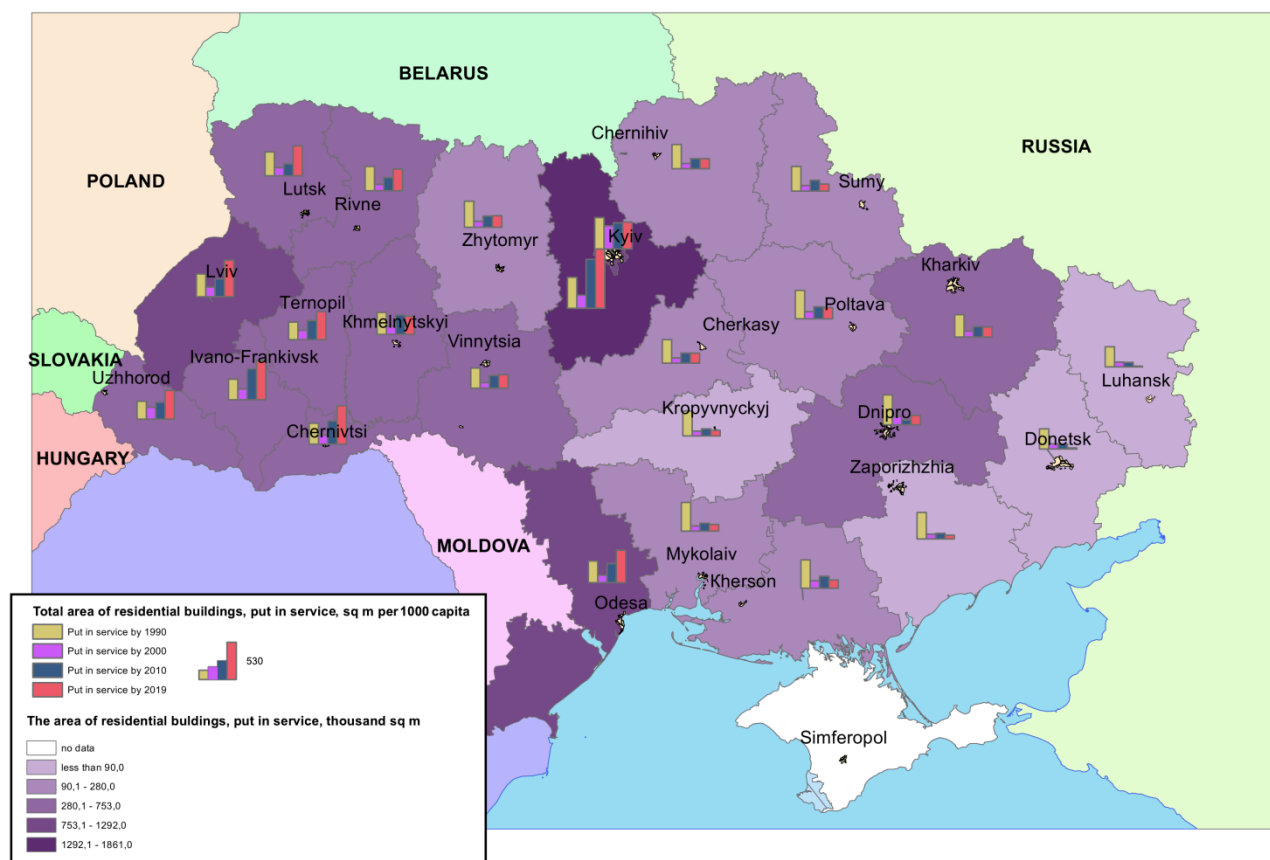


Fig. 4. Housing commissioning. Compiled according to the State Statistics Service of Ukraine.

Conclusions.

Therefore, the housing market needs clear legislative regulation and the creation of effective housing policy in the state. The lack of such a policy gives rise to a number of different housing programs, which are not funded and cannot be effective in solving the housing problem of the majority of our citizens. As a result, the unregulated rental market is flourishing due to the impossibility people find in obtaining money to purchase their own homes. The provision of social housing for the population today is poorly implemented and has no statistical support. Although housing affordability has been improved in recent years due to increase in the population's income and supply growth of new housing, it cannot dramatically be improved without effective mortgages. Despite the inefficiency and fragmentation of housing support programs, affordable mortgages would be a good alternative in solving the housing problem. The combination of affordable mortgages with an increase in the real estate tax would encourage owners of «additional» housing to rent it out and increase the supply on the market.

The main task of an effective housing policy should be creation of the most favourable conditions

for housing. These are opportunities for the affluent segments of the population to buy housing on their own or lease it by means of creating clear and favourable conditions for mortgage opportunities, creation of effective housing programs at the national and local levels. This increases housing affordability especially for the middle class. The formation of social housing through state support is for the vulnerable part of the population. It should be based on a radical change of approaches to the mechanisms of its formation. The state should become an investor and customer of the social housing construction, and reduce its cost by redirecting funds from housing subsidies to the construction of new social housing. There must also be a clear distinction between social and market housing affordability. Social affordability should take into account the time during which the relevant sectors of the population should realise their right to housing with differentiated living expenses within the «acceptable» share of a family budget. Housing standards and conditions of living space rationing, utilities rationing and other housing maintenance costs should be reviewed. It is necessary to introduce the creation of housing cooperatives or associations for the construction and management of

social housing in the lands allocated for this purpose by local authorities and use the experience of foreign countries. Such organizations should have a number of tax benefits and preferences.

In addition, the qualitative aspect of providing housing for the population is very important, taking into account the housing comfort, its design, the convenience of housing and courtyards, installation of sports facilities and social infrastructure.

References

- Alpopi C., Manole C. Integrated Urban Regeneration – Solution for Cities Revitalize, *Procedia Economics and Finance*, Volume 6, 2013 178-185 pp., [https://doi.org/10.1016/S2212-5671\(13\)00130-5](https://doi.org/10.1016/S2212-5671(13)00130-5)
- Analitkyk opysaly ideal'nu kvartyr na rynku zhytlovyi nerukhomosti stolytsi [Analysts have described the ideal apartment in the residential real estate market of the capital]. UNN official website. Retrieved from <https://www.unn.com.ua/uk/news/1760098-analitiki-opisali-idealnu-kvartiru-na-rinku-zhitlovoyi-nerukhomosti-stolitsi> (In Ukrainian).
- Boelhouwer, P., 2010. Housing systems in Western Europe: Theory and practice. Retrieved from <https://www.hse.ru/data/2010/04/16/1216776170/2010.ppt>
- Chen M, Zhang W, Lu D. (2015) Examining spatial pattern and location choice of affordable housing in Beijing, China: Developing a workable assessment framework. *Urban Studies*, 52(10):1846-1863. <https://doi.org/10.1177/0042098014542133>
- Hegedüs, J., Lux, M., Teller, N., 2012. *Social Housing in Transition Countries*. Routledge, 358 p.
- Kath Hulse & Judith Yates, 2017. A private rental sector paradox: unpacking the effects of urban restructuring on housing market dynamics, *Housing Studies*, 32:3, 253-270, <https://doi.org/10.1080/02673037.2016.1194378>
- Kathryn P., Nelson., 2010. Whose shortage of affordable housing?, 401-442. DOI: <https://doi.org/10.1080/10511482.1994.9521172>
- Komu polozhenno sotsial'noye zhil'ye, i kakiye prava imeyut yego nanimateli [Who is entitled to social housing and what are the rights of its tenants] [electronic resource]. Retrieved from: <http://mozyrisp.gov.by/ru/raion/view/komu-polozhenno-sotsialnoe-zhilje-i-kakie-prava-imejut-ego-nanimatelinn-3199/> (In Russian).
- Zapusk ipotechnoho kredyuvannya – spil'ne zavdannya derzhavy ta biznesu. Ofitsiynyy sayt KBU [Launching mortgage lending is a joint task of the state and business. Official site of the KBU]. Retrieved from: <http://kbu.org.ua/index.php?id=1473> (In Ukrainian).
- Maslyak, P.O., 2019. Kil'kisna otsinka suspil'no-heohrafichnoho polozhennya terytoriyi [Quantitative assessment of the socio-geographical position of the territory]. *Bulletin of Taras Shevchenko National University of Kyiv. Geography series*, 1 (74), 5-9. (In Ukrainian).
- Milligan, V., Pawson, H., Williams, P. & Yates, J., (2015) Next Moves? Expanding affordable rental housing in Australia through institutional investment <https://doi.org/10.13140/2.1.4577.6161>
- Nikolaev, S.V., 2013. Sotsialnoye zhilye na novom etape sovershenstvovaniya. [Social housing at a new stage of improvement]. *Housing construction*, 3. Retrieved from: <https://elibrary.ru/item.asp?id=18873244> (in Russian).
- Official site of the National Bank of Ukraine. [electronic resource]. Retrieved from <https://bank.gov.ua/ua/statistic/sector-financial/data-sector-financial#1ms> (In Ukrainian).
- Official site of the state fund for youth housing assistance. Retrieved from <https://www.molod-kredit.gov.ua/zhytlovi-prohramy/kredyt-dlia-vpo-ta-ato-oos> (In Ukrainian).
- Official site of the UN HABITAT. [electronic resource]. Retrieved from <https://unhabitat.org/about-us/history-mandate-role-in-the-un-system>.
- Parkinson, S., Batterham, D., Reynolds, M. and Wood, G. (2019) The changing geography of homelessness: a spatial analysis from 2001 to 2016, AHURI Final Report No. 313, Australian Housing and Urban Research Institute Limited, Melbourne, <https://www.ahuri.edu.au/research/final-reports/313>, <https://doi.org/10.18408/ahuri-5119601>
- Poryadok nadannya derzhavnoyi pidtrymky dlya zabezpechennya hromadyan dostupnym zhytлом vid 11 lyutoho 2009 r. № 140. [The procedure for providing state support for providing the population with affordable housing, issued February 11, 2009, 140]. Retrieved from <https://www.kmu.gov.ua/npas/196155781> (In Ukrainian).
- Power, A., 1999. *Estates on the Edge: The Social Consequences of Mass Housing in Northern Europe*. St. Martin's Press, 432.
- Reeves, P., 2014. *Affordable and Social Housing*. New York: Routledge, 272. <https://doi.org/10.4324/9781315882758>
- Rowley, S., James, A., Gilbert, C., Gurran, N., Ong, R., Phibbs, P., Rosen, D. and Whitehead, C., 2016. Subsidised affordable rental housing: lessons from Australia and overseas, AHURI Final Report No. 267, Australian Housing and Urban Research Institute Limited, Melbourne, <https://www.ahuri.edu.au/research/final-reports/267>, <https://doi.org/10.18408/ahuri-8104301>
- Savchuk, I.G., Zapototskyi, S.P., 2020. Cottage settlements in capital region of Ukraine. *Journal of Geology, Geography and Geoecology*. 29(2). 415-421. <https://doi.org/10.15421/112037>

- Scanlon, K., Fernández Arrigoitia, M., Melissa and Whitehead, Christine, M. E., 2015. Social housing in Europe. *European Policy Analysis*, (17), 1-12.
- Scanlon, K., Whitehead, C., Fernández Arrigoitia, M., 2014. *Social Housing in Europe*. John Wiley & Sons, 496.
- Selyutina, L., Bulgakova, K., Bessonov, M., Paigusov, A., 2016. Sotsialnoye zhilye strategicheskoye napravleniye razvitiya stroitelstva v regionakh Rossii [Social housing is a strategic direction for the development of construction in the regions of Russia]. *International Journal of Applied and Basic Research*, 6-1, 142-144. Retrieved from <https://elibrary.ru/item.asp?id=25949025> (In Russian).
- Selyutina, L., Evseeva, E., Martinova, A., Nektov, V., Nikolyuk, E., 2015. Social housing construction in Russia: realities and development prospects. [Sotsialnoye zhilishchnoye stroitelstvo v Rossii: realii i perspektivy razvitiya] *Scientific Review*. Publisher: Publishing House Science of Education. Moscow, 21, 218-220. Retrieved from <https://elibrary.ru/item.asp?id=25602571> (In Russian).
- Shingalin, A., 2014. Novyye tendentsii razvitiya zhilishchnogo stroitel'stva v usloviyakh sotsial'no oriyentirovannoy rynochnoy ekonomiki [New trends in the development of housing in a socially oriented market economy]. *Modern Research and Innovation*, 8-2 (40), 27-31. (In Russian).
- Sotsial'no demografichni kharakterystyky domohospodarstv Ukrainy (za danymy vybirkovoho obstezhennya umov zhyttya domohospodarstv) za 2018 rik. [Socio-demographic characteristics of households in Ukraine (according to a sample survey of living conditions of households) for 2018]. Official site of the State Statistics Service of Ukraine. Retrieved from: http://www.ukrstat.gov.ua/operativ/menu/menu_u/virdg.htm (In Ukrainian).
- Sotsial'noye zhil'ye v Belarusi kartonnyye panel'ki, v Yevrope apartamenty v istoricheskikh tsentrakh [Social housing: in Belarus cardboard panels, in Europe apartments in historical centers]. Retrieved from https://udf.by/news/main_news/139245-socialnoe-zhile-v-belarusi-kartonnye-panelki-v-evrope-apartamenty-v-istoricheskikh-centrah.html (in Russian).
- Ukaz Prezidenta Ukrainy №1077/2007 Pro zakhody shchodo budivnytstva dostupnogo zhytla v Ukraini ta polipshennya zabezpechennya hromadyan zhytлом [Decree of the President of Ukraine №1077 / 2007 On measures to build affordable housing in Ukraine and improve housing]. Retrieved from <https://zakon.rada.gov.ua/laws/show/1077/2007> (In Ukrainian).
- Wallace, James E., 2010. Financing affordable housing in the United States. *Housing Policy Debate*, 6 (4), 785-814. Retrieved from https://www.innovations.harvard.edu/sites/default/files/hpd_0604_wallace.pdf
- Wetzstein S. The global urban housing affordability crisis. *Urban Studies*. 2017;54(14):3159-3177. <https://doi.org/10.1177/0042098017711649>
- Zakon Ukrainy «Pro vnesennya zmin do deyakykh zakonodavchykh aktiv Ukrainy z pytan' zabezpechennya zhytлом hromadyan [Law of Ukraine On Amendments to Certain Legislative Acts of Ukraine on Housing Citizens], 2009. Bulletin of the Verkhovna Rada of Ukraine, 46, 701. Retrieved from <https://zakon.rada.gov.ua/laws/show/1510-17> (In Ukrainian).
- Zakon Ukrainy Pro rehulyuvannya mistobudivnoy diyal'nosti [Law of Ukraine On Regulation of Urban Development], 2011. Information of the Verkhovna Rada of Ukraine, 34, 343. Retrieved from <https://zakon.rada.gov.ua/laws/show/3038-17/print> (In Ukrainian).
- Zakon Ukrainy Pro zapobihannya vplyvu svitovoyi finansovoyi kryzy na rozvytok budivel'noy haluzi ta zhytlovoho budivnytstva. [Law of Ukraine On prevention of the impact of the global financial crisis on the development of the construction industry and housing construction]. Information of the Verkhovna Rada of Ukraine, 19, 257. Retrieved from <https://zakon.rada.gov.ua/laws/show/800-17> (In Ukrainian).
- Zakon Ukrainy Pro zhytlovyy fond sotsial'noho pryznachennya [Law of Ukraine On social housing] Bulletin of the Verkhovna Rada of Ukraine, 19-20, 159. Retrieved from <https://zakon.rada.gov.ua/laws/show/3334-15> (In Ukrainian).
- Zapototska, V.A., 2018. Osnovni napryamky rekonstruktsiyi zhytlovoho fondu v Ukraini [The main directions of housing reconstruction in Ukraine]. Bulletin of Taras Shevchenko National University of Kyiv. Geography series, 3 (72), 37-41, DOI: <http://doi.org/10.17721/1728-2721.2018.72.7> (In Ukrainian).
- Zapusk ipotechnoho kredyuvannya spil'ne zavdannya derzhavy ta biznesu [Launching mortgage lending is a joint task of the state and business]. Official site of the KBU. Retrieved from: <http://kbu.org.ua/index.php?id=1473> (In Ukrainian).