счетов-фактур в Казахстане достигло определенных успехов, большинство нерешенных проблем возникает на предприятиях. Эти проблемы связаны с: отсутствием или непониманием глубинной сути электронных счетов-фактур; проблемой возникновения дополнительных затрат на предприятиях, в том числе при установке определенных программ; разрывом между использованием электронных счетов-фактур и существующим моделированием. В статье рекомендуется оптимизировать процесс работы с электронными счетами-фактурами, а именно выгрузку и загрузку электронных счетов-фактур через API.

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ANALYSIS OF MORTGAGE LENDING IN KAZAKHSTAN

ANNOTATION

The provision of housing is one of the socio-economic problems of many countries, including Kazakhstan. How many families are in dire need of housing? In the Republic of Kazakhstan the state takes many measures to provide the population with housing, among them loans are provided at preferential rates, but the affordability of housing remains low compared to other countries. Housing-related problems also remain unresolved. The research paper used statistical, mathematical calculations, methods of comparison, analysis and special indicators to identify the meaning and importance of the topic. The article considered the factors influencing the rise in housing prices. Mortgage loans issued by second-tier banks to the population for 2019-2021 by currency, region, mortgage lending programmes and requirements were analysed, including the leading bank in providing housing - Otbasi Bank JSC. Due to the high concentration of the population in Kazakhstan's megacities, its impact on access to housing is considered. The age thresholds for withdrawal of funds accumulated in pension funds to purchase housing are compared. Simple ways of calculating the valuation indicator, which is the main criterion for mortgage lending, are also given and its role in mortgage processing is explained.

Key words*: mortgage lending, commercial banks, state program, estimated figure, pension age.*

Introduction. A mortgage is a bank loan to buy a house or other real estate. A mortgage loan is granted for a long term and allows you to reduce the monthly payment to the most appropriate amount [1].

The term "mortgage" is not a modern term, it is a long-established concept, its origin goes back to ancient Greek history. Currently, many foreign and domestic authors are engaged in this issue, so there are already unanimous opinions on the offer of the mortgage [2].

Although the state offers various programs and discounts related to mortgage lending, there is still a long way to reach the European interest rate [3]. This is due to the fact that the population in the Republic of Kazakhstan is characterized by low wages and low social level of socially vulnerable groups. Part of the low-paid population is not able to provide themselves with housing because of the increase in the initial payment for housing and other problems arising in the housing market [4].

However, measures were taken to build housing for the middle class and socially protected part of the population, as well as planned to build affordable housing for people in need of housing [5].

Housing and its accessibility directly affect the standard of living of the population, as well as the rate of population growth.

Commercial banks in Kazakhstan are tightening requirements related to mortgage lending. At this stage in the development of the banking system, banks are not interested in providing housing loans and impose additional restrictions, tightening requirements for borrowers, i.e. their stable high income, well-paid job, age and then.

The relevance of the study is to increase the provision of housing needs of the population, including youth and vulnerable segments of the population, through mortgage lending.

The purpose of the research paper is to consider and analyze the issues and factors related to the affordability of housing for mortgage lending in the Republic of Kazakhstan, to highlight the value of the assessment indicator and give directions to ensure the affordability of housing.

Materials and methods of research. To analyze the current state of mortgage lending in the Republic of Kazakhstan, we used statistics from the National Bank, the Ministry of Finance, the Agency for Regulation and Development of the Financial Market, the Single Accumulative Pension Fund, as well as the financial statements of the bank.

During the analysis of the current situation on mortgage lending methods of collecting, grouping, mathematical accounting, construction and generalization of data were used. On the basis of statistical analysis, tables and charts on mortgage lending were used as analysis.

Результаты исследования. In terms of housing affordability, Kazakhstan ranked 35th out of 109 countries. The top ten is occupied by countries such as Saudi Arabia, the U.S. states, South Africa and Qatar. Taking 35th place, Kazakhstan is ahead of Uzbekistan, Kyrgyzstan, Belarus and Armenia [6,7].

Let us consider the factors influencing the growth of housing prices in the market (Fig. 1).

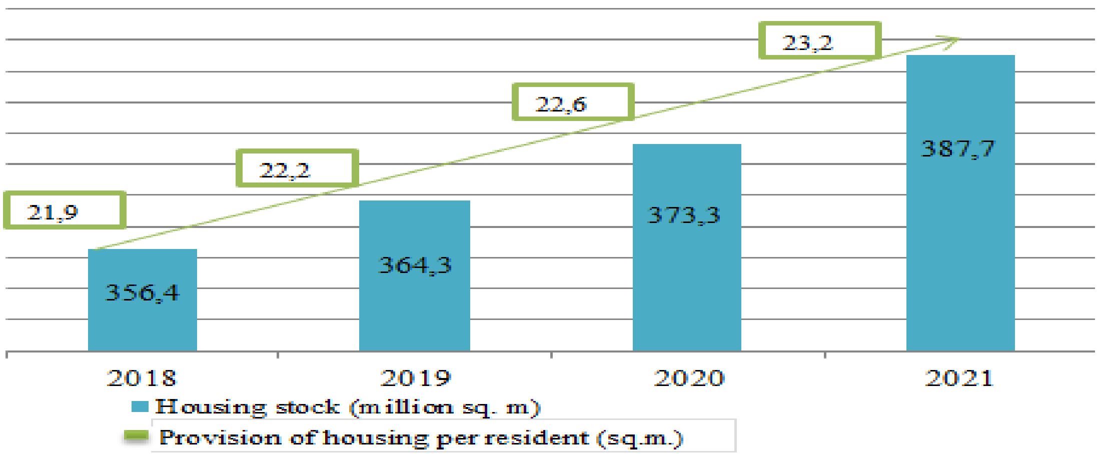

Figure 1 - Total housing stock of the Republic of Kazakhstan and housing availability

Despite the measures taken over the years, the affordability of housing in Kazakhstan is at a low level. The total housing stock in Kazakhstan is 387.7 million square meters (2021), with a housing supply of 23.2 square meters. This is below the United Nations requirements for total living space (30 square meters per person). Despite annual growth, the supply of housing is low, lagging behind international standards. To meet the UN goal, the state needs to build another 180 million to 200 million square meters. And for 2025, the government plans 103 million square meters [8, 9].

The state of mortgage lending in Kazakhstan by year is presented in the following table (Table 1) [10].

Table 1 - Bank mortgage loans to population, million tenge

Loans issued	2019	2020	2021	2021/2019 Change, %
	million tenge			
All credits, including:	18 281 555	40 974 282	32 644 055	1,78
in local currency	17 858 193	40 732 884	32 595 716	1,82
in foreign currency	423 362	241 398	48 339	0,11

Comparing the figures presented in Table 1, we see that the majority of residents arrange a mortgage loan in local currency. The share of mortgage loans in national currency in 2021 and 2019 is 82%. This can be explained by the upward trend of the U.S. dollar exchange rate.

Table 2 - Mortgage loans granted to population by oblast, million tenge [11]

Regions of the Republic of Kazakhstan	All issued mortgages			share, %		
	2019	2020	2021	2019	2020	2021
total for the Republic of:	**1 767 153**	**133 165**	**1 743 051**	**100**	**100**	**100**
Akmolinsk	42 620	3 085	48 663	2,41	2,31	2,79
Aktobe	100 753	6 329	76 168	5,7	4,75	4,36
Almaty	40 067	2 627	44 845	2,26	1,97	2,57
Atyrau	53 899	6 451	56 515	3,05	4,84	3,24
East Kazakhstan	105 247	7 686	90 006	5,95	5,77	5,16
Jambul	40 339	3 590	34 714	2,28	2,69	1,99
Western Kazakhstan	57 661	4 666	50 869	3,26	3,50	2,91
Karaganda	94 793	7 020	108 224	5,36	5,27	6,20
Kostanay	55 746	5 269	47 949	3,15	3,95	2,75
Kyzylorda	24 760	1 735	24 631	1,40	1,30	1,41
Mangistau	69 879	4 950	65 599	3,95	3,71	3,76
Pavlodar	60 953	3 084	61 152	3,44	2,31	3,50
North Kazakhstan	37 041	1 495	27 128	2,09	1,12	1,55
Turkistan	1 312	1 323	10 488	0,07	0,99	0,60
Almaty city	429 328	27 404	416 698	24,29	20,57	23,90
Astana city	483 831	36 178	499 773	27,37	27,16	28,67
Chimkent city	68 923	10 272	79 629	3,90	7,71	4,56

As can be seen from the data presented in Table 2, the volume of mortgage loans issued in all regions of the Republic decreased sharply in 2020 compared to 2019. This is due to the effects of COVID-2019. However, in 2021 from 133,165 million tenge to 1,743,051 million tenge the need of the population increases. If we consider the situation with mortgage loans by regions, in 2021 the largest share will take Astana city (28,67%), Almaty city (23,90%), the reason for which is due to a large concentration of young people in these cities. The lowest shares have Zhambyl region (1.99%), Kyzylorda region (1.41%), North-Kazakhstan region (1.55%) and Turkestan region (0.60%).

In recent years, the share of mortgage loans in the market has been growing steadily. For example, for comparison, in 2015 the portfolio of mortgage loans was 7,1% of the total loan portfolio of the economy, and by the end of 2021 - 18% [12]. We see that the indicators of the current year are aimed at increasing the role of mortgages in lending to the economy.

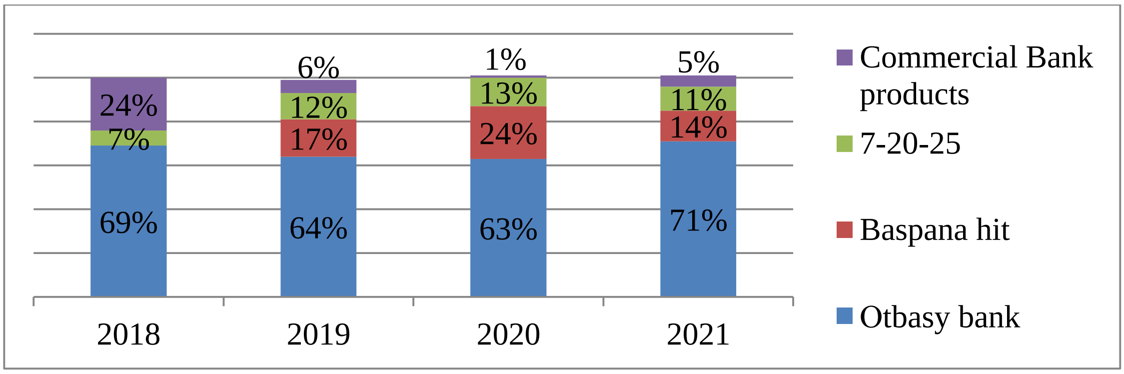

Figure 2 - Location of mortgage loans by program, % [13]

In Kazakhstan, among the second-tier banks, the leadership in mortgage lending is currently held by Otbasy Bank [14]. Today, this bank is developing at the expense of lending to the population through the system of housing construction savings and is the operator of government programs aimed at solving the housing problems of certain social groups. At the same time, since 2021 the number of borrowers with the permission to receive a mortgage loan increased due to the age limit from the

Unified Accumulative Pension System. However, the age limit in 2021 and 2023 increased several times (Table 3) [15.]

Table 3 - Changes in the minimum sufficient threshold of pension savings

Age	01.01.2021	01.04.2022	01.01.2023
20	1 710 000	3 140 000	3 260 000
25	2 090 000	3 730 000	3 890 000
30	2 500 000	4 370 000	4 580 000
35	2 961 000	5 060 000	5 310 000
40	3 420 000	5 790 000	6 100 000
45	3 930 000	6 580 000	6 950 000
50	4 470 000	7 430 000	7 860 000
55	5 060 000	8 340 000	8 840 000
59-62 (for 2021-2022)	5 560 000	9 120 000	9 670 000 (59 years old)
60-62 (2023)	-	-	9 890 000

If we compare the data in the table, we can draw the following conclusions. For example, if we take a 20-year-old citizen, the amount of his savings in the Single Accumulative Pension Fund should be 3,260,000 tenge in 2023, and he can only receive funds exceeding it [15]. Now the question is how a 20-year-old citizen (he is a 3rd year student of the university) to accumulate such amount? Does he need to work from school age to have housing?

Given the terms of the bridge loan, if you compare it to other mortgage products on the market, the interest rates on commercial mortgages outside of any government programs range from 13 to 23 percent (Annual Effective Rate of Charge from 14.1 percent)[16].

In 2018-2021, 4 banks are at the top of the list according to the dynamics of the mortgage portfolio of the largest participants in the mortgage market. These banks include Otbasy Bank, Sberbank of Kazakhstan (JSC "Bereke Bank" from 14.09.2022) [17], BankCenterCredit and Halyk Bank. Among them, the main share (64%) is occupied by Otbasy Bank [13].

Table 4 - Standard mortgage requirements for any residential real estate purchase

Second-tier banks of the Republic of Kazakhstan	Product	Rate, %	Annual effective interest rate, %	Initial payment, %	Min amount (thousand tenge)	Max amount (thousand tenge)
1	2	3	4	5	6	7
Otbasy Bank	Interim credit	7-11,5, reduce to 5%	starting 7,4	50	-	90 000
CENTERCREDIT	Mortgage	13	14,1	20	-	100 000
FREEDOM finance	Digital mortgage	16	17	30	3 000	200 000
HALYK BANK	Mortgage (Salary project)	16	17,4	10	-	-
KZIBank	Home Loan	16	17,6	-	10 000 $	300 000 $
Altyn Bank	Mortgage	16	18,3	20	-	-
Altyn Bank	Digital mortgage	16	18,3	20	1 000	-
NURBANK	Mortgage	17	18,8	30	-	50 000
HALYK BANK	Mortgage	17,5	19,2	20	-	-

1	2	3	4	5	6	7
SHINHAN BANK KAZAKHSTAN	Real estate loan	18,5	19,4	-	3 000	100 000
BANK RBK	Required Credit Mortgage	19	21,1	30	-	75 000
ForteBank	Mortgage	19	27,3	15	500	50 000
Bank of China Kazakhstan	Mortgage loan	23	26,5	50	-	-
مصرف الهلال al hilal bank	Islamic Mortgage Murabaha	-	-	30	3 000	200 000

Despite the new changes in rates and terms, the interim loan at Otbasy Bank is much better than the standard mortgage products of second-tier banks in the Republic of Kazakhstan. In fact, the residential construction savings system remains the most attractive in Kazakhstan's mortgage market.

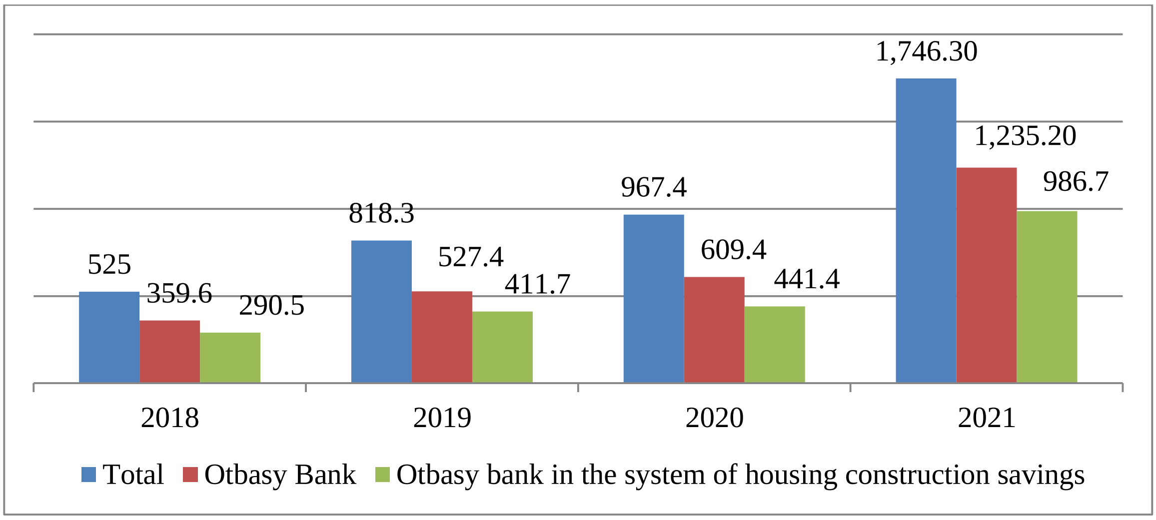

Figure 3 - The Role of Otbasy Bank and the Home Savings System [12]

The housing savings system can be used by all second-tier banks. However, this system also has its own requirements, i.e., the housing savings system does not give access to public financing and does not provide additional funds to second-tier banks.

If the score is 16 or higher, there is an opportunity to get a loan from a bank at a low rate and for a long term. The drawback here on the bank's part is that they don't disclose explanations like how the score is made and what it affects. How do you get a score of 16?

Table 5 – Change in evaluation index [20]

Estimated score	16	20	25	29	35	41	45
Mortgage interest, %	5	4,8	4,5	4,2	4	3,8	3,7
Term, year	6	7	8	9	10	11	12

According to this table, if the homebuyer's valuation index is 16, the homebuyer will be able to obtain a home for 6 years at an annual rate of 5%. If the assessment index is 35, the corresponding rate is 4%, and the annual duration is 10 years. From this you can see that the higher the rating, the lower the rate. Now the question arises, how to increase the rating? To do this, you need to know important factors such as time and the amount of money in the account. The funds in the account can be topped up immediately, and we can't put off time. This is because the only condition for getting a home loan is that the account must be open for 36 months. Another issue may arise here. If a person's account term was 3 years, the funds have been in the account continuously for 3 years, but why is the valuation index less than 16? To be more specific, let's compare two situations for a mortgage loan:

1. If a person contributes 20,000 tenge to his account for 3 years, the accumulated amount for 3 years will be 720,000 tenge (state interest is not taken into account here). With this combination shows the valuation index is 16, if the price of the house is 1,440,000 tenge. It is known that it is impossible to buy a house on the market for such an amount.

2. If the second person has accumulated 20,000 tenge for 2 years and 8 months and increased the money to collect 50% of the house, but the assessment index of this person does not reach 16.

Therefore, the account must be 3 years old for those who want to get a home through Otbasa Bank, and the appraisal rate varies depending on the price of the home.

Table 6 - Estimated value depending on the price of the house

House price, tenge	The required amount of remuneration, tenge
5 000 000	80 000
10 000 000	160 000
15 000 000	240 000
20 000 000	320 000
25 000 000	400 000
30 000 000	480 000

Here, dividing the price of the house by 1,000 and multiplying by 16, you can get a loan at 5 percent for 6 years, and if at 4.8 percent for 7 years, you have to divide by 20 instead of 16.

In Kazakhstan a lot of work is being done and changes are being made according to the programs. To understand and use them, it is necessary to constantly improve the financial literacy of ordinary people [21].

Conclusion. As a result of the study related to the housing issue, we have come to the following conclusions. In Kazakhstan, it is necessary to develop an effective market for the construction industry, which is an important factor in increasing the affordability of housing for a large group of the population [5].

In order to achieve the UN standard for total living space, introduction of some restrictions on registration and residence of natives from other regions of Kazakhstan, especially in megalopolises with large populations of young people, will increase the rate of housing provision in other regions and, accordingly, in the housing queue will provide speed. At the same time, in order to ensure access to housing prices, it is necessary to take into account the wages in each region when raising the social level of residents, and not only to increase wages, but also to ensure that housing prices do not rise.

We believe that the amount that can be taken from the Single Accumulative Pension Fund for housing should be revised so that it is affordable to residents. Second-tier banks should be educated so that ordinary people can calculate the valuation index, and free choice of annuity or differential type of debt repayment should be allowed, allowing a person to choose the most efficient option in the process of getting a mortgage loan.

As in other countries, employers must make a significant contribution to the housing of their employees. Here, first, the employee will have housing, on the other hand, he or she will not change jobs because of the contract with the company until the loan is paid off, and will serve faithfully for the future development of the company. Another point to be studied is that more seminars should be held to improve the financial literacy of individuals.

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АННОТАЦИЯ

Обеспечение жильем является одной из социально-экономических проблем многих стран, в том числе и Казахстана. Сколько семей остро нуждаются в жилье? В Республике Казахстан государство принимает множество мер по обеспечению населения жильем, в том числе предоставляются льготные кредиты, но доступность жилья остается низкой по сравнению с другими странами. Проблемы, связанные с жильем, также остаются нерешенными. В исследовательской работе использовались статистические, математические расчеты, методы сравнения, анализа и специальные показатели для выявления значения и важности темы. В статье были рассмотрены факторы, влияющие на рост цен на жилье. Проанализированы ипотечные кредиты, выданные банками второго уровня населению на 2019-2021 годы в разрезе валют, регионов, программ ипотечного кредитования и требований, в том числе ведущего банка по предоставлению жилья - АО "Банк Отбасы". В связи с высокой концентрацией населения в мегаполисах Казахстана, рассмотрено его влияние на доступность жилья. Сравниваются возрастные пороги для изъятия средств, накопленных в пенсионных фондах, для приобретения жилья. Также приводятся простые способы расчета оценочного показателя, который является основным критерием при предоставлении ипотечного кредитования, и объясняется его роль при оформлении ипотеки.

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INTELLECTUAL POTENTIAL AS AN IMPORTANT FACTOR IN THE SOCIO-ECONOMIC DEVELOPMENT OF THE COUNTRY
ИНТЕЛЛЕКТУАЛЬНЫЙ ПОТЕНЦИАЛ КАК ВАЖНЫЙ ФАКТОР СОЦИАЛЬНО-ЭКОНОМИЧЕСКОГО РАЗВИТИЯ СТРАНЫ

ANNOTATION

Globalization, the requirement for innovative production, and increased competition encourage labor market actors to seek competitive advantages in their own resources. We are talking about non-materialized, ideal knowledge, which is in the form of a system of images and ideas of creating an employee.

The value of the intellectual potential of employees is manifested in their professionalism, the most important element of the innovation process, modification of the structure of production in accordance with the requirements of markets and consumers.

In order to expand economic relations and develop market mechanisms in the labor sphere, structures of all levels of government should ensure continuous monitoring of the intellectual labor market, an assessment of the volume of training of specialists at various levels and directions, the demand for educational services, as well as an active state policy in this market. It is necessary to create organizational structures that ensure the communication of the system of higher professional education with the labor market.