



MORTGAGE MARKET OF THE REPUBLIC OF KAZAKHSTAN

REVIEW FOR JANUARY-SEPTEMBER 2018

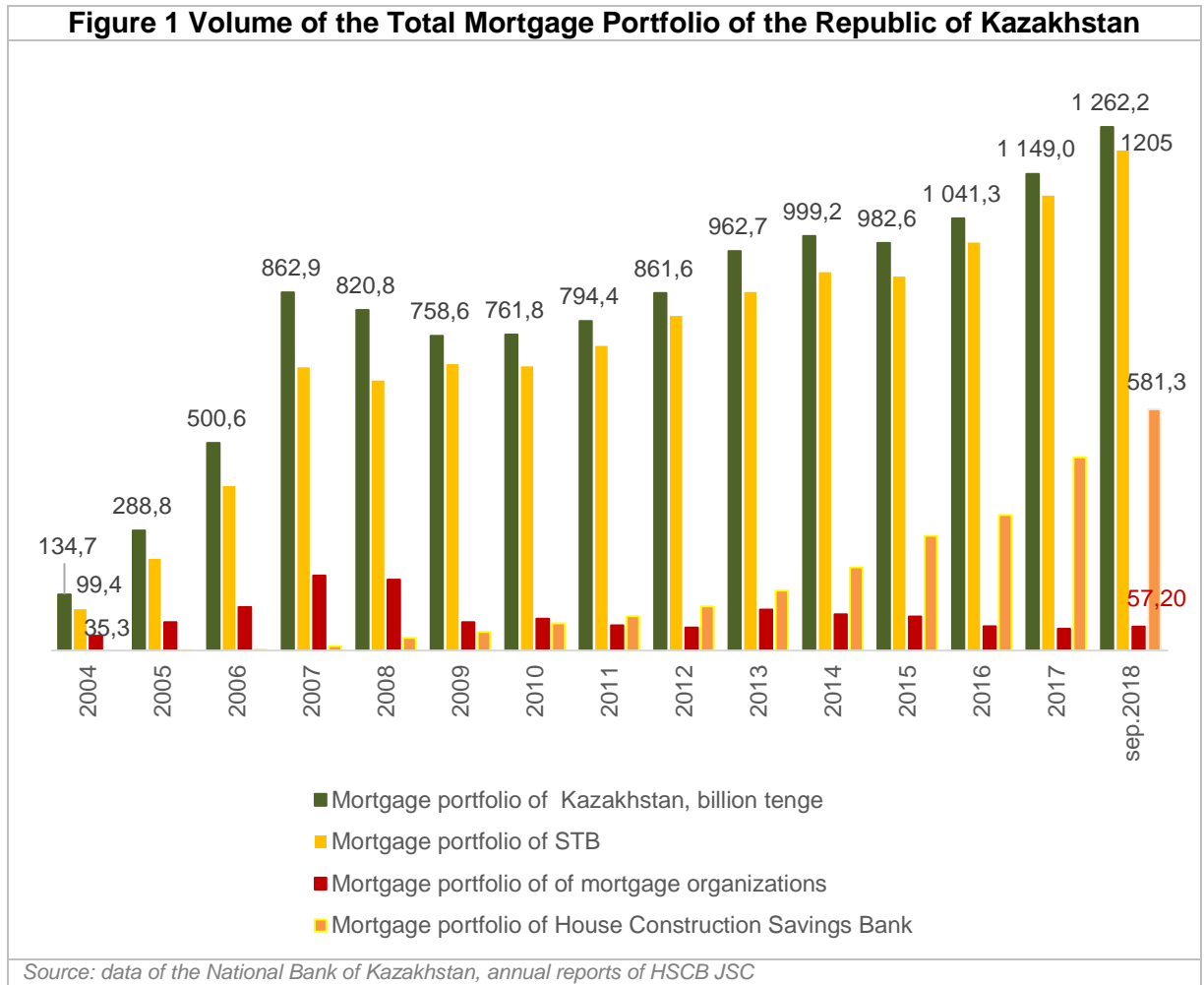
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Section I. Primary Mortgage Market

Mortgage portfolio of the Republic of Kazakhstan as a whole includes mortgage portfolio of second-tier banks (STB) and mortgage portfolio of mortgage organizations. As of 01 October 2018, the total mortgage portfolio of the Republic of Kazakhstan amounted to 1262.2 billion tenge, including (Figure 1):

- mortgage portfolio of STB – 1205 billion tenge (96%), 581.3 billion tenge of which is the portfolio of House Construction Savings Bank JSC (46% of the total portfolio of the country);
- the mortgage portfolio of mortgage organizations – 57.2 billion tenge (4%).



1. Volume of Mortgage Lending to the Population by STB

In January-September 2018, the volume of mortgage lending to the population by second-tier banks (STB) of the Republic of Kazakhstan amounted to 1,205 billion tenge, including 1,144 billion tenge in national currency (or 95% of the total), 61 billion tenge in foreign currency (5%). The growth of the rate from January to September this year was 9.8% (Figure 2). The growth of the rate compared to the same period last year – 14% (Figure 3).

Figure 2 Dynamics of the Volume of Mortgage Lending to the Population by STB, billion tenge

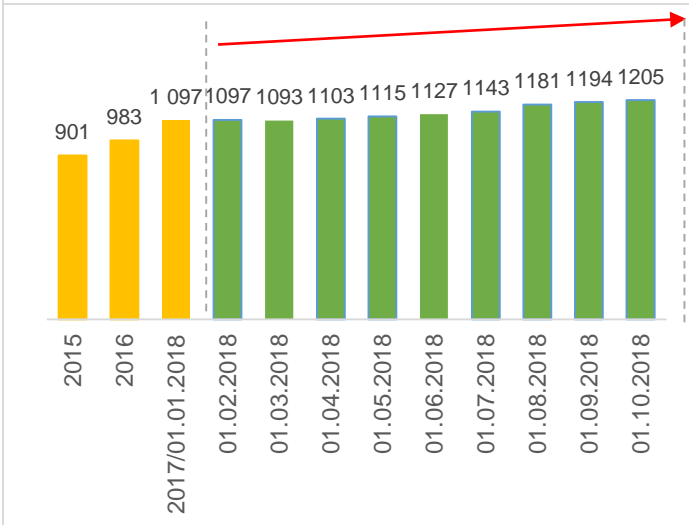
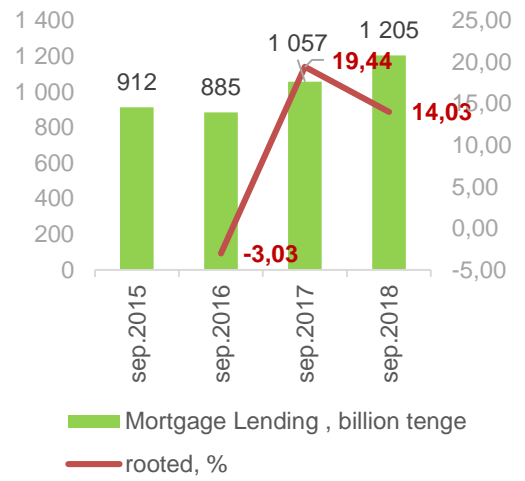


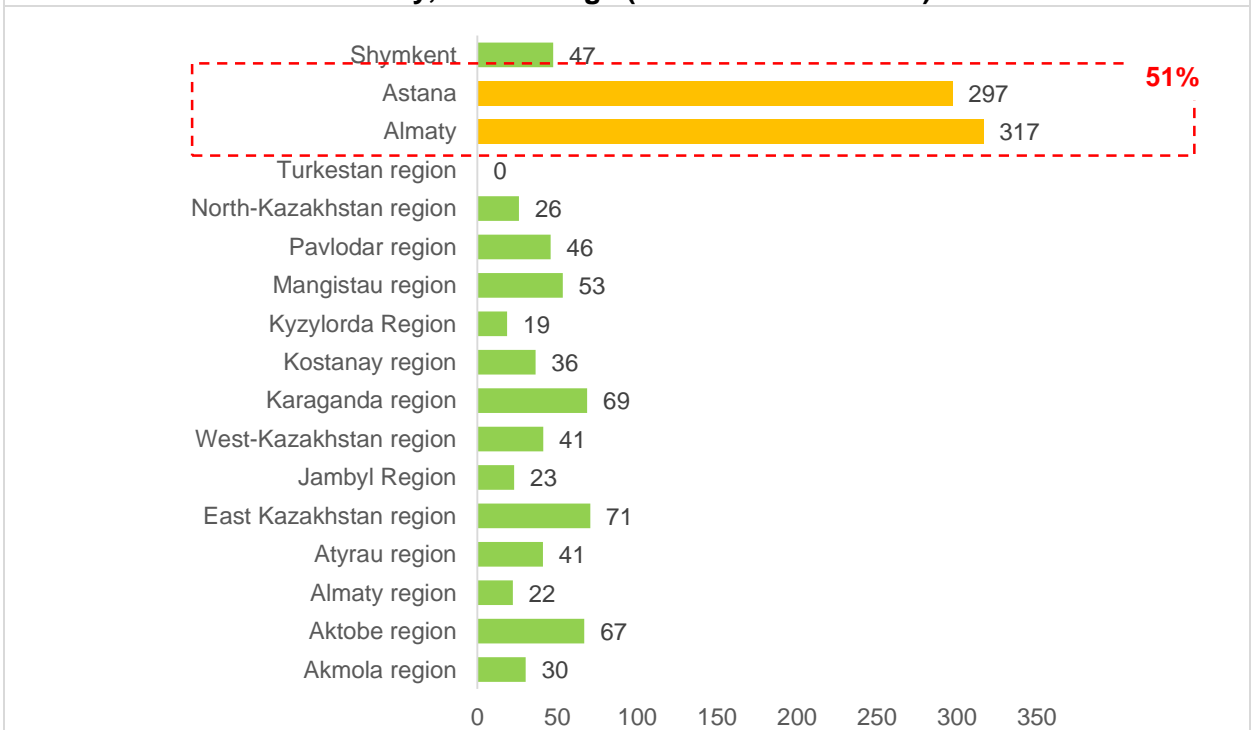
Figure 3 Comparison of the Volume of Mortgage Lending to the Population by STB at the end of September 2015-2018, billion tenge



Source: The National Bank of the Republic of Kazakhstan

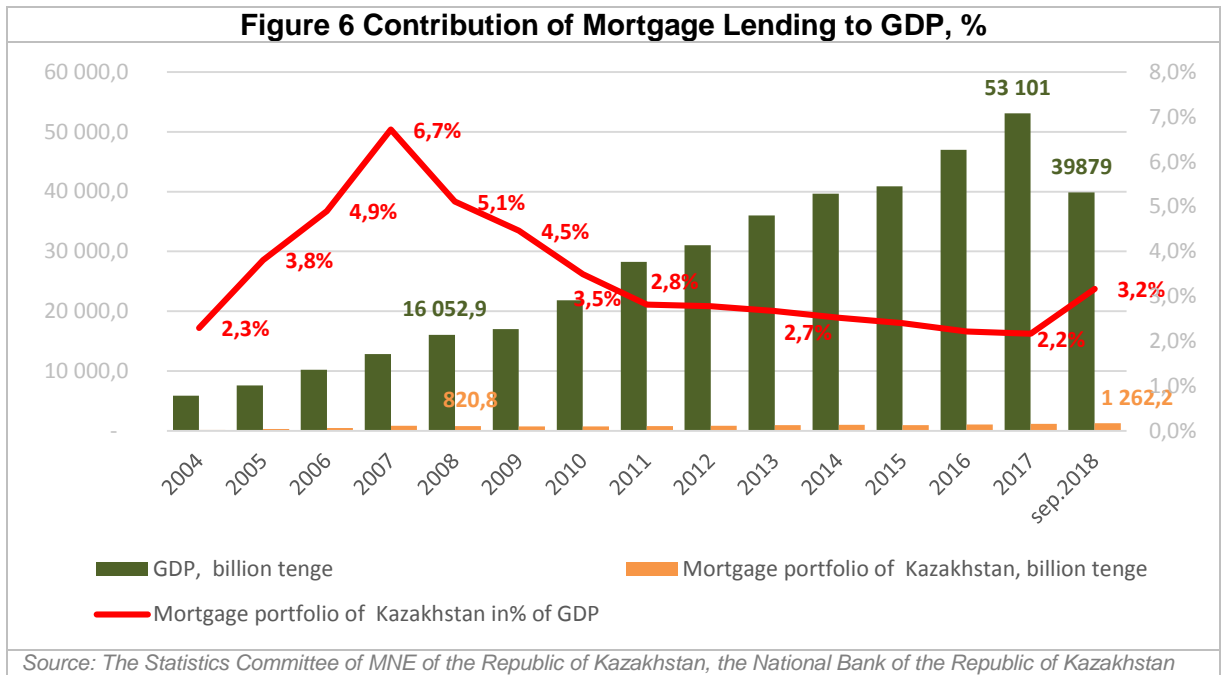
Analysis by regions shows that Astana and Almaty account for 51% of the total volume of mortgage lending by STB. Thus, the main part of the total mortgage portfolio is accumulated in these cities (Figure 4).

Figure 4 Volume of Mortgage Lending to the Population by STB by regions of the country, billion tenge (as of 1 October 2018)



Source: The National Bank of the Republic of Kazakhstan

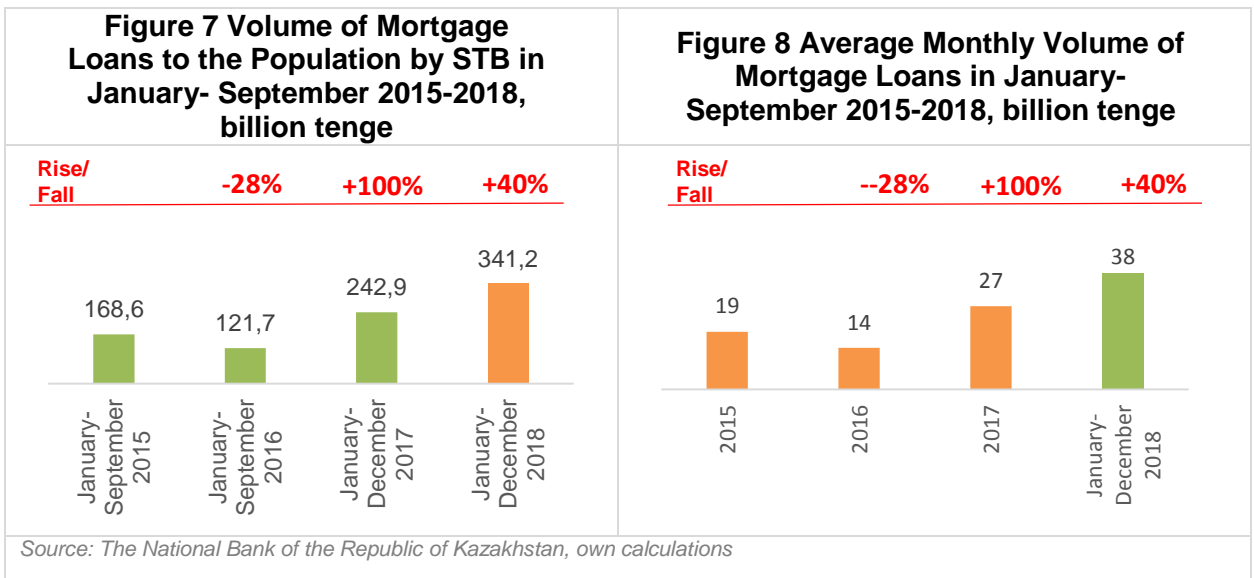
The share of mortgage lending in GDP at the end of September 2018 amounted to 3.2% (Figure 6).



2. Mortgage Loans Issued to the Population by STB

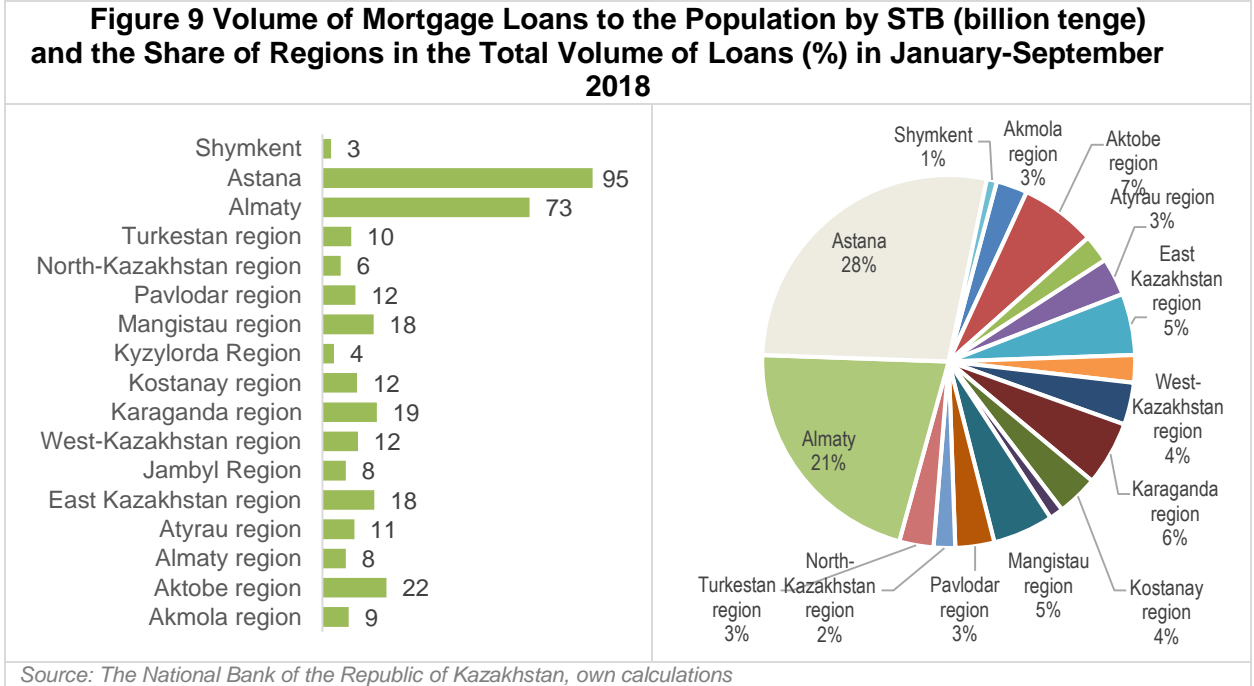
In the period from January 1 to September 2018, mortgage loans were issued to the population in the amount of 341.2 billion tenges, which was higher than the level of the same period in 2017 by 40.5% (Figure 7). The share of mortgage loans issued during the analyzed period in the total volume of mortgage lending to the population by STB was 28%.

The average monthly volume of mortgage loans is 38 billion tenges¹. In comparison with the same period of 2017, the volume of the average monthly mortgage loan increased by 40% (Figure 8). If we assume that the dynamics of mortgage loans until the end of this year continues, by the end of the year the volume of issuance can be predicted at the level of 456 billion tenges.



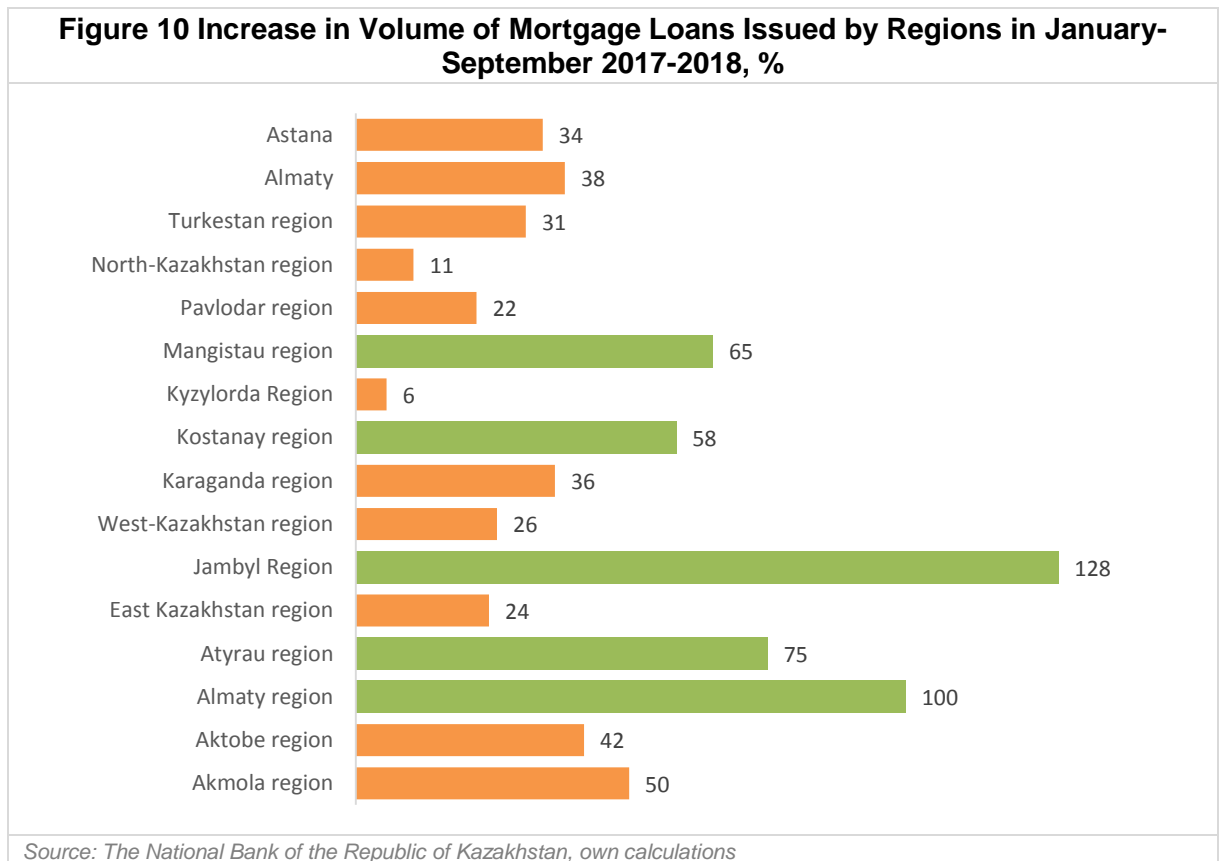
¹The average monthly volume of issuance for January-September 2015-2018 is calculated as the ratio of the volume of issuance for the analyzed period to the number of months of the analyzed period (for instance, the average monthly volume of mortgage loans in January-September 2018 amounted to 341.2 billion tenges/9 months = 37.92 billion tenges).

49% of the total amount of mortgage loans issued falls on Astana and Almaty (Figure 9).



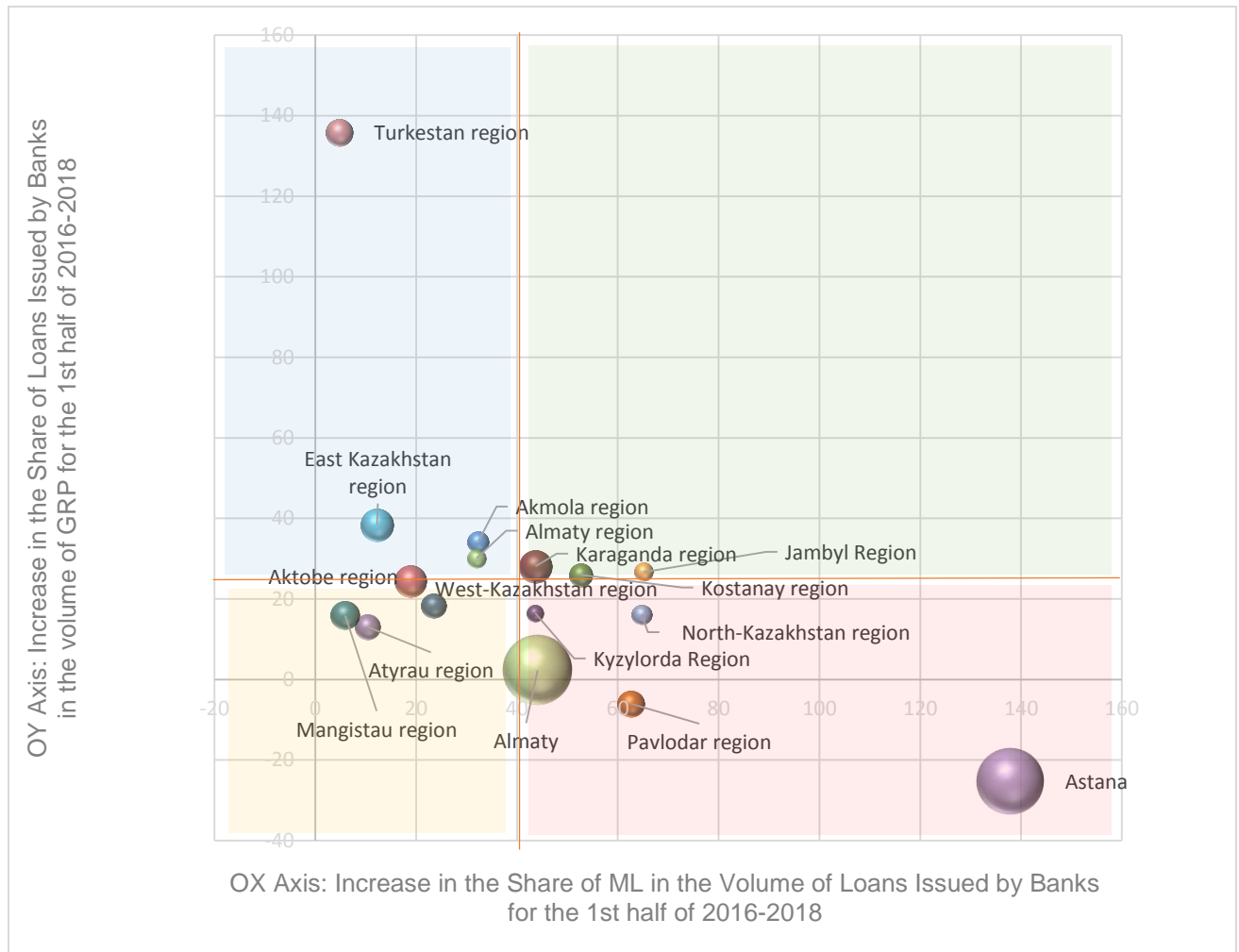
Mortgage lending has increased in all regions of the country.

The increase in the volume of loans issued by more than 50% in January-September 2017-2018 is observed in 5 regions: Mangistau, Kostanay, Zhambyl, Atyrau, and Akmola regions. For the rest of the regions, the growth of loans issued ranges from 6 to 50% (Figure 10).



The Credit Market – Mortgage Market² Matrix gives an idea of the share of lending and its change in GRP³, on the one hand, and the share of mortgages and its change in the volume of lending to the region, on the other hand (Figure 11).

Figure 11 Credit Market – Mortgage Market Matrix



As can be observed from the Matrix, lending as an industry is developing at a good pace in 7 regions of the country (blue and green squares of the matrix): Akmola, Almaty, East Kazakhstan, Zhambyl, Karaganda, Kostanay, and South Kazakhstan regions.

However, the mortgage lending segment is developing faster than the national average only in three regions: Zhambyl, Karaganda, and Kostanay regions (green square), despite a relatively small mortgage portfolio of these regions.

In the cities of Almaty and Astana, Pavlodar, Kyzylorda, and North Kazakhstan regions, the share of mortgages in the volume of loans is growing (red square) against the background of slow growth in lending in general.

In Mangystau, Atyrau, Aktobe, and West Kazakhstan regions, there are slowdowns in the growth rate of lending relative to GRP and in the growth rate of mortgages in the volume of loans (yellow square).

Almaty and Astana are the main holders of the mortgage portfolio. As mentioned above, they account for 51% of the country's total mortgage portfolio. In Astana, the share

² The method of matrix construction is presented in Appendix 1.

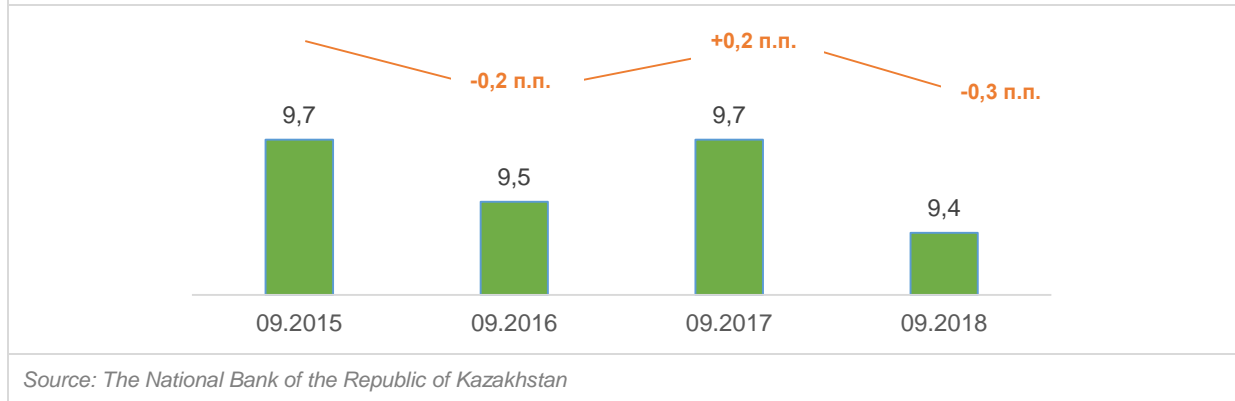
³ Data on GRP are presented as of the 1st half of 2018, the data for the 1st half of 2016-2018 were used for the construction of the Matrix

of mortgages in the volume of loans issued for the 1st half of 2016-2018 increased by 6 times, this is the highest rate in the country⁴.

3. Weighted Average Interest Rates on Mortgage Loans Issued to the Population by STB

The average interest rate on mortgage loans issued in January-September 2018 was 9.4% (-0.3 p.p. by January-September 2017) (Figure 12).

Figure 12 Weighted Average Interest Rate on Issued Loans, January-September 2015-2018



4. The Level of Crediting of the Population

One of the indicators of the level of crediting of the population is the level of crediting of the population on the mortgage portfolio per one economically active resident⁵, which is defined as the ratio of the mortgage portfolio to the total number of economically active population of the country.

The level of debt on the mortgage portfolio per one economically active resident of the country at the end of 2018 amounted to 132,719 tenge. The growth of the rate in comparison with 2017 amounted to 9% (Table 1).

The highest level of crediting of the population is observed in the following regions of the country:

- Aktobe region (152.5 thousand tenge per one economically active resident);
- Mangystau region (189.5 thousand tenge per one economically active resident);
- Almaty (329.9 thousand tenge per one economically active resident);
- Astana (559.1 thousand tenge per one economically active resident).

Table 1 The Level of Crediting on Mortgage Portfolio of the Economically Active Population of the Country, tenge

	2017	2018 (January-September)	Growth in 2018 (January-September)/2017, %
Republic of Kazakhstan	122 101	132 719	9
Akmola	63 639	71 244	12
Aktobe	129 013	152 550	18
Almaty	16 928	21 226	25

⁴ The share of mortgages in the volume of loans for the 1st half of 2016-2018 in the Republic of Kazakhstan increased from 1.5% to 4% (or 3 times).

⁵ Economically active population – the total number of employed and unemployed people in the country.

Atyrau	117 194	130 264	11
East Kazakhstan	91 567	98 710	8
Zhambyl	38 794	43 447	12
West Kazakhstan	111 170	123 327	11
Karaganda	89 541	101 319	13
Kostanay	61 550	71 120	16
Kyzylorda	52 163	52 938	1
Mangystau	166 678	189 510	14
Pavlodar	104 807	110 326	5
North Kazakhstan	76 842	82 924	8
Turkestan/South Kazakhstan	35 252	38 317	9
Almaty city	325 284	329 874	1
Astana	500 499	559 140	12
Shymkent	-	114 609	-

Source: UKRM Calculations Based on the Data from the National Bank of the Republic of Kazakhstan

The level of crediting of the population is growing every year. The highest increase in the level of crediting of the population on the mortgage portfolio is observed in Almaty, Aktobe, Kostanay, and Mangystau regions. In Almaty and Kyzylorda region, the level of mortgage loan portfolio has increased by only 1% since the beginning of the year.

The second indicator that shows the level of crediting of the population is the volume of mortgage loans issued for the analyzed period per one employed resident⁶.

The volume of mortgage loans in the analyzed period per one employed resident of the country amounted to 39.5 thousand tenges (Table 2). The growth of the rate compared to the same period in 2017 amounted to 40%

Table 2 Volume of Mortgage Loans Issued in January-September 2016-2018 per one employed resident of the Republic of Kazakhstan

	2017 (January-September)	2018 (January-September)	Growth in 2018 (January-September)/2017, %
Republic of Kazakhstan	28 296	39 507	40
Akmola	15 036	22 733	51
Aktobe	38 734	53 740	39
Almaty	4 130	8 228	99
Atyrau	21 236	37 340	76
East Kazakhstan	21 278	26 735	26
Zhambyl	7 062	16 156	129
West Kazakhstan	30 924	39 168	27
Karaganda	21 381	29 413	38
Kostanay	15 579	24 937	60
Kyzylorda	11 675	12 189	4
Mangystau	39 050	66 824	71
Pavlodar	23 850	29 204	22
North Kazakhstan	19 529	21 322	9
South Kazakhstan/Turkestan	6 810	12 990	91
Almaty city	59 086	79 804	35
Astana	141 818	186 559	32
Shymkent		7 643	

Source: The National Bank of the Republic of Kazakhstan

The highest rates of crediting are observed in the following regions:

- Aktobe region (53.7 thousand tenges per one employed resident);
- Mangystau region (66.8 thousand tenges per one employed resident);

⁶ The number of the employed population in Kazakhstan as of September 2018 is also presented in Appendix 2.

- Almaty City (79.8 thousand tenge per one employed resident);
- Astana (186.6 thousand tenge per one employed resident).

In Astana, the volume of mortgage loans per one employed resident exceeded the national average by 4.7 times.

At the same time, a high level of growth in mortgage lending per employed resident can be seen in 7 regions of the country: Akmola, Almaty, Atyrau, Zhambyl, Kostanay, Mangistau, and South Kazakhstan regions, as well as the cities of Almaty and Astana. The lowest level of growth is in Kyzylorda and North Kazakhstan regions.

We will add to the analysis by comparing the volume of mortgage loans issued per one employed resident with the average monthly salary of one employee, by the ratio of indicators (Table 3).

Table 3 Comparison of the Volume of Issued ML and the Average Monthly Nominal Wage Per Employee in January-September 2018

	The Volume of Issued ML Per Employee, tenge	Average Monthly Nominal Wage of An Employee, tenge	The Ratio of the Volume of Issued ML to the Average Monthly Nominal Wage Per Employee, %
Republic of Kazakhstan	39 507	162 751	24,3
Akmola	22 733	121 639	18,7
Aktobe	53 740	137 698	39,0
Almaty	8 228	120 645	6,8
Atyrau	37 340	291 332	12,8
East Kazakhstan	26 735	137 878	19,4
Zhambyl	16 156	111 240	14,5
West Kazakhstan	39 168	151 807	25,8
Karaganda	29 413	146 912	20,0
Kostanay	24 937	125 206	19,9
Kyzylorda	12 189	133 516	9,1
Mangystau	66 824	267 883	24,9
Pavlodar	29 204	137 638	21,2
North Kazakhstan	21 322	113 336	18,8
South Kazakhstan	12 990	111 290	11,7
Almaty city	79 804	204 740	39,0
Astana	186 559	241 280	77,3
Shymkent	7 643	118 043	6,5

Source: the calculations of UKRM on the basis of the data of the National Bank of the Republic of Kazakhstan and the Statistics Committee of MNE of the Republic of Kazakhstan

As can be observed from Table 3, the share of mortgage loans issued per one employee in the amount of its average monthly salary is 24%. The maximum value of the indicator is found in Astana (77%), the minimum value of the indicator is found in Shymkent (6.5%).

5. Mortgage Loan Penetration Rate

The mortgage loan penetration rate reflects the proportion of households that have received a mortgage (both in the past and in the present) to housing, both those that have already repaid the loan and those that are burdened with a mortgage loan by the current period.

According to the data of First Credit Bureau LLP (FCB), 408 thousand mortgage loans with the purpose of housing were issued in the period from 2001 to July 2018, of which 246 thousand loans are existing, 162 thousand are repaid⁷.

⁷www.1cb.kz

Thus, the mortgage loans penetration level among households of the Republic of Kazakhstan⁸ was 8%.

In the first half of 2018, the number of mortgage loans issued amounted to 33 071, which is 6% higher than in the same period of 2017. The average loan amount on mortgage loans, according to the statistics of FCB, amounted to 6.2 million tenge (including 13.1 million tenge in Almaty and 8.5 million tenge in Astana⁹), the average loan term – 10 years¹⁰, the average interest rate ranges from 8 to 10%.

6. Current Level of Housing Space Available to the Population

According to the Statistics Committee, the total area of the housing stock of the Republic of Kazakhstan as of the beginning of 2018 amounted to 347.4 million sq.m, including 219 million sq.m in urban areas and 28 million sq.m in rural areas (Table 4).

Table 4 Housing Stock of the Republic of Kazakhstan as of the Beginning of 2018

	Всего, тыс. кв. м	Among Them			
		Urban Area		Rural Area	
		thousand sq.m	As Percentage of Total	thousand sq.m	As Percentage of Total
Republic of Kazakhstan	347 441,2	219 146,5	100,0	128 294,7	100,0
Akmola	16 269,7	7 518,4	3,4	8 751,3	6,8
Aktobe	16 122,0	12 108,5	5,5	4 013,5	3,1
Almaty	31 966,2	8 634,9	3,9	23 331,3	18,2
Atyrau	12 421,1	7 191,9	3,3	5 229,2	4,1
West Kazakhstan	12 216,6	7 083,1	3,2	5 133,5	4,0
Zhambyl	16 882,2	7 960,7	3,6	8 921,5	7,0
Karaganda	29 137,3	23 326,6	10,7	5 810,7	4,5
Kostanay	17 832,3	9 979,7	4,6	7 852,5	6,1
Kyzylorda	15 100,9	7 328,5	3,4	7 772,4	6,1
Mangystau	12 747,9	5 890,0	2,7	6 857,9	5,3
Pavlodar	16 123,8	11 470,3	5,2	4 653,5	3,6
North Kazakhstan	11 923,6	5 267,1	2,4	6 656,6	5,2
Turkestan	31 939,7	8 294,6	3,8	23 645,1	18,4
East Kazakhstan	25 973,1	16 307,4	7,4	9 665,8	7,5
Astana	20 228,9	20 228,9	9,2	-	-
Almaty city	43 335,3	43 335,3	19,8	-	-
Shymkent	17 220,6	17 220,6	7,9	-	-

Source: On housing stock of the Republic of Kazakhstan in 2017, Astana, 2018//Statistics Committee

Amount of housing space available per one resident on average in the country amounted to 21.6 sq.m, 24,1 sq.m in urban area, 18.2 sq.m in rural area (Table 5).

Table 5 Amount of Housing Space Available per One Resident¹¹

	Всего	Among Them	
		Urban Area	Rural Area
Republic of Kazakhstan	21,6	24,1	18,2
Akmola	22,0	23,8	20,6
Aktobe	22,0	24,6	16,5
Almaty	18,9	21,8	18,0
Atyrau	21,4	23,7	19,0

⁸ The total number of households as of January-July 2017 amounted to 5.3 million.

⁹ https://www.1cb.kz/docs/analyticalreviews/1CB_Analytics_Monthly_6.2018.pdf

¹⁰ the perspective of all existing loans in national currency

¹¹ Total housing area (total housing area of empty or abandoned houses is not taken into account) to the number of persons living in them// Statistics Committee of MNE of the Republic of Kazakhstan

West Kazakhstan	20,6	24,8	16,6
Zhambyl	16,6	19,4	14,7
Karaganda	23,0	23,8	20,4
Kostanay	21,7	22,3	20,9
Kyzylorda	19,9	21,7	18,4
Mangystau	23,3	23,2	23,3
Pavlodar	22,0	22,4	20,9
North Kazakhstan	21,0	21,7	20,5
Turkestan	17,9	21,3	17,0
East Kazakhstan	20,2	22,2	17,3
Astana	29,8	29,8	-
Almaty city	27,1	27,1	-
Shymkent	24,2	24,2	-

Source: On housing stock of the Republic of Kazakhstan in 2017, Astana, 2018//Statistics Committee

As can be observed from Table 5, there is a disproportion in the amount of housing space available to the population both regionally and in urban and rural areas.

7. Current Level of Housing Affordability to the Population

The Price to Income Ratio (PIR, housing affordability ratio) can be used to assess housing affordability¹². PIR the number of years required to purchase housing if the entire household income goes to housing. Calculation formula: $PIR = \frac{\overline{PC} * S}{D * N * 12}$, where \overline{PC} – the average market cost of 1 sq.m. of housing in the primary and secondary markets, S – standard housing area per one household¹³, D – per capita income per month, N – the number of family members in a household, 12 – the number of months in a year.

In September 2018, according to the Statistics Committee, the average sale price of new housing in the cities of Kazakhstan amounted to 264.8 thousand tenge per 1 sq. m, the resale price of decent housing – 184.4 sq.m per 1 sq.m, the rent – 1367 tenge per 1 sq. m (Table 6).

Table 6 The Cost of Housing in the Primary and Secondary Markets as of 1 September 2018

	Sale Price of New Housing, thousand tenge per 1 sq. m	Resale Price of Decent Housing, thousand tenge per 1 sq. m	Rent for Decent Housing, tenge per 1 sq. m
Republic of Kazakhstan	264,8	184,4	1 367
Astana	337,6	345,9	2 751
Almaty	326	342,2	2 265
Shymkent	306,1	169,8	1 219
Aktau	284,6	251,6	2 016
Aktobe	150,6	148,6	1 334
Atyrau	326,3	261,9	1 693
Zhezkazgan		143,9	1 262
Kokshetau	190,5	174,9	1 212
Karaganda	201,6	179	1 586
Kostanay	190,4	181,6	1 290
Kyzylorda	141,0	130,3	1 090
Uralsk	147,9	157,4	1 098

¹² The main indicators of housing affordability used in the international practice // Economic analysis: theory and practice 12 (2016), pp. 111-124

¹³ The standard of 15 sq.m. per one family member is taken according to Paragraph 1, Article 75 of the Law № 94-І On Housing Matters of 16 April 1997: "Housing from the public housing stock or housing leased by the local executive body in the private housing stock are provided in the amount of **no less than fifteen square meters** and no more than eighteen square meters of usable area per person, but not less than one-room apartment or room in a hostel".

Ust-Kamenogorsk	231	168,4	1 306
Pavlodar	146,6	149,9	1 065
Petropavlovsk	135,0	183,9	1 300
Semey	172,3	153,8	1 131
Taldykorgan	141,2	185,1	1 038
Taraz	116,0	178,4	967
Turkestan		144,2	1 422

Source: Prices on Housing Market in September 2018 // The Statistics Committee of MNE of the Republic of Kazakhstan

The sale price of new housing has risen by 5% since the beginning of the year. At the same time, the resale price of decent housing fell by 0.7% Rent rose by 3%

The average per capita income of the population of the country in the second quarter of 2018 amounted to 51.2 thousand tenge per month (Table 7). At the same time, the figures are higher in the cities and amount to 59.3 thousand tenge per month.

Table 7 Cash Income of the Population for the 2nd Quarter of 2018, On Average Per Capita, Tenge

	Total		Urban Area		Rural Area	
	per quarter	per month	per quarter	per month	per quarter	per month
Republic of Kazakhstan	153 725	51242	177 853	59284,33	121 040	40347
Akmola	141 962	47321	157 823	52607,67	127 829	42610
Aktobe	152 057	50686	167 562	55854	124 703	41568
Almaty	131 923	43974	136 534	45511,33	130 567	43522
Atyrau	139 876	46625	158 683	52894,33	122 784	40928
West Kazakhstan	149 438	49813	174 540	58180	122 454	40818
Zhambyl	110 729	36910	125 774	41924,67	100 841	33614
Karaganda	182 578	60859	195 132	65044	133 482	44494
Kostanay	158 638	52879	175 467	58489	138 716	46239
Kyzylorda	121 550	40517	132 495	44165	113 835	37945
Mangystau	190 117	63372	233 134	77711,33	160 876	53625
Pavlodar	154 275	51425	163 803	54601	131 328	43776
North Kazakhstan	156 957	52319	183 153	61051	135 396	45132
Turkestan	97 292	32431	97 770	32590	97 177	32392
East Kazakhstan	166 544	55515	193 357	64452,33	123 994	41331
Astana	213 536	71179	213 536	71178,67	121 040	40347
Almaty city	218 774	72925	218 774	72924,67	127 829	42610
Shymkent	132 323	44108	132 323	44107,67	124 703	41568

Source: Expenditures and Revenues of the Population of the Republic of Kazakhstan, 2nd Quarter of 2018// The Statistics Committee of MNE of the Republic of Kazakhstan.

Calculate the level of housing affordability (PIR) for the urban population (Table 8).

Table 8 Level of Housing Affordability for Urban Population

Regions	The Average Market Cost of 1 sq.m of Housing in the Primary and Secondary Markets, thousand tenge	Household Size, persons	Normative Area of Housing Per One Household, sq.m	Per Capita Income, tenge	Housing Affordability Level, years
	\overline{PC}	N	S	D	PIR
Republic of Kazakhstan	224,6	3,4	51	59284,33	5
Akmola	182,7	3,2	48	52607,67	4
Aktobe	149,6	3,8	57	55854	3

Almaty	163,15	3,7	42	45511,33	4
Atyrau	294,1	4,4	66	52894,33	7
West Kazakhstan	152,65	3,5	52,5	58180	3
Zhambyl	147,2	3,9	58,5	41924,67	4
Karaganda	190,3	3	45	65044	4
Kostanay	186	2,8	42	58489	4
Kyzylorda	135,65	5	75	44165	4
Mangystau	268,1	4,3	64,5	77711,33	4
Pavlodar	148,25	2,8	64,5	54601	3
North Kazakhstan	159,45	2,8	42	61051	3
Turkestan	144,2	4,3	42	32590	6
East Kazakhstan	199,7	2,8	64,5	64452,33	4
Astana	341,75	3,3	42	71178,67	6
Almaty city	334,1	2,8	49,5	72924,67	6
Shymkent	237,95	4,3	42	44107,67	7

Source: own calculations of UKRM

As can be observed from Table 8, an average of 5 annual salaries is required for the households of the Republic of Kazakhstan in order to purchase housing with an area of 51 sq.m According to the international gradation of housing affordability: "Housing in the Republic of Kazakhstan is seriously hindered", because the optimal period is considered to be equal to 3 years (Table 9).

Table 9 International Gradation of Housing Affordability

PIR < 3 years	3 years ≤ PIR < 4 years	4 years ≤ PIR < 5 years	PIR ≥ 5 years
Housing is affordable	Housing is not so affordable	Housing is severely hindered	Housing is mostly not available

From the regional perspective, the level of housing affordability fluctuates both in the smaller and in the larger direction. The regions where housing can be considered relatively affordable include the cities of North Kazakhstan, Pavlodar, West Kazakhstan, and Aktobe regions (PIR indicator is 3 years). In the rest of the country, the acquisition of housing is seriously hindered or mostly not available.

8. Current Level of Mortgage Affordability to the Population

The Mortgage as Percentage of Income (MPI, the share of mortgage payment in household income) is used to assess mortgage affordability¹⁴:

MPI – reflects the actual monthly mortgage cost and household income. The calculation uses a 100% mortgage for the maximum loan period for the purchase of housing. The decrease in the indicator shows a positive trend. You can compare MPI with Debt to Income (DTI, debt load ratio), which the National Bank of the Republic of Kazakhstan has determined at the level of 50%¹⁵

In order to calculate the MPI, we compare the average monthly household income with the average monthly mortgage payment on average terms: the weighted average interest rate is 9.6%, the maximum loan term is 240 months, the initial payment is 0%

¹⁴ The main indicators of housing affordability used in the international practice // Economic analysis: theory and practice 12 (2016), pp. 111-124

¹⁵ (Debt-to-income ratio, DTI) – the ratio of the amount of debt and income of the borrower. The maximum level of DTI of the borrower at which the Bank can provide unsecured consumer loan is determined at 50% This value, on the one hand, is comparable with the relevant international practice, and, on the other hand, has a neutral effect on the existing scoring models of banks to assess the creditworthiness of borrowers, provided they use lower internal limits DTI//On Financial Stability Report of the National Bank https://online.zakon.kz/Document/?doc_id=31552802&mode=p&page=6#pos=2463;-250

MPI should not exceed DTI (50%). If the MPI is above 50%, the mortgage is considered not available (NA), if less than 50% – available (A). Calculations on mortgage affordability are shown in Table 10.

Table 10 Current level of Mortgage Affordability

Region	Average Monthly Income of a Household, tenge	Average Housing Cost = Average Mortgage Loan Cost, tenge	Monthly Mortgage Payment, tenge ¹⁶	MPI (share of monthly mortgage payment in a household income) %	DTI, %	Current Level of Mortgage Affordability
Republic of Kazakhstan	201567	11454600	107521	53	50	NA
Akmola	168345	8769600	82318	49	50	A
Aktobe	212245	8527200	80042	38	50	A
Almaty	168392	9054825	84995	50	50	A
Atyrau	232735	19410600	182202	78	50	NA
West Kazakhstan	203630	8014125	75226	37	50	A
Zhambyl	163506	8611200	80831	49	50	A
Karaganda	195132	8563500	80383	41	50	A
Kostanay	163769	7812000	73329	45	50	A
Kyzylorda	220825	10173750	95498	43	50	A
Mangystau	334159	17292450	162319	49	50	A
Pavlodar	152883	6226500	50446	33	50	A
North Kazakhstan	170943	6696900	62862	37	50	A
Turkestan	140137	9300900	87305	62	50	NA
East Kazakhstan	180467	8387400	78730	44	50	A
Astana	234890	16916625	158791	68	50	NA
Almaty city	204189	14032200	131716	65	50	NA
Shymkent	189663	15347775	144065	76	50	NA

Source: own calculations of UKRM

As can be observed from Table 10, MPI indicator on average is 53% in the country, which means that the household needs to allocate 53% of its monthly income for the repayment of monthly mortgage payments, issued for 20 years at an average rate of 9.6% in the amount of 100% of the apartment cost for the purchase of housing with an area of 51 m² (15 m² per one family member). The purchase of housing of bigger size will lead to an increase in the level of monthly payments, and, thus, to a deterioration in the mortgage affordability rate.

In 12 regions, the share of mortgage payments in household income is below 50%, but no less than 33%

In 5 regions of the country, mortgage can be considered almost unaffordable: in the cities of Atyrau region (MPI – 78%), in the cities of Turkestan region (62%), in Astana (68%), in Almaty (65%), in Shymkent (76%).

9. The Review of the STB's Proposals

Mortgage loans in the market offer 12 out of 28 STB, as well as 2 mortgage organizations. 7 banks (Halyk Savings Bank of Kazakhstan JSC, ATF Bank JSC, Tsesna Bank JSC, Bank Center Credit JSC, Bank RBK JSC, Forte Bank JSC, HCSB JSC), in

¹⁶ The calculation of the monthly mortgage payment was made on a loan calculator, the repayment method – annuity.

addition to offering mortgage products under their own programs, offer mortgage program 7-20-25 (Table 11).

Table 11 STB's Offers on Their Own Mortgage Products

No	Bank Name	Mortgage Term	Initial Payment, %	Interest Rate, %	EAIR, %	Maximum Loan Amount
1	House Construction Savings Bank JSC («Own House» product)	25	30	9,5	12,8	90 million tenges
2	Bank Center Credit JSC	15	30	16,5	16,9	up to 70% of the cost of purchased housing
3	Altyn Bank JSC	20	20	12,75	14	100 million tenges
4	ATF Bank JSC	15	20	16	17,4	100 million tenges
5	VTB JSC	15	30	17	18,9	75 million tenges
6	Nurbank JSC	20	35	15	16,5	50 million tenges
7	RBK JSC	15	30	14,5	16	75 million tenges
8	Sberbank of Russia JSC	20	30	14,6	15,6	up to 70% of the cost of purchased housing
9	Tengri Bank JSC	20	20	16	16,7	up to 80% of the cost of purchased housing
10	Forte Bank JSC	10	50	14,49	16,7	up to 50% of the cost of purchased housing
11	Halyk Savings Bank of Kazakhstan JSC	20	20	12,5	14,8	Unrestricted
12	Tsesna Bank JSC	10	40	20,5	24,4	Unrestricted
13	MO Baspana	25	20	7		Up to 25 million tenges in Almaty, Astana, Shymkent, Aktau, and Atyrau, up to 15 million in the regions

Source: the data of the official websites of STB and mortgage organizations

HCSK JSC – the only bank, the portfolio of which 100% consists of housing loans provided to the population. At the same time, the share of HCSB in the amount of the mortgage loans at the end of September 2018 was 67.7%¹⁷

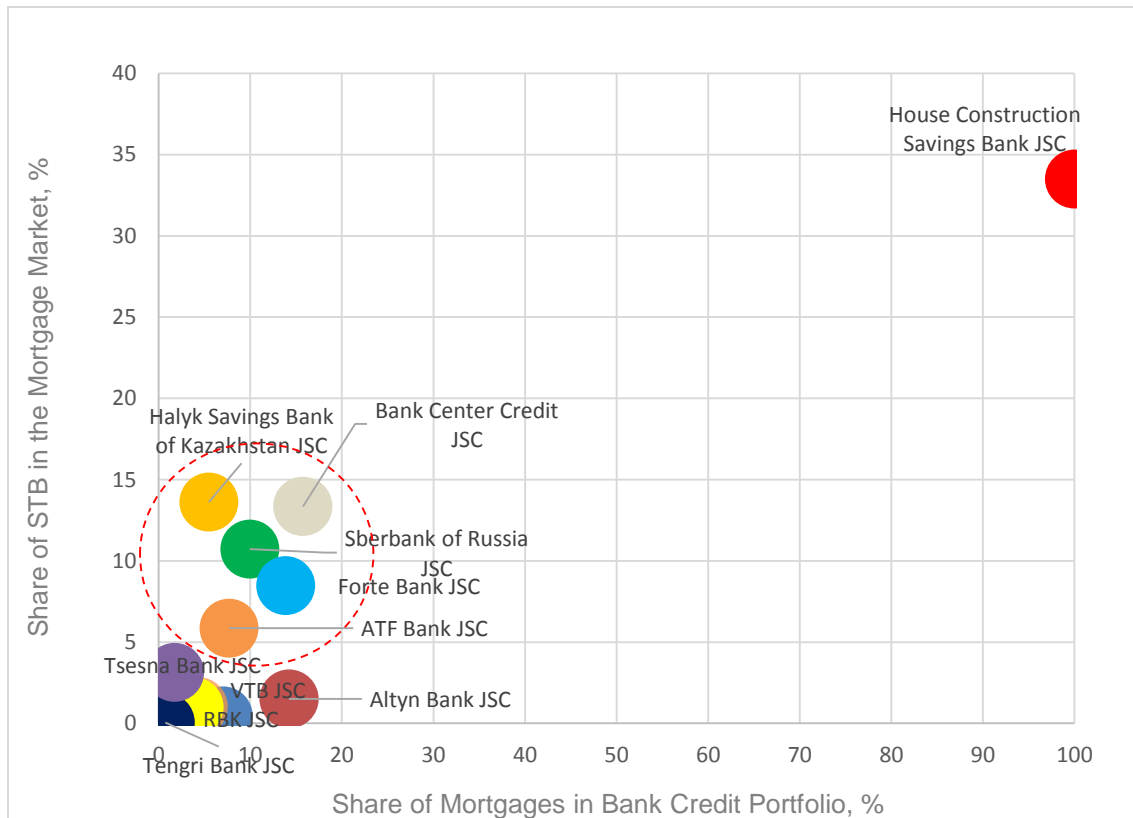
32.3% of the mortgage market is divided between 11 banks: Halyk Bank, Bank Center Credit, Sberbank of Russia, Forte Bank, and ATF. The share of mortgage in the loan portfolio of these banks does not exceed 16%. The share of banks in the volume of mortgage loans, including loans under the 7-20-25 Program is 32.3% and excluding loans under the 7-20-25 Program is 16% (Figure 13).

Proposals for mortgage products can be differentiated according to interest rate, initial payment, mortgage term, and loan value. The most attractive conditions in terms of

¹⁷ The volume of loans issued by HCSB in January-September 2018 amounted to 231.1 billion tenges or 67.7% of the total volume of mortgage loans for the analyzed period// "...As of 01 October 2018, savings of depositors amount to 562,374 million tenges

interest rates offer MO Baspana, MO KMC, and HCBK JSC. Relatively attractive conditions in terms of down payment offer MO Baspana, Altyn Bank JSC, ATF Bank JSC, HSBK JSC (20% of the loan value). For some mortgage products, it is proposed to provide an additional collateral in the form of real estate instead of the initial payment – RBK JSC, HSBK JSC, Tsesna Bank JSC. Do not restrict customers in the loan value – Tsesna Bank JSC and HSBK JSC, which is an attractive condition for customers who intend to buy expensive housing.

Figure 13 Share of STB in the Mortgage Market – Share of Mortgages in Bank Credit Portfolio Matrix



As of 30 October 2018, 3989 applications for a mortgage loan have been considered within the framework of the 7-20-25 Program of STB. Of these, 2658 applications for a loan in the amount of 31.8 billion tenges were approved (Table 12).

Table 12 Forecast of approved applications under the 7-20-25 State Program at the end of 2018

	Fact (2018)			Average growth rate, %	Forecast until the end of 2018 (as of 30 October 2018)	
	Aug.30	Sep.30	Oct. 20		Nov. 30	Dec. 30
Applications Approved	1190	2052	2658	49	3960,42	5901,03
Approved applications amount, billion tenge	14	24,5	31,8	51	48,0	72,5
STB issuing loans	4 ¹⁸	5 ¹⁹	7 ²⁰		n.a.	9 ²¹

Source: the calculations of the UKRM on the basis of data www.baspana72025.kz/

¹⁸ Bank Center Credit, ATF, Tsesna Bank, RBK (as of 13 August 2018)//www.baspana72025.kz/

¹⁹ Bank Center Credit, ATF, Tsesna Bank, RBK, Halyk Bank (as of 11 September 2018)//www.baspana72025.kz/

²⁰ https://www.inform.kz/ru/zhilstroyserbank-i-sberbank-mogut-prinyat-uchastie-v-zhilischnoy-programme-7-20-25_a3432925/

²¹ It is planned to attract 9 STB: Bank Center Credit, ATF, Tsesna Bank, RBK, Halyk Bank, Eurasian Bank, HCSB, Forte Bank, and Sberbank// www.baspana72025.kz/

According to the news data presented on the official website of MO Baspana, «... 60% of borrowers pay less than 100 thousand tenge per month on mortgage. Only 6% of borrowers received the maximum possible amount (20 million tenge in Astana, Almaty, Atyrau, Aktau, and Shymkent, 12 million tenge in other regions). The bulk of borrowers, which is 37% of the total portfolio, received a loan in the amount of 10 to 15 million tenge²²».

As can be observed from Table 12, the growth rate of approved applications in October 2018 decreased compared to September 2018 and amounted to 49%. According to the forecast presented in Table 1, as of 30 October 2018, the volume of approved applications under the 7-20-25 Program at the end of 2018 may be 5 901 for a total of 72.5 billion tenge, the share of approved applications under the 7-20-25 Program at the end of 2018 may be 16%²³ of the volume of mortgage loans issued to the population.

In order to stimulate the issuance of mortgage loans under the 7-20-25 Program, MO Baspana is planning to issue 10 thousand housing certificates in the amount of 1 million tenge for the public sector employees by the end of 2018. The purpose of such an incentive tool: to reduce the size of the down payment. It is planned to allocate at least 50 thousand housing certificates for a total amount of 50 billion tenge²⁴ through the akimats of cities and regions. This action may affect the number of approved applications and increase the forecasted volume of mortgage loans.

Furthermore, at the beginning of November this year, MO Baspana officially announced the launch of Baspana Hit, a new mortgage product, which allows customers to take a mortgage for the purchase of secondary housing at the interest rate of 11%²⁵ for a period of 15 years. The introduction of this product can also contribute to the growth of the share of loans under the 7-20-25 Program in the volume of mortgage loans.

Certainly, the conditions offered by MO Baspana under the 7-20-25 mortgage Program are attractive, however, the mortgage becomes impractical for the clients wishing to purchase housing of a higher comfort class, the market value of which exceeds the maximum purchase price. Accordingly, the 7-20-25 mortgage Program is aimed at customers wishing to purchase primary housing worth no more than 25 million tenge (15 million tenge in the regions).

We will assess the attractiveness of mortgage products according to two important characteristics from the client's point of view: (Figure 13):

- monthly payment;
- the share of monthly payments in the average monthly income of a household.

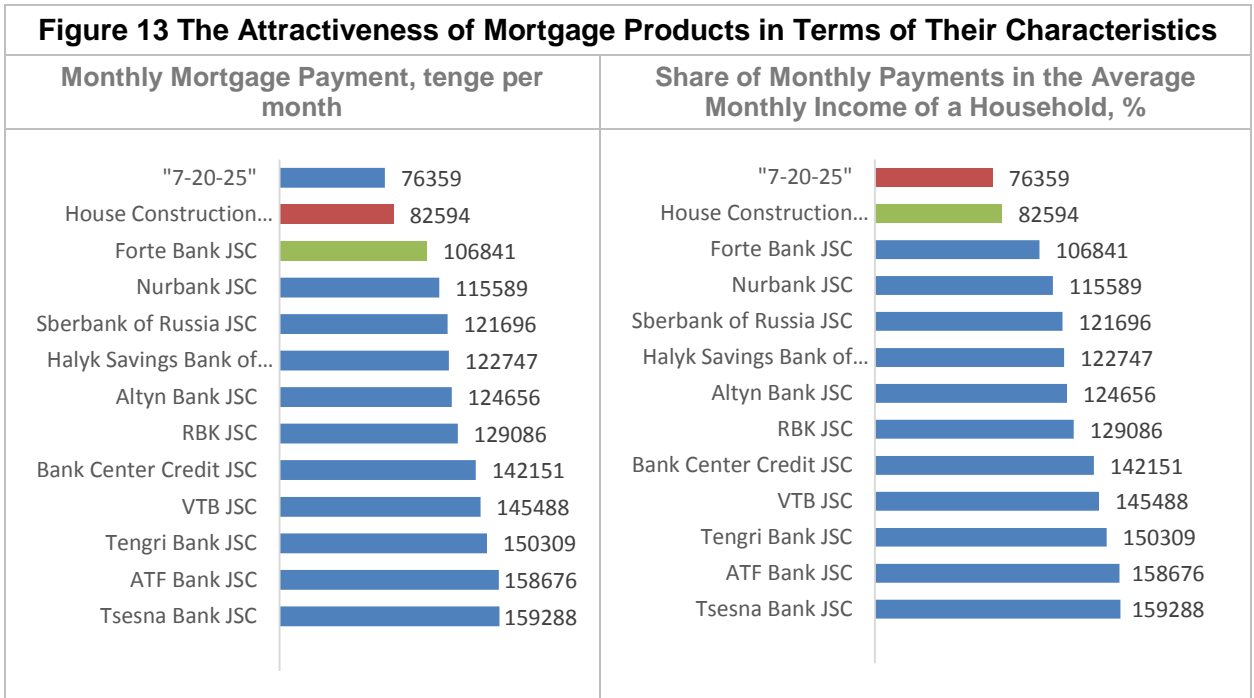
As shown in Figure 13, the most attractive terms are in three mortgage products: HSCB JSC, MO Baspana.

²² <http://www.baspana72025.kz/actual-information/programma-72025-shest-vazhnih-novostey-kotorie-vi-mogli-propustit-47>

²³ 16% = 72.5 billion tenge/456 billion tenge*100%

²⁴ https://tengrinews.kz/kazakhstan_news/7-20-25-kak-poluchit-jilischnyiy-sertifikat-na-million-tenge-356765/

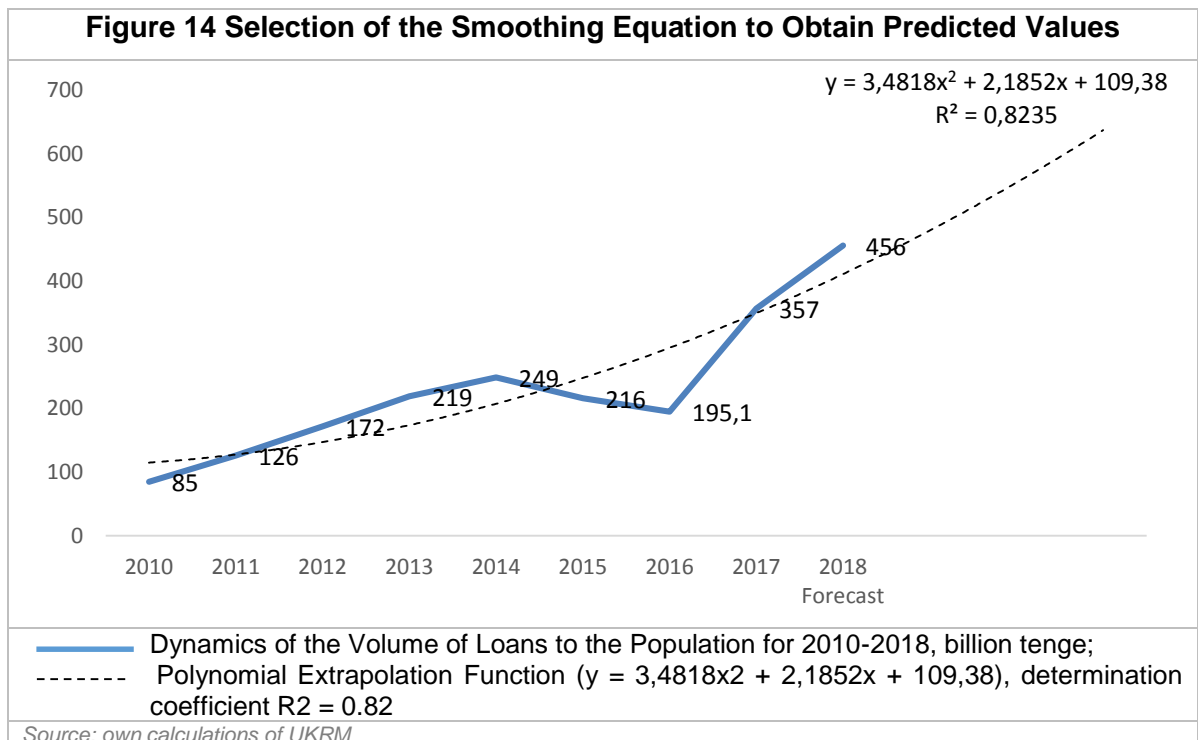
²⁵ can change when the base rate of the National Bank of Kazakhstan is fixed at the time of the loan.



10. Forecast of Mortgage Loans Volume

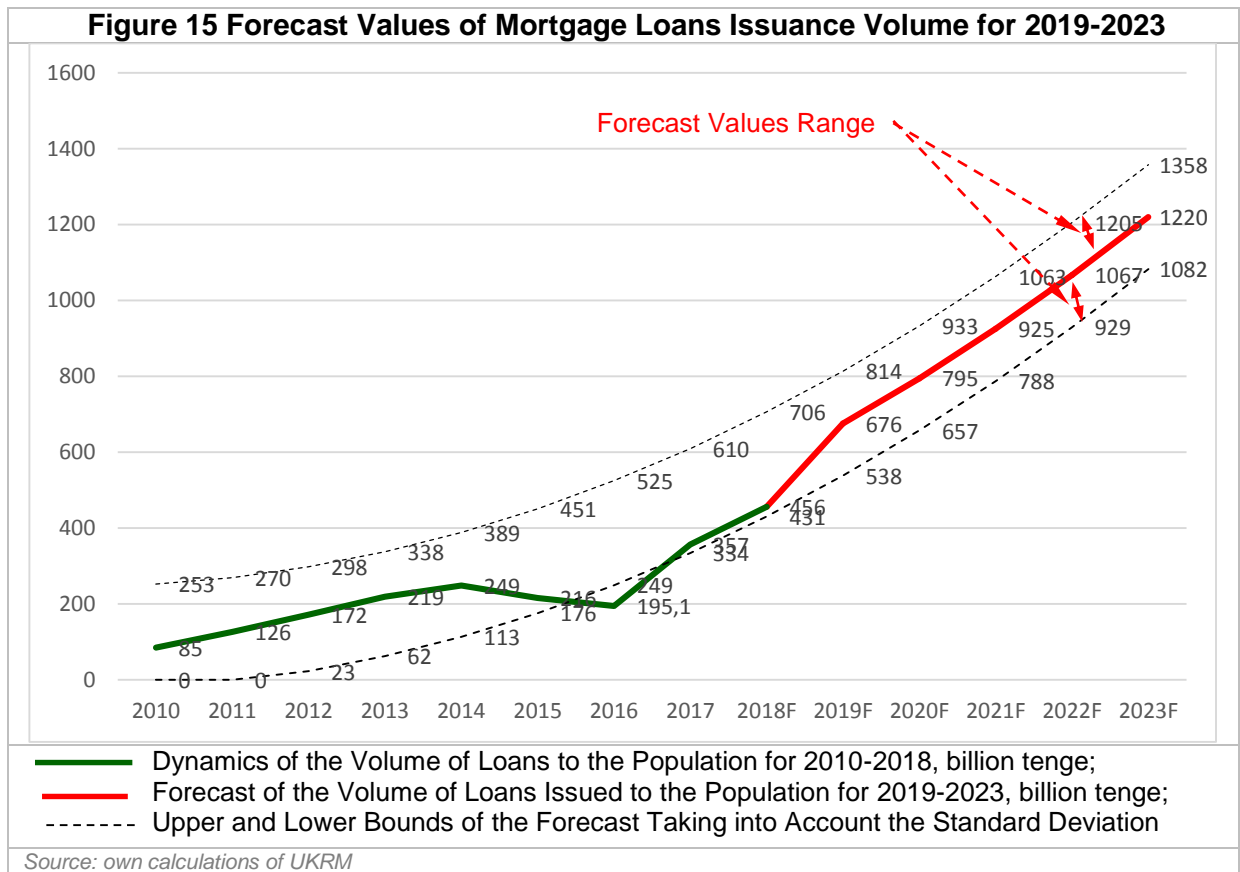
The volume of mortgage loans in the Republic of Kazakhstan for 2019-2023 can be predicted as follows:

Step 1: selection of the extrapolation function closest to the dynamic range. In this case, the most accurate function is polynomial, with the coefficient of determination $R^2 = 0.82$



Step 2: calculation of forecast values by solving the equation of the corresponding function. According to the equation of the polynomial function, the forecasted values of mortgage lending volumes for 2019-2023 with a probability of 82% will be in the following ranges (Figure 15):

- 2019 676 billion tenges (∓ 137 billion tenges²⁶);
- 2020: 795 billion tenges (∓ 137 billion tenges);
- 2021: 925 billion tenges (∓ 137 billion tenges);
- 2022: 1067 billion tenges (∓ 137 billion tenges);
- 2023: 1220 billion tenges (∓ 137 billion tenges);



While maintaining the ratio of share leaders in the volume of issuance, it is possible to predict the amount of the mortgage loans minus the share of the loans under the 7-20-25 Program and the HCSB's loans due to the differences in the target segments (Table 13):

Table 13 Forecast of the Issuance Volume Minus the Share of Loans under the 7-20-25 Program and the HCSB's Loans

	2018	2019	2020	2021	2022	2023
Forecast of the Mortgage Loans Volume in the Republic of Kazakhstan, billion tenge	456	676	795	925	1067	1220
Forecast of the Issuance Volume Minus the Share of Loans under the 7-20-25 Program ²⁷ and the HCSB's Loans ²⁸ due to the differences in the target segments, billion tenge	73	108	127	148	171	195

Source: own calculations of UKRM

²⁶ 137 billion tenges is the value of the standard deviation of the forecast values from the actual data (the value of the standard error inherent in the statistical forecast).

²⁷ As of 01 November 2018, the market share of loans issued under the 7-20-25 Program is 16%.

²⁸ As of 01 November 2018, the market share of HCSB was 67.7%.

Section II. Secondary mortgage lending market (repurchase of rights of claims on mortgage loans issued by STBs)

1. The potential of the secondary mortgage lending market

Within the framework of this desk study, under the "secondary mortgage lending market" we will understand the "mortgage loan market requirements" or "mortgage organizations redemption market for the rights of claims for mortgage loans of STBs". Let's highlight the levels of demand for a general idea of the potential of the mortgage loan refinancing market in the country:

- **The absolute potential of the market** for rights of claims on mortgage loans is the maximum (upper) limit of the market to which the current level of STBs demand for refinancing is aiming. In fact, the absolute potential of the mortgage loan refinancing market is equal to the volume of the total mortgage portfolio formed by the STBs at the end of the period;
- **Current market potential** - the volume of the STBs mortgage portfolio formed by the STBs for funding at the current date or subject to refinancing by mortgage organizations within the framework of housing programs for a certain period of time.
- **The current volume of rights of claims on mortgage loans repurchased by mortgage organizations** (the volume of loans repurchased by mortgage organizations) reflects the value of repurchased mortgage rights of claims for a certain period of time;
- **The volume of the unclaimed mortgage portfolio** represents the difference between the absolute and the current market potential. This situation is typical of "toxic" mortgage loans, loans with overdue debts of more than 90 days, or bad loans, the term of the debt for which has expired.
- **The scale of market opportunities (the scale of current demand)** - is the difference between the current potential and the current volume of repurchased claims.

Define each of these quantities of demand.

The absolute potential of the secondary mortgage lending market is equal to the aggregate volume of the STBs mortgage portfolio, which as of 01.10.2018, amounted to 1,205 billion tenge (fig. 16).

The current potential in practice is difficult to assess, since there is no official information from the STBs about the intention to sell one or another mortgage pool. Consequently, the assessment of the current market potential will be based on assumptions that, of the total mortgage portfolio of STBs, mortgage companies can consider for redemption mortgage loans for which there is no overdue debt, or for which the debt does not exceed 30 calendar days²⁹. Consequently, the current market potential can be defined as "the share of reliable mortgage loans in the structure of the STBs mortgage portfolio".

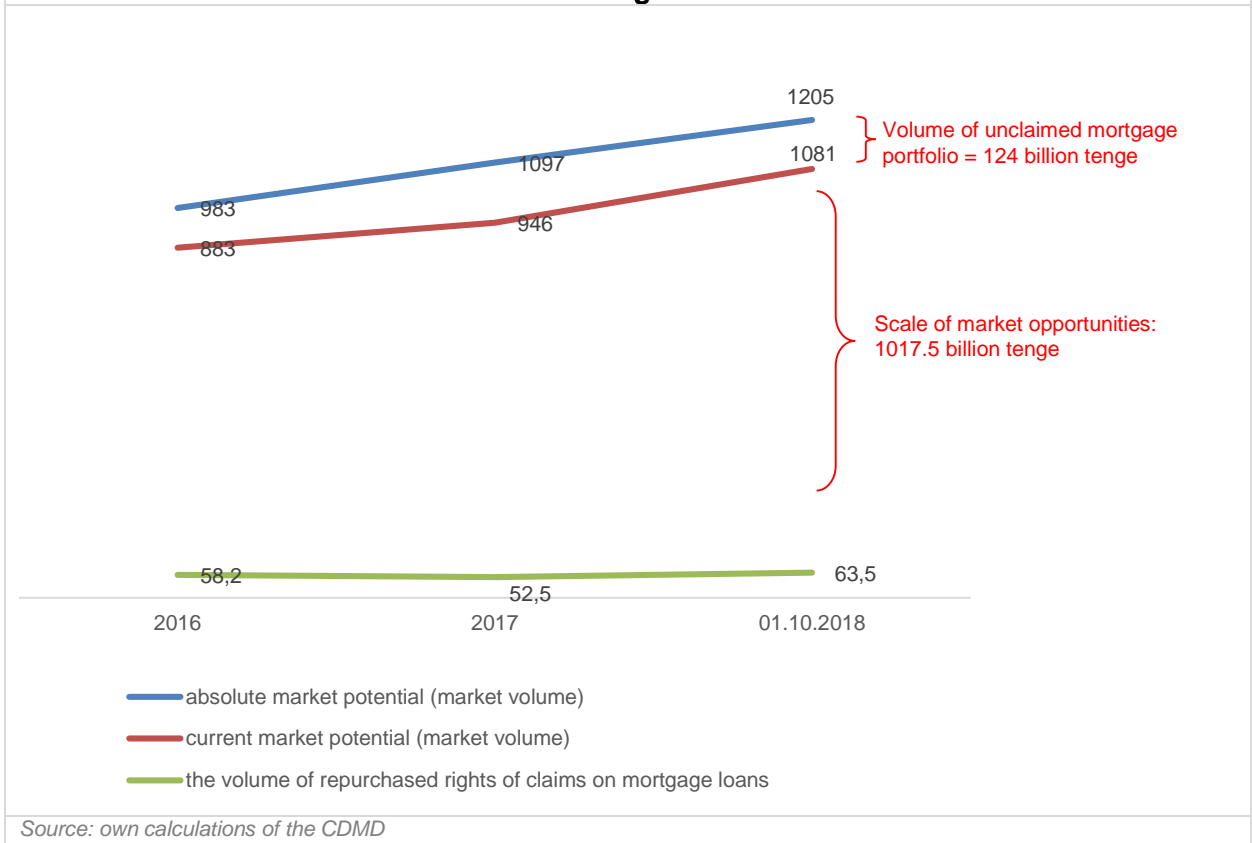
According to the report of the National Bank of the RK "The current state of the banking sector of the Republic of Kazakhstan as of October 01, 2018", the share of loans for which there is no overdue in the loan portfolio of the banking sector is 85,8%, the share of loans overdue from 1 to 30 days – 3,9% (as of September 01, 2018). These indicators can be taken to calculate the current potential of the mortgage loan refinancing market.

²⁹ Less the loans issued under the "7-20-25" program, the redemption of rights of claims for which is carried out by the MO "Baspana" under the relevant agreements with partner banks.

Thus, the current potential of the mortgage loan refinancing market is equal to 1,081 billion tenge.

The volume of the unclaimed mortgage portfolio is 124 billion tenge. According to the data of the report of the National Bank of the RK "Current status of the non-banking sector of the Republic of Kazakhstan as of October 01, 2018", the current volume of repurchased rights of claims on mortgage loans amounted to 63,5 billion tenge³⁰. Consequently, the scale of current demand can be estimated at 1017,5 billion tenge.

Fig.16 The potential of the secondary market of mortgage lending in the RK, billion tenge



2. Loan portfolio of mortgage organizations

There are three mortgage organizations in Kazakhstan:

- "Mortgage Organization "Kazakhstan Mortgage Company" JSC (100% state participation in authorized capital);
- "Mortgage Organization "Baspana" JSC (100% state participation in the authorized capital);
- "Mortgage Organization "Express Finance" JSC.

The volume of the loan portfolio of mortgage organizations as of 01.10.2018 amounted to 212,2 billion tenge. The increase in relation to 01.01.2018 is amounted to 21,6%.

29,9% (63,5 billion tenge) of the loan portfolio of mortgage organizations are represented by long-term loans and overdue loans to customers.

³⁰ The data of the mortgage organizations loan portfolio on indicators "Long-term loans granted to customers" and "Overdue customers on loans" as of 01.10.2018

The share of “MO “KMC” JSC in the volume of long-term loans of mortgage organizations is 82% (51,5 billion tenge).

3. The quality of the loan portfolio of mortgage organizations

The specific weight of loans with overdue loans in the total loan portfolio of mortgage organizations as of 01.10.2018 is amounted to 14,2% (or 28,5 billion tenge). Loans with overdue loans with a maturity of more than 90 days at the reporting date amounted to 6,5 billion tenge or 3,2% of the loan portfolio (table 14).

Table 14 –The quality of the loan portfolio of mortgage organizations

Indicator name	01.01.2018		01.10.2018		Growth, %
	billion tenge	share, %	billion tenge	share, %	
Loan portfolio (principal debt)	174,5	100	200,2	100	14,7
Loans for which there is no overdue debt on principal and/or accrued interest	155,3	89,0	171,8	85,8	10,6
Loans with overdue debts, including:	15,2	8,7	28,5	14,2	87,5
– Loans with overdue debts from 1 to 30 days	9,9	5,7	17,0	8,5	71,7
– Loans with overdue debts from 31 to 60 days	2,3	1,3	3,4	1,7	47,8
– Loans with overdue debts from 61 to 90 days	0,7	0,4	1,6	0,8	128,6
– Loans with overdue debts over 90	2,2	1,3	6,5	3,2	195,5
Provisions for loans under IFRS, including:	4,1	2,5	6,2	3,1	51,2
– provisions for loans with overdue debt over 90 days	1,6	0,9	4,0	2	150
Coverage ratio of loans with overdue debts of provisions on loans,%	27		21,8		
Coverage ratio of loans with overdue debts over 90 days with provisions for them,%	72,7		61,5		

Source: National Bank of the Republic of Kazakhstan

As can be seen from table 16, the quality of the loan portfolio deteriorated, the share of overdue debts increased, in particular, the increase in “toxic” loans in the loan portfolio of mortgage organizations was 195,5% since the beginning of the year.

At the reporting date, the amount of formed provisions amounted to 6,2 billion tenge. The share of formed provisions in the loan portfolio of mortgage organizations is 3,1%. The amount of provisions for loans with overdue debt over 90 days amounted to 4 billion tenge or 2% of the loan portfolio. The coverage ratio of loans with overdue debt over 90 days of provisions for them amounted to 61,5%.

Main conclusions

In the primary mortgage lending market, as of 01.10.2018, the situation was as follows:

1. The aggregate mortgage portfolio of the RK amounted to 1 262,2 billion tenge, including: the mortgage portfolio of STBs - 1205 billion tenge (96%), the mortgage portfolio of mortgage organizations – 57,2 billion tenge (4%).
2. There has been an increase in mortgage lending from the beginning of the year, as well as over the past three years.
3. More than half of the total mortgage portfolio falls on the cities of Astana and Almaty.
4. Mortgage loans were issued to the population in the amount of 341,2 billion tenge, the share of loans issued in 2018 in the total mortgage portfolio of the country is 28%.
5. The average monthly disbursement amount is 38 billion tenge, therefore, by the end of 2018, mortgage issuance is expected to increase to 456 billion tenge.
6. The weighted average lending rate amounted to 9,4%.
7. The level of debt load on the mortgage portfolio per 1 economically active resident of the country amounted to 132,7 thousand tenge. The highest level of debt load in the Aktobe and Mangystau regions, the cities of Almaty and Astana.
8. The total housing stock of the country is amounted to 347,4 million sq. m. The provision of population with housing – 21,6 sq. m.
9. According to the International gradation of Housing Affordability - “the purchase of housing in Kazakhstan is seriously hampered.”
10. Mortgage loans on the country’s market are offered by 12 STBs out of 28, 7 of them offer mortgages under the “7-20-25” program: Halyk Bank, ATF Bank, Tsesna Bank, Bank Center Credit, RBC Bank, Forte Bank, House construction savings bank .
11. As of October 30, 2018, in the framework of the implementation of the “7-20-25” program, the STBs has reviewed 3989 applications for a mortgage loan. Of these, 2658 applications for a loan in the amount of 31,8 billion tenge were approved. According to the MO "Baspana", 60% of borrowers pay less than 100 thousand tenge on a mortgage per month. Only 6% of borrowers received the maximum possible amount (20 million tenge - in the cities of Astana, Almaty, Atyrau, Aktau and Shymkent, 12 million - in other regions). The bulk of borrowers received a loan in the amount of 10 to 15 million tenge.
12. The STBs offers for their own mortgage products can be differentiated by interest rate, down payment, term of the mortgage and cost of the loan. The most attractive terms in terms of interest rates are offered by “House Construction savings bank” JSC – 9,3% per annum (AERR - 12.8%). Relatively attractive conditions in terms of the initial contribution are offered by “Altyn Bank” JSC, “ATF Bank” JSC, “Halyk Savings Bank of Kazakhstan” JSC - 20% of the cost of the loan. Do not limit customers in the cost of the loan - "Tsesna Bank" JSC, "Halyk Savings Bank of Kazakhstan" JSC, which is an attractive condition for customers who intend to buy expensive housing at a cost.
13. 48% of the mortgage market belongs to HCSB. HCSB is the only bank whose portfolio consists 100% of housing loans provided to the public. At the same time, the share of HCSB in the volume of mortgage loans in September 2018 was 67.7%.

14. 52% of the mortgage market is divided between 11 banks - Halyk Bank, Bank Center Credit, Sberbank of Russia, Forte Bank, and ATF. The share of mortgages in the loan portfolio of these banks does not exceed 16%. The share of banks in the volume of mortgage issuance, taking into account the issuance of loans under the program "7-20-25" - 32.3%, excluding loans under the program "7-20-25" - 16%.
15. The forecasted values of mortgage loans for 2019-2023 with a probability of 82% will correspond to the following values:
 - 2019: 676 billion tenge;
 - 2020: 795 billion tenge;
 - 2021: 925 billion tenge;
 - 2022: 1067 billion tenge;
 - 2023: 1220 billion tenge.
16. The forecasted values of the mortgage loans for 2019-2023, less the share of loans issued under the program "7-20-25" and loans of "HCSB" JSC will be:
 - 2019: 108 billion tenge;
 - 2020: 127 billion tenge;
 - 2021: 148 billion tenge;
 - 2022: 171 billion tenge;
 - 2023: 195 billion tenge;

In the secondary mortgage lending market:

1. The current potential of the market requirements for mortgage loans in the country can be estimated at the market in 1081 billion tenge.
2. The total amount of redeemed rights of claims on mortgage loans amounted to 63,5 billion tenge, which is 6% of the market.
3. The scale of market opportunities is 1017,5 billion tenge.

Appendix 1

A method for constructing a matrix “The loan market - the mortgage loan market”

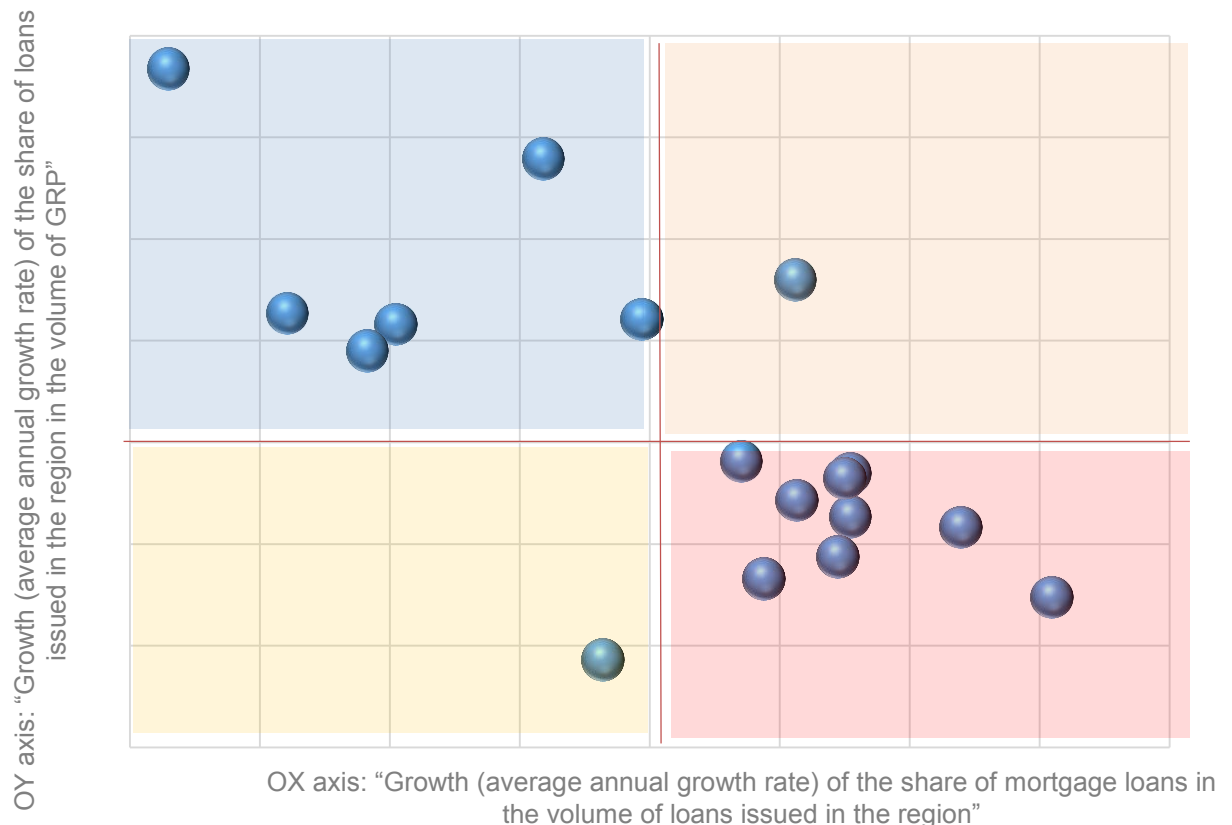
The “Loan market — Mortgage loan market” matrix shows how, on the background of growth/decline in lending as a segment of the economy contributing to the development of GDP, the subsegment of mortgage loans grows/declines in a regional context.

The matrix is built in two axes:

- OX axis: “Growth (average annual growth rate) of the share of mortgage loans in the volume of loans issued in the region”.
- OY axis: “Growth (average annual growth rate) of the share of loans issued in the region in the volume of GRP”

The matrix is constructed in the form of a bubble chart, where the value of bubbles along the axes is the corresponding values of growth across regions, and the diameter of the bubble is the share of the region in the total mortgage portfolio of the country.

The matrix in the form of a bubble chart



Separation points:

- OX axis: the average value for all regions or the republican value for the indicator “Growth (average annual growth rate) of the share of mortgage loans in the volume of loans issued”.
- OY axis: the average value for all regions or the republican value for the indicator “Growth (average annual growth rate) of the share of loans issued in the volume of GDP/GRP”

Matrix squares:

- blue square: “high rates of development of the lending segment - low rates of development of the mortgage subsegment”;
- green square: “high rates of development of the lending segment - high rates of development of the mortgage subsegment”;
- yellow square: “low rates of development of the lending segment - low rates of development of the mortgage subsegment”;
- red square: “low rates of development of the lending segment - high rates of development of the sub-egment of the mortgage”.

Calculation table for matrix construction (for 9 months of 2018)

	The share of loans issued by banks in the volume of GDP (GRP) for 9 months., %				Share of IC in the volume of loans issued by banks for 9 months, %				The region's share in total mortgage lending, % (Size of round)
	2016	2017	2018	Average annual growth rate, % (OY axis)	2016	2017	2018	Average annual growth rate, % (OX axis)	
Separation points (average for all regions)				24,7				40,9	
Akmola	7,2	13,5	12,9	34,2	3,7	4,1	6,6	32,3	2,5
Aktobe	9,2	14,0	14,2	24,4	5,8	7,3	8,2	18,9	5,6
Almaty	4,6	7,7	7,8	30,1	3,2	3,4	5,6	32,0	1,8
Atyrau	3,5	4,5	4,4	13,0	3,6	3,3	4,4	10,4	3,4
West-Kazakhstan	8,1	13,2	15,6	38,4	3,9	5,2	4,9	12,2	5,9
Zhambyl	8,5	13,8	13,6	26,7	2,4	3,0	6,6	65,2	1,9
Karaganda	6,9	9,8	9,7	18,3	4,4	5,9	6,8	23,5	3,4
Kostanay	7,2	11,7	11,8	28,1	2,4	3,9	5,0	43,7	5,7
Kyzylorda	9,2	13,7	14,5	26,0	3,2	5,0	7,5	52,6	3,0
Mangystau	8,3	10,5	11,3	16,5	1,6	3,3	3,3	43,6	1,5
South-Kazakhstan	6,3	8,8	8,4	15,9	9,4	6,8	10,5	5,9	4,4
Pavlodar	11,6	10,2	10,3	-6,0	2,4	4,7	6,4	62,6	3,8
North-Kazakhstan	12,5	16,8	16,8	16,1	2,4	5,2	6,5	64,8	2,2
East-Kazakhstan	7,4	11,0	41,4	135,9	3,2	3,0	3,5	4,7	4,0
Astana c.	74,5	63,6	77,9	2,3	0,5	1,2	1,1	44,1	26,3
Almaty c.	30,9	20,4	17,2	-25,3	2,3	9,2	13,1	137,8	24,7

Appendix 2

Labor force (economically active population) in the Republic of Kazakhstan as of September 2018, thousand people

Name of region	2017		2018				
	IV quarter	year	I quarter	II quarter	III quarter	IV quarter	year
Republic of Kazakhstan	8 980,6	9 027,4	9 007,0	9 078,9			
Akmola	424,6	428,9	428,7	425,1			
Aktobe	438,3	429,5	435,2	438,4			
Almaty	1 029,0	1 037,5	1 021,3	1 043,4			
Atyrau	320,8	315,7	311,0	314,4			
West-Kazakhstan	334,4	336,6	334,9	334,2			
Zhambyl	527,9	531,1	528,0	530,1			
Karaganda	691,4	685,0	676,9	677,6			
Kostanay	514,1	517,1	507,8	511,7			
Kyzylorda	346,5	347,4	344,7	351,3			
Mangystau	291,8	292,0	278,4	281,7			
South Kazakhstan	1 160,0	1 197,0	-	-			
Pavlodar	413,1	416,3	409,2	414,6			
North-Kazakhstan	306,9	310,3	306,8	314,1			
Turkestan			802,2	823,0			
East-Kazakhstan	722,2	722,3	712,4	714,9			
Astana c.	521,3	521,5	531,8	531,4			
Almaty c.	938,4	939,2	959,5	959,7			
Shymkent c.			418,3	413,3			

Employed population in the RK as of September 2018, thousand people

Name of region	2017		2018				
	IV quarter	year	IV quarter	year			
Republic of Kazakhstan	8 541,3	8 585,2	8 567,4	8 637,5			
Akmola	404,1	408,3	408,3	404,8			
Aktobe	417,3	408,9	414,3	417,5			
Almaty	980,6	988,4	972,4	994,2			
Atyrau	305,0	300,1	295,8	299,0			
West-Kazakhstan	318,1	320,2	318,5	318,0			
Zhambyl	502,2	505,3	502,4	504,1			
Karaganda	659,2	652,4	645,4	646,7			
Kostanay	489,6	492,1	483,7	487,3			
Kyzylorda	329,9	330,6	328,1	334,5			
Mangystau	277,5	277,8	265,0	268,1			
South Kazakhstan	1 098,7	1 134,9	-	-			
Pavlodar	393,2	396,4	389,6	395,1			
North-Kazakhstan	291,9	295,2	291,9	298,9			
Turkestan			760,3	779,8			
East-Kazakhstan	687,4	687,6	678,0	680,5			
Astana c.	497,4	497,5	507,2	507,3			
Almaty c.	888,9	889,6	909,9	910,1			
Shymkent c.			396,7	391,8			

Population of the Republic of Kazakhstan at the beginning of the year, people

	2017	2018
Whole population		
Republic of Kazakhstan	17 918 214	18 157 337
Akmola	734 369	738 942
Aktobe	845 679	857 711
Almaty	1 983 465	2 017 277
Atyrau	607 528	620 684
West Kazakhstan	641 513	646 927
Zhambyl	1 115 307	1 117 220
Karaganda	1 382 734	1 380 538
Kostanay	879 134	875 616
Kyzylorda	773 143	783 156
Mangystau	642 824	660 317
South Kazakhstan	2 878 636	2 929 196
Pavlodar	757 014	754 854
North Kazakhstan	563 300	558 584
East Kazakhstan	1 389 568	1 383 745
Astana c.	972 692	1 030 577
Almaty c.	1 751 308	1 801 993
Urban population		
Republic of Kazakhstan	10 250 102	10 423 569
Akmola	348 692	348 685
Aktobe	531 748	545 312
Almaty	474 717	464 453
Atyrau	291 815	296 902
West Kazakhstan	324 459	333 263
Zhambyl	448 670	443 896
Karaganda	1 098 499	1 099 146
Kostanay	468 822	472 807
Kyzylorda	340 834	346 193
Mangystau	273 540	269 243
South Kazakhstan	1 302 040	1 341 014
Pavlodar	534 667	533 477
North Kazakhstan	249 294	250 850
East Kazakhstan	838 305	845 758
Astana c.	972 692	1 030 577
Almaty c.	1 751 308	1 801 993
Rural population		
Republic of Kazakhstan	7 668 112	7 733 768
Akmola	385 677	390 257
Aktobe	313 931	312 399
Almaty	1 508 748	1 552 824
Atyrau	315 713	323 782
West Kazakhstan	317 054	313 664
Zhambyl	666 637	673 324
Karaganda	284 235	281 392
Kostanay	410 312	402 809
Kyzylorda	432 309	436 963
Mangystau	369 284	391 074
South Kazakhstan	1 576 596	1 588 182
Pavlodar	222 347	221 377



North Kazakhstan	314 006	307 734
East Kazakhstan	551 263	537 987

Source: Committee on Statistics, MNE of the RK