



**LOAN DEBT BURDEN OF THE POPULATION IN CONSTITUENT
ENTITIES OF THE RUSSIAN FEDERATION**

**ÓNUS DA DÍVIDA DE EMPRÉSTIMOS DA POPULAÇÃO NAS
ENTIDADES CONSTITUINTES DA FEDERAÇÃO RUSSA**

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ABSTRACT

Background: In an unstable macroeconomic situation, the high loan debt burden of the population creates significant social risks associated with the declining well-being of citizens. For the timely development of measures to prevent and minimize these risks, it is necessary to use a system of indicators to adequately assess the debt load burden of the population both in the country as a whole and in certain regions.

Objective: The article aims to assess the debt burden of the population in the constituent entities of the Russian Federation based on the PTI indicator (pay-to-income ratio means the ratio of the borrower's monthly payment on all the loans (principal debt and interest) to their average monthly income).

Methods: The main research methods are as follows: generalization and analysis, grouping, comparative and correlation analysis.

Results: The authors have developed a methodical approach to calculating the PTI indicator based on open information sources. According to this approach, the PTI indicator has been calculated for regions of the Russian Federation for the first time. The authors have assessed this indicator for the total debt burden of the population, including mortgages and other loans. Based on the analysis, the relationship between the debt burden and income of the population, the debt burden of the population on mortgage loans, and housing affordability have been identified.





Keywords: Loan exposure; Loan debt burden; Household debt load in regions; PTI; Pay-to-income ratio.

RESUMO

Antecedentes: Numa situação macroeconómica instável, o elevado endividamento da população cria riscos sociais significativos associados ao declínio do bem-estar dos cidadãos. Para o desenvolvimento tempestivo de medidas de prevenção e minimização desses riscos, é necessário utilizar um sistema de indicadores que avalie adequadamente a carga de dívida da população tanto no país como um todo quanto em determinadas regiões.

Objetivo: O artigo visa avaliar o peso da dívida da população nas entidades constituintes da Federação Russa com base no indicador PTI (relação pay-to-income significa a proporção do pagamento mensal do mutuário em todos os empréstimos (dívida principal e juros) ao seu rendimento médio mensal).

Métodos: Os principais métodos de pesquisa são: generalização e análise, agrupamento, análise comparativa e de correlação.

Resultados: Os autores desenvolveram uma abordagem metódica para calcular o indicador PTI com base em fontes abertas de informação. De acordo com essa abordagem, o indicador PTI foi calculado pela primeira vez para regiões da Federação Russa. Os autores avaliaram este indicador para o peso total da dívida da população, incluindo hipotecas e outros empréstimos. Com base na análise, identificou-se a relação entre o peso da dívida e a renda da população, o peso da dívida da população em empréstimos hipotecários e a acessibilidade da habitação.

Palavras-chave: Exposição a empréstimos; Carga da dívida dos empréstimos; Carga da dívida dos agregados familiares nas regiões; PTI; Rácio de pagamento/rendimento.

1 INTRODUCTION

Currently, the loan exposure of the Russian population is a rather serious problem. According to the Bank of Russia, as of October 1, 2019, 54% of the employed population (39.5 million people) had loans (Mereminskaya et al., 2019). A third of borrowers in 2019 had a pay-to-income ratio (PTI) greater than 60% (Vedomosti, 2019). According to the National Bureau of Credit Histories, as of October 1, 2019, the PTI value was 28.8% for the population with incomes up to 20,000 rubles; 24.6% for people with incomes from 20,000 to 40,000 rubles; 20.6% for people earning over 40,000 rubles. Consequently, the least protected groups of the population have a higher debt burden, which causes social risks associated with the deterioration of their well-being (Mereminskaya et al., 2019).





For the timely development of measures to prevent and minimize these risks, an adequate system of indicators is needed. The currently used DTI (debt-to-income) indicator, along with the simplicity of calculation, does not allow reliably assessing the borrower's loan debt burden due to the fact that it does not consider an interest rate, a schedule of periodic blended loan payments showing the amount of principal (loan body) and the amount of interest. Accordingly, the actual level of credit burden might differ significantly with the same DTI for different borrowers. For a more reliable assessment of the loan debt burden, it is proposed to calculate the PTI for constituent entities of the Russian Federation. Currently, this indicator is not published by regulators on a regular basis. This article is the first to calculate the PTI indicator for regions of the Russian Federation and is based on open information sources.

2 LITERATURE REVIEW

The study results indicate a relationship between the incomes of the population and their loan exposure. A.M. Aizcorbe, A.B. Kennickell, and K.B. Moore (2003) believe that low-income households are more inclined to increase their debt and credit burden. According to D. Krueger and F. Perri (2005), when income inequality increases, there is no corresponding consumption inequality. This can be explained by the fact that high-income households have a higher savings rate (Dyner et al., 2004).

M. Christen and R. Morgan (2005) established that there was a direct relationship between income inequality (calculated by the Gini coefficient), debt, and credit burden. Thus, an increase in income inequality makes low-income households get loans in order to match the consumption level of high-income households (Yakushev, 2019).

The permanent income theory of consumption explains why growing household income inequality leads to an increase in their debt: when income decreases, individuals use debt for consumption smoothing (Friedman, 1957). V. Perry (2008) provided evidence in favor of this theory. The scholar determined that "losing" households increase their debt in order to maintain a normal standard of living during an economic boom.





E.M. Lugachev found that the relationship between household income inequality and debt burden was quadratic. As income inequality rises in the region, the loan debt burden increases at a decreasing rate to 0.41. Then it decreases and causes a further increase in inequality (Lugachev, 2014).

The scholars determined the relationship between the mentality and credit behavior of the population. According to P. Heidhues and B. Koszegi (2010), those who prefer short-term loans to larger debts use credit cards more often.

In addition, S. Meier and C. Sprenger studied the behavior of borrowers in Boston and revealed that people "living for the day" were more likely to get a loan. Considering the current credit restrictions, available income, and socio-demographic features, they are inclined to get a credit card and have a higher level of debt (Meier & Sprenger 2010).

R.V. Batashev and A.A. Tregubova considered the regional aspects of the debt burden and established a high level of differentiation of the constituent entities of the Russian Federation in terms of the distribution of their credit debt. According to the authors, the higher the nominal income in a region, the lower the credit burden on average (according to "the ratio of the borrower's total debt on loans and borrowings to the borrower's annual income"), and the higher the share of the economically active population with loans (Batashev & Tregubova, 2016).

M.A. Selivanova and Yu.M. Ilyinykh (2018) regarded the low incomes of the population as the main reason for the high debt burden of certain regions. G.V. Belekhova's study indicates that the financial behavior of the Russian population is significantly influenced by the number of children and disabled relatives. These factors reduce the material possibilities of families and, accordingly, their financial actions (Belekhova, 2017). In another study, R.V. Batashev (2016) found that an increase in the loan debt burden in Russia was a factor in the growth of household consumer spending. Thus, studies conducted in Russia confirm that the least solvent segments of the population have to take on a higher credit burden in order to maintain a certain level of consumption. This is necessary to maintain current life activity and meet certain social standards.

Some scholars, in particular, M.P. Sarunova, N.B. Berikova, D.V. Mandzhieva, and S.B. Harlaksheeva (2018), claimed that the high loan debt burden of the population in





certain regions was conditioned by the low level of financial literacy. A similar viewpoint is expressed by V.B. Bulatova, I.A. Yakovleva, and D.Y. Burlov based on the results of monitoring the financial literacy of the population in the Republic of Buryatia. The authors believed that the main efforts in this area should focus on socially vulnerable groups of the population (Bulatova et al., 2017).

A number of studies (especially the scientific work of O.E. Kuzina and N.A. Krupensky (2018)) assess the overall loan debt burden of the Russian population. Although the loan debt burden of the Russian population is one of the lowest in the world, the authors emphasized that the share of troubled retail loans was higher than in countries with a higher debt burden. According to the authors, this is due to the fact that the structure of retail loans in Russia is dominated by loans for consumer goods taken out for a short period and at a high rate. Therefore servicing relatively small loans creates a larger burden on the family budget in Russia than in Europe and the United States. In conformity with the study, 31% of Russian borrowers spent half of their family's income or more on loan services in 2012 (Kuzina, 2011). In this regard, the authors claimed that the increase in bank retail lending would not be sustainable without banks changing their business models or transiting from short-term consumer loans to long-term loans secured by real estate or other assets.

S.A. Donec and A.A. Ponomarenko studied the loan debt burden of the Russian population in relation to current debt payments to their income. They discovered that this was an important indicator of preventing financial crises. In addition, it is convenient for cross-country comparisons. The main issue with using this indicator is the lack of exact values in officially published information, as well as the need to use assumptions that can distort the calculation of this indicator (Donec & Ponomarenko, 2017).

As mentioned above, the loan debt burden of the Russian population has regional specifics. This article assesses the loan exposure of the population in the constituent entities of the Russian Federation in terms of the ratio of current payments on debt to their income.

3 METHODS





The main indicator used in Russia to determine the loan debt burden of the population is DTI, i.e. the ratio of the borrower's total debt on loans and borrowings to the borrower's annual income. Along with the simplicity of calculating this indicator, it does not allow a reliable assessment of the borrower's credit burden due to the fact that it does not consider an interest rate, a schedule of periodic blended loan payments showing the amount of principal (loan body) and the amount of interest. Accordingly, the actual level of credit burden might differ significantly with the same DTI for different borrowers.

A more accurate assessment of loan debt burden is given by the PTI indicator defined as the ratio of the borrower's monthly payment on all loans (principal and interest) to their average monthly income. At the meso- and macrolevels, the main problem is the incompleteness of statistical data regarding individual payments on loans, both on the principal debt and on the accrued interest.

An additional indicator showing the level of loan debt burden is the share of past-due payments defined as the ratio of overdue debt on loans to the total amount of debt on loans. As a rule, an increase in this indicator entails an increase in the credit burden. Tracking the dynamics of this indicator can also lead to incorrect conclusions since banks periodically write off overdue debts for losses and transfer them to collectors. This decreases the level of past-due payments but the level of debt burden might remain the same.

Another problem is that the loan debt burden is calculated per borrower, while loan repayments most often cover the entire household. There are no data on households' credit burden in official statistics.

In the European Union, the following indicators are used as criteria for assessing the high debt ratio of households (D'Alessio & Lezzi, 2013, p. 8):

- More than 30% (or even 50%) of the gross monthly household income is spent on payments on secured and unsecured loans;
- Over 25% of the household's gross monthly income is spent on repayments on unsecured loans;
- After paying loans, the remaining income is below the poverty line;





– The household has a delay in paying loans or paying other obligatory payments for two months or more;

– The household has more than four loans;

– Household members consider loan repayments to be a heavy burden.

Within the framework of this article, the PTI indicator was calculated for the constituent entities of the Russian Federation.

To calculate this indicator, we used the following data:

1. Data of the Central Bank of Russia (Tsentrallyi bank, 2020) on indicators:

– Loans in rubles and foreign currency (including mortgage loans) (by regions of the Russian Federation);

– Overdue debt on loans in rubles and foreign currency (including mortgage loans) (by regions of the Russian Federation);

– Weighted average term for housing mortgage loans granted to residents in rubles (by regions of the Russian Federation);

– Weighted average rate on housing mortgage loans granted to residents in rubles (by regions of the Russian Federation);

2. Data from the KUAP.RU website (KUAP.RU, 2020) (on the financial statements of banks) in terms of:

– Interest income from lending to individuals;

3. Data of the National Bureau of Credit Histories on the indicator (Natsionalnoe byuro, 2020):

– The average term of a consumer loan (by regions of the Russian Federation).

4. The Federal Statistics Service in terms of the indicator:

– Per capita income (by regions of the Russian Federation).

All loan repayments were divided into two groups: mortgage loans and other loans.

To calculate payments on mortgage loans, we used data from the Central Bank of Russia on mortgage loan balances in various regions. To attain this end, we considered the average value per year. In addition, we used the weighted average rate on mortgage loans granted to residents in rubles. This rate was reduced to the "effective value" taking into account the monthly accrued interest according to the following formula:





$$r = (1 + i/n)^n - 1,$$

where r is an annual rate, n is the number of periods per year.

We used the average value for 2019. There is no data on the actual cost of mortgage loans but we can refer to the rate on loans issued that year since a significant part of mortgage loans issued earlier at higher rates were refinanced. To calculate principal repayments, we used the weighted average term for mortgage loans granted to residents (average for 2019), as well as the assumption that the principal debt is repaid in equal installments over the entire loan term.

To calculate payments on other loans, we used data from the Central Bank of Russia on other loan balances in various regions (balance on all loans net of housing mortgage loans). We considered the average value per year. To calculate payments on other loans, we referred to the interest income of banks from lending to individuals in 2019 cleared of income from residential mortgage lending. Such interest incomes were distributed by regions in proportion to the average balance on other loans in 2019. To calculate principal payments, we used the weighted average term for consumer loans for Q2 2018 (data from the National Bureau of Credit Histories) (for later dates, there are no values for this indicator by regions) provided to residents (average value for 2019), as well as the assumption that the principal debt is repaid in equal installments during the entire term of the loan.

Due to the irregular publication of data from individual sources, the PTI indicator was calculated only for 2019.

To calculate an income per capita, quarterly data from the Federal Statistics Service were used and the average annual value was calculated.

4 RESULTS

4.1 ANALYSIS OF PTI FOR MORTGAGE LOANS





The calculations show that the average value of the PTI indicator for mortgage loans throughout Russia amounted to 1.79%. The burden of residential mortgage loans in total payments on loans varies across different regions. The coefficient of variation for the sampling was 34%. The highest indicator was recorded in the Chuvash Republic, i.e. 3.5% (Figure 1).

In 2019, mortgages accounted for 43% of individual loans and 22% of the total volume of household payments on all loans. This testifies to the insufficient distribution of mortgage lending among individuals.

In addition, we assessed the impact of housing affordability on the mortgage lending market. For this, we used the indicator "Number of years required to pay for a 60 m² apartment" in 2019, calculated according to the RIA Ranking methodology (RIA Rating, 2020).

As a result, this indicator and the ratio of payments on a mortgage loan have an inverse relationship to household income: with an increase in housing affordability, the loan debt burden on mortgage loans also increases. The correlation coefficient was -0.47, which is close to the lower limit of the average dependence between variables.

Then we divided all the regions into groups depending on the affordability of housing (Table 1). For each region, we calculated the average values of the PTI index for mortgage loans.

Based on the grouping of regions, we have revealed that if the number of years required to purchase a house is more than 10, the credit burden on mortgage loans decreases and is 0.5% of income per household on average.



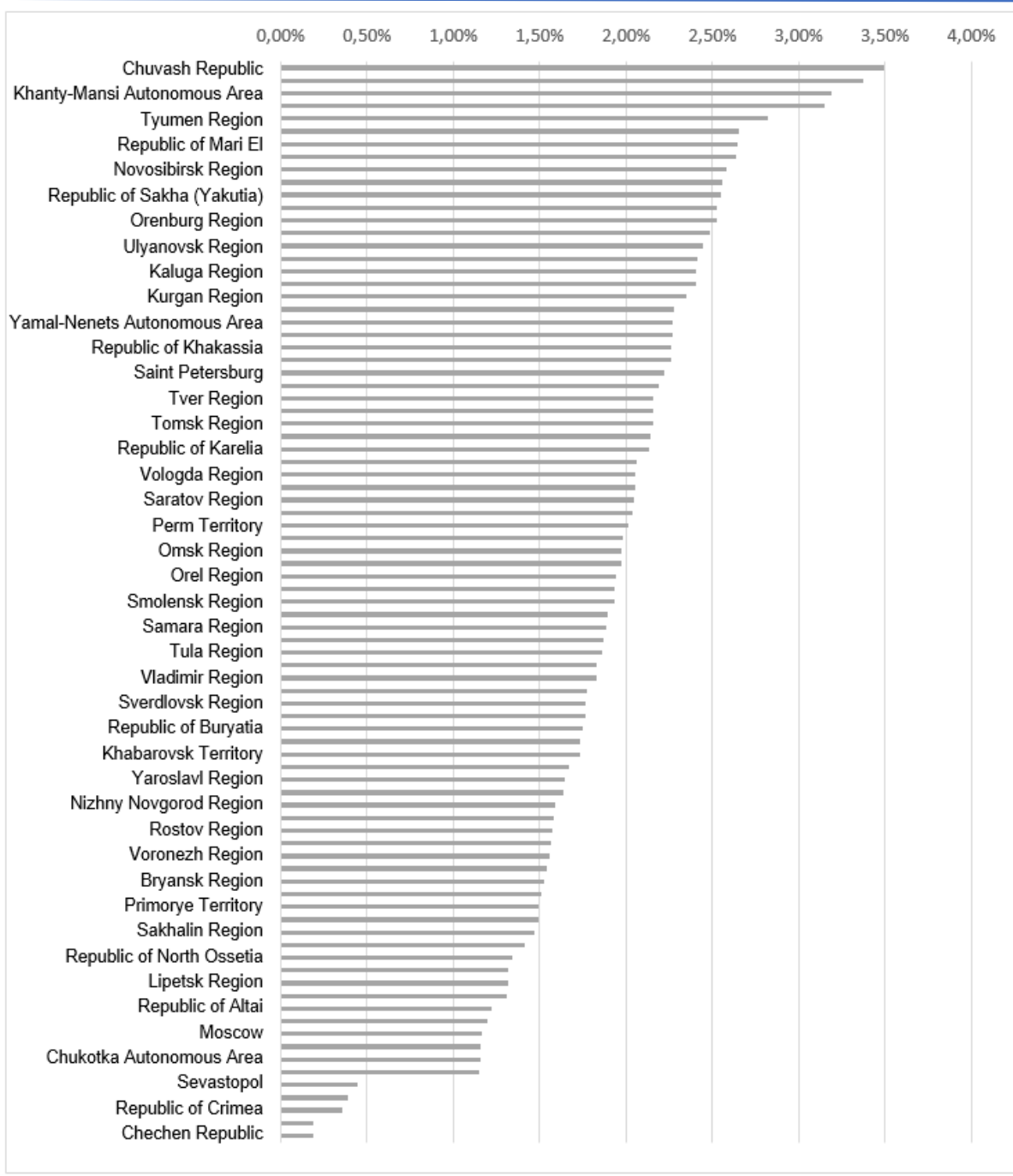


Figure 1. The ratio of payments on mortgage loans to household income

Table 1. The PTI level (mortgage loans only) by regions depending on housing affordability





Groups of regions by the level of housing affordability in accordance with the RIA methodology	Average PTI on mortgage loans
up to 3 years inclusive	1.92%
from 3 to 4 years inclusive	2.30%
from 4 to 5 years inclusive	1.99%
from 5 to 6 years inclusive	1.97%
from 6 to 6.8 years inclusive	2.27%
from 6.9 to 9.9 years inclusive	1.59%
from 10 years	0.34%

The next period is 6.9 years. Thus, 11 out of 15 regions with a term from 6.9 to 10 year has the credit burden below the national average. Only in four regions this value exceeds the limit. On the contrary, regions have the highest level of credit burden in groups with terms from 3 to 4 years and from 6 to 6.8 years.

Thus, it can be assumed that the credit burden on mortgage loans decreases when the term exceeds 6.8 years.

In general, the correlation coefficient between the affordability of housing according to the RIA Ranking methodology and the share of unpaid mortgage loans in the total debt of the population amounted to -0.42, which indicates a rather low dependence. At the same time, regions with the largest share of mortgage loans in the total debt of the population are mainly among the constituent entities with relatively high incomes of the population and relatively high affordability of housing. Regions with minimum values are characterized by relatively low household incomes and low housing affordability (Table 2).

Table 2. Leader and outsider regions in terms of the indicator "The share of mortgage loans in the structure of overall household debt"

Constituent entity	Share of mortgages in the total loan	Share of mortgage loans in the total debt of the population	Average income per capita in 2019,	Housing affordability according to the RIA





	payments of the population	as of January 1, 2020	thousand rubles/month	Ranking methodology, years
Regions with the largest share of mortgage loans in the structure of overall household debts to credit institutions				
Yamal-Nenets Autonomous Area	33%	54%	84,365	1.4
Khanty-Mansi Autonomous Area	32%	53%	53,399	2.3
Chuvash Republic (Chuvashia)	29%	53%	20,121	5.3
Republic of Sakha (Yakutia)	28%	50%	45,453	4.0
Saint Petersburg	27%	50%	47,465	4.5
Nenets Autonomous Area	26%	47%	81,234	2.6
Average for a group of regions	29%	51%	55,339	3.4
Regions with the lowest share of mortgage loans in the structure of overall household debts to credit institutions				
Karachayevo-Circassian Republic	16%	32%	19,070	9.7
Republic of Crimea	15%	32%	22,278	10.0
Republic of Adygea (Adygea)	14%	29%	29,496	7.9
Republic of Altai	11%	23%	20,515	6.8
Chechen Republic	6%	17%	24,209	10.5
Republic of Ingushetia	5%	17%	16,720	7.2
Average for a group of regions	11%	25%	22,048	8.7

In general, there is a low level of unpaid mortgage loans, which on average amounted to 1.0% in Russia as of January 1, 2020. This indicates that both banks and the population take a responsible approach to the use of this financial instrument. A relatively high value of unpaid mortgage loans was recorded in the Karachayevo-Circassian Republic (4.4%). In other regions, this indicator does not exceed 3%.





Based on the analysis conducted, mortgage lending still has a high potential for growth. Only 10% of the working population has mortgage loans (Mereminskaya et al., 2019). Its development is constrained by low incomes and low housing affordability.

4.2 ANALYSIS OF PTI FOR OTHER LOANS

A much more difficult situation is observed in relation to other loans. Unfortunately, statistics by the constituent entities of the Russian Federation published on the website of the Central Bank of Russia do not allow to divide other loans (except for residential mortgage lending) into separate banking products (car loans, consumer loans, credit cards, etc.).

On average, other loan payments in the Russian Federation amount to 6.3% of household income. Regional indicators vary less than the ratio of payments on mortgage loans to household income. For other loans, the coefficient of variation was 27% versus 34% for mortgage loans. The maximum value of PTI on other loans was recorded in the Republic of Tyva (13.8%), and the minimum value is typical of Sevastopol (1.7%). The indicators for 68 regions (80%) range from 5 to 9%, and the values for 52 regions (61%) vary from 6 to 8% (Figure 2).



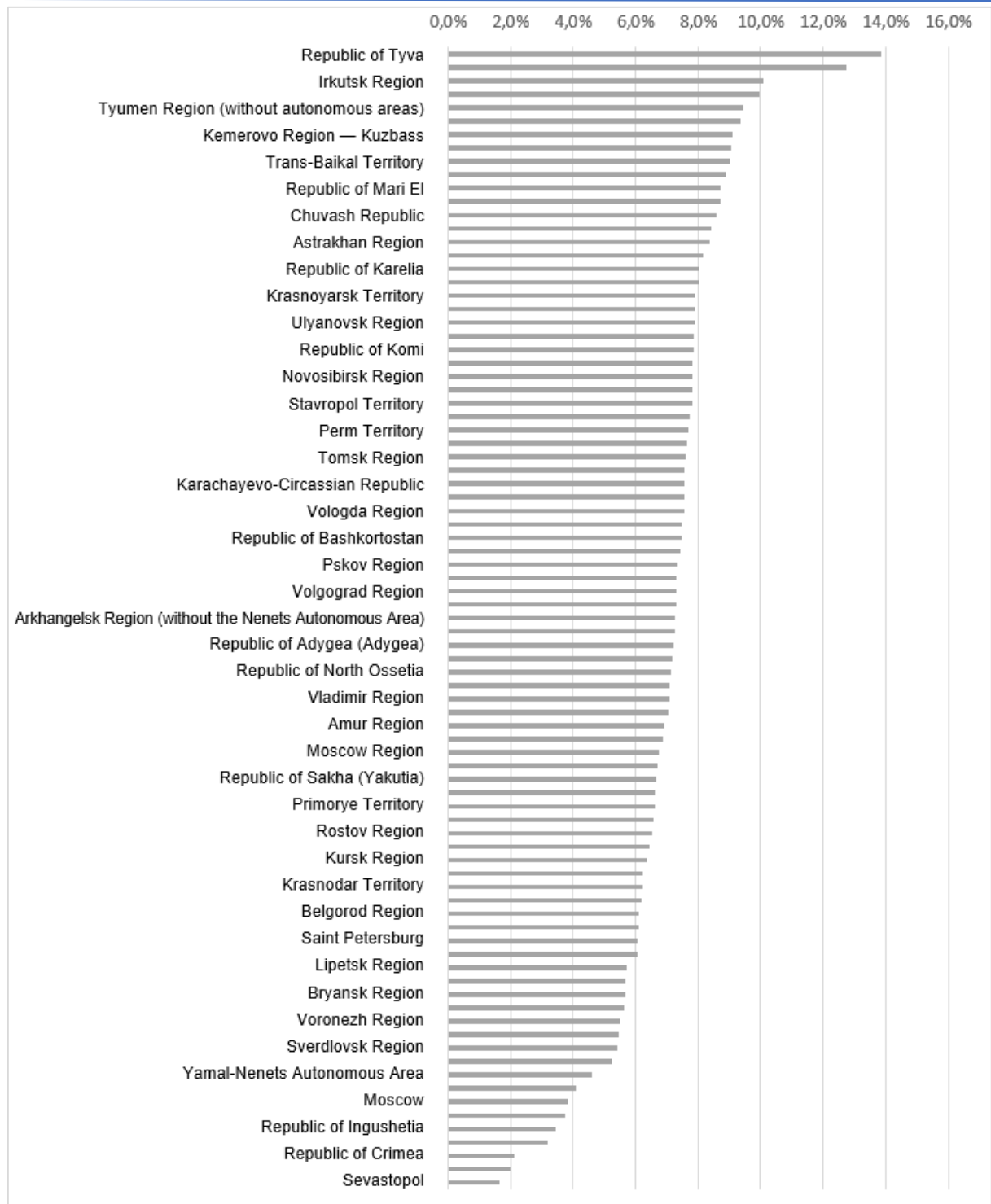


Figure 2. The ratio of payments on mortgage loans to household income





As of January 1, 2020 the average level of overdue debt on other loans in Russia amounted to 6.5%, with a maximum of 15.4% in the Republic of Dagestan.

4.3 ANALYSIS OF PTI FOR ALL LOANS

The average PTI for all the loans given in the Russian Federation was 8.1%. The maximum value is common to the Republic of Tyva (17.0%), the minimum value is typical of Sevastopol (2.1%) (Figure 3). The variation coefficient was 0.28, which demonstrates a significant scatter of indicators. The indicators for 52 regions (61.2%) range from 7 to 10%.

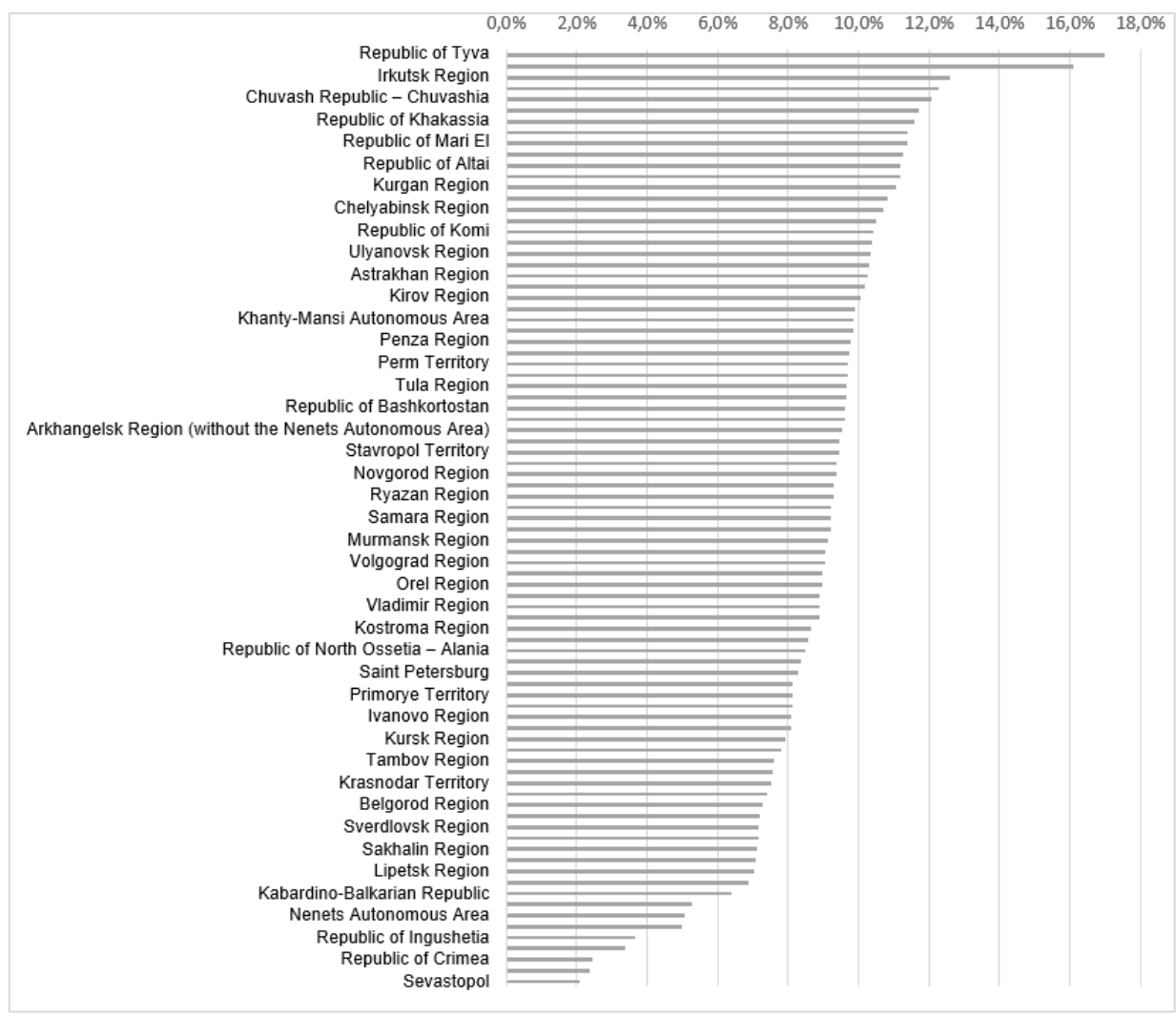


Figure 3. The ratio of all loan payments to household income





The correlation coefficient between the level of arrears and PTI is -0.05. There was no direct relationship between the level of credit burden and the amount of overdue debt. Banks use risk management tools to correctly assess the solvency of borrowers. In recent years, the Central Bank of Russia has been fighting against inflating the bubble in the consumer lending market by setting higher reserve requirements for loans with high-level risks (Chmelar, 2012; Drehmann & Juselius, 2012; Olney, 1999). Unscrupulous participants are leaving the bank lending market.

In addition to the PTI indicator, we calculated the indicator "Household income net of loan payments and the cost of living in a region divided by the cost of living". This indicator shows how much money a household has after all loan repayments and the purchase of the necessary set of products and services to support life. The division by regional minimum wages helps to somehow smooth out differences between the constituent entities in the cost of goods and services.

Table 3. Average indicators by the constituent entities of the Russian Federation

Constituent entities of the Russian Federation by income per capita	Average indicators by regions			
	Average per capita income, rubles per month in 2019	PTI ratio in 2019	Household income net of loan repayments and minimum wages in the region divided by the minimum wage in 2019	Level of past-due payments as of January 1, 2020
1 st group (20%)	54,253	7.5%	2.28	3.4%
2 nd group (20%)	31,905	8.9%	1.67	3.8%
3 rd group (20%)	27,986	8.5%	1.43	4.5%
4 th group (20%)	25,156	9.6%	1.21	4.7%
5 th group (20%)	20,991	10.1%	0.89	4.9%

As the study has shown, one of the key factors affecting the level of loan debt burden and the ability to fulfill loan liabilities is the level of income of the population. The correlation coefficient between PTI and per capita income was -0.38, which indicates a rather weak inverse relationship. If we take the average values for groups of regions





differentiated by the income of their population, the PTI indicator is noticeably lower in the most prosperous regions. On the contrary, the groups of regions with the lowest income of the population have the highest values of this indicator.

Similarly, household income net of loan repayments and the minimum wage divided by the minimum wage has the maximum value in more prosperous regions. The lower the indicator, the lower the average per capita income of a group of regions.

The level of past-due payments is also related to the general standard of living of the population, as indicated by the average values of this indicator for groups of regions. A similar relationship is confirmed by the correlation coefficient between debt arrears and:

- The share of the population with incomes below the minimum wage (0.54);
- The share of the population with incomes below 7,000 per month (0.56);
- The share of the population with incomes below 10,000 per month (0.55);
- Average per capita income (0.53).

Individuals with low incomes find it more difficult to plan loan repayments as unforeseen changes in their income or expenses have a stronger impact on payment discipline if compared to individuals with higher incomes. The latter have the opportunity to neutralize the impact of these circumstances due to savings and a better balance between monthly income and expenses.

5 DISCUSSION

In this connection, the main measures to reduce the existing loan debt burden should aim at combating poverty and increasing the income of the population. The government can improve financial literacy, but if a person does not have money for satisfying basic necessities, they will get a loan to buy them.

To increase the affordability of housing and, accordingly, mortgage lending, it is necessary, on the one hand, to implement state programs aimed at lowering mortgage rates. On the other hand, it is important to reduce construction costs by reducing administrative barriers and co-financing infrastructure development (the construction of heat, water, and electricity networks, roads, site preparation, etc.). It is recommended to





stimulate healthy competition between real estate developers and competitive distribution of land plots.

To preserve household incomes, it is advisable to stimulate the construction of tenement houses and social hiring for the low-income population, which can become an alternative to buying a house with a mortgage and free up some money for the purchase of essential goods.

For socially vulnerable segments of the population using short-term loans and microloans with a higher interest rate, it is possible to implement financial rehabilitation programs to convert an increased debt burden into a moderate one. This category of citizens should get assistance from social workers who could help form the household budget.

In terms of improving financial literacy, it is recommended to introduce courses on the basics of investment, money management, and rational consumption in secondary and higher educational institutions, as well as to promote the All-Russian hotline for consumers of financial services supervised by Rospotrebnadzor (the Federal Service for the Oversight of Consumer Protection and Welfare).

To reduce spontaneous and thoughtless buying, it is recommended to limit the advertising of luxury goods which are often purchased on credit and are not essential.

In addition, it is necessary to consider the creation of new loan products for large purchases (houses and cars). In this case, the initial payment will be formed by accumulating funds on special deposits. This will allow potential borrowers to rationally assess their ability to make regular payments on loans.

The leverage ratio is an important indicator of the banking system and can highlight banking crises. In this regard, it is recommended to implement measures aimed at publishing the data necessary for calculating this indicator. To monitor the loan exposure of the population, it is recommended:

- The Central Bank of Russia should publish information on household debt (including overdue debt) to microfinance organizations in the constituent entities of the Russian Federation. Due to the lack of this information, it is difficult to assess the real debt burden of citizens in a particular region;





– The Central Bank of Russia should regularly calculate and publish the PTI indicator by each region. The indicators given in the article are estimates and might differ from the actual values. In addition, it is recommended to calculate the PTI indicator for certain types of loans, including microloans;

– The National Bureau of Credit Histories should publish information on the credit burden of the population in the constituent entities of the Russian Federation. Currently, data are published on an irregular basis, which does not allow tracking the situation;

– The official statistics should present data on the loan debt burden of households, and not just individuals, since the income and expenses of individuals living in the same household are combined.

The study results can be used to create measures for the socio-economic development of regions and form their monetary policy. The main measures to reduce the existing loan debt burden should aim at combating poverty and increasing the income of the population. Another important measure is to improve financial literacy, which will reduce the number of short-term loans with high rates in favor of long-term secured loans, but with lower rates, as well as contribute to a shift to more sustainable consumption.

6 CONCLUSION

The conducted study will allow the heads of customers to balance the workforce, improve procurement activities, avoid inappropriate use of budgetary funds, and improve the efficiency of procurement in general.

Such research promotes the socio-economic efficiency of the state contract system and the implementation within its framework of state and municipal procurement. In general, the sustainability of budget policy and the system of public administration depends on the efficiency and transparency of procurement procedures. In this respect, it seems advisable to develop a special local normative act providing for the procedure of forming a plan-assignment for different periods of time from a day to a year for specialists of the contract department, taking into account the optimization of the labor process.

In general, it is recommended to ration the working time of contract department employees of state and municipal institutions both in the field of supply and procurement





and in other spheres using the PERT method. The results of the present study are of interest to the scientific community that studies the problems of labor rationing, as well as rationing specialists in organizations.

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