



Bank of Russia



ANALYSIS OF RUSSIAN HOUSEHOLDS' DEBT BURDEN IN 2019 Q4 – 2020 Q1 BASED ON CREDIT HISTORY BUREAUS' DATA

Information and analytical commentary

Moscow
2020

CONTENTS

Summary	2
Introduction	4
1. Key trends in lending from 1 October 2019 to 1 April 2020	5
2. Bank lending.....	9
3. MFO borrowers' debt burden.....	14
Conclusion.....	19
Annexes	20
Annex 1. Description of data used.....	20
1.1. Data composition	20
1.2. Data processing.....	21
Annex 2. Credit penetration and debt burden, by region (as of 1 April 2020).....	23
Annex 3. Credit penetration and debt burden, by region (as of 1 October 2019).....	27

This publication was prepared by the Financial Stability Department.

Feedback regarding the structure and content of this review may be sent to the emails: reports@cbr.ru and RumyancevEL@cbr.ru.

The reference to the Bank of Russia is mandatory if you intend to use this information and analytical material.

Cover photo: A. Bok, Bank of Russia
12 Neglinnaya Street, 107016 Moscow
Bank of Russia website: www.cbr.ru

SUMMARY

Banks' and MFOs' customer base

- The number of Russian residents having loans raised from a bank or a microfinance organisation (MFO) totalled 42 million as of 1 April 2020, increasing by 1.1 million people over the six months. 36.4 million people had only bank loans, 3.2 million – both bank loans and microloans, and 2.3 million – only microloans.
- The customer base of banks and MFOs continues to change. Over the six months, 4.3 million persons repaid their debt and raised no new loans (microloans), while 5.4 million persons became new borrowers.
- It is quite a common situation in bank lending when one borrower has more than one type of loans. As of 1 April 2020, such borrowers numbered 12.8 million (accounting for 54% of debt on bank loans).
- The majority of MFO borrowers (73%) have one outstanding loan.

Potential vulnerabilities of the credit market

- Of the 3.2 million persons having both bank loans and microloans, 2.9 million raised microloans from MFOs already having bank loans, including 0.9 million (as of 1 April 2020) having overdue debt on bank loans. Such borrowers accounted for 75 billion rubles of debt on microloans and 351 billion rubles of debt on bank loans (less than 2% of debt on bank loans). Borrowers having bank loans service their microloans better compared with MFO borrowers having no bank loans.
- There are currently no 'chain risks' in the retail lending market, as shown by the analysis measuring the portion of the chains of agreements formed because borrowers have several loans or there are co-borrowers on some loans.
- According to long-term observations, there is a gradual upward trend in the share of mortgage loans with a down payment potentially made using a consumer loan: from 2014 through 2020 Q1, this portion increased from 3.7% to 5.5% of the mortgage loans disbursed over this period. Nonetheless, the percentage of such loans is currently small and, therefore, requires no special measures to be taken.
- Information on overdue debt evidences that the probability of a borrower's default grows as the number of loans per borrower increases. This is explained by a rise in a borrower's debt burden, which confirms the importance of using the payment-to-income ratio in the regulation.
- As shown by the analysis of MFOs' overdue debt, only a part of borrowers having overdue microloans are capable of improving their payment discipline: of the borrowers having debt overdue less than 90 days as of 1 October 2019, 15% managed to repay their overdue debt within six months.

Demographic and regional breakdowns

- People aged from 30 to 40 are the most active borrowers accounting for 40% of individuals' outstanding loans (microloans). The segment of microloans has its structural specifics; namely, it is characterised by a higher activity among borrowers aged under 25 (they account for 9% of all outstanding microloans, and as little as 2.5% of outstanding bank loans). Among other

things, the higher percentage of borrowers aged under 25 in the MFO segment is associated with the fact that young people have no credit history, due to which banks are less willing to issue loans to such borrowers. Conversely, nearly one-third of borrowers in the segment of unsecured consumer lending are aged 50+, while they account for 19.4% in microlending.

- The highest credit penetration (the percentage of a region's permanent residents having loans and microloans) is specific not to economic centres. The median level of credit penetration across regions equals 30.6%, varying from 7.5% to 39.2% in different regions.

Implications for macroprudential policy

- Mortgage lending has a significant growth potential. This segment will expand as a result of both a rise in the number of borrowers, totalling 7.9 million as of 1 April 2020, and a higher affordability of mortgage loans amid decreasing interest rates on mortgage loans. In order to support lending, in April, the Bank of Russia released the accumulated macroprudential capital buffer and reduced buffers on newly issued loans.
- There is a rise in the portion of banks' and MFOs' customers having debt on several credit products simultaneously. Moreover, a creditor disbursing the first loan (microloan) to such a borrower may be unaware of the borrower's increasing debt burden and, therefore, underestimate the level of risk. As the infrastructure develops allowing, upon borrowers' consent, creditors' access to data on borrowers' incomes via state information systems, it will be possible to consider a regular re-evaluation of borrowers' payment-to-income ratios by creditors, so as to ensure adequate risk assessment.
- A gradual increase in the number of borrowers having several credit products simultaneously, as well as a partial migration of bank borrowers to MFOs may entail a rise in borrowers' debt burden. In order to efficiently limit risks when the pandemic ends, the regulator will need a procedure enabling it to promptly limit the risks of households' excessive debt. The regulator may apply quantity restrictions to limit the share of loans issued to borrowers with high payment-to-income ratios (for details, refer to the [report 'On the Development of the Bank of Russia's Retail Lending Policy'](#)).

INTRODUCTION

Beginning on 1 October 2019, banks and microfinance organisations in Russia are obliged to calculate borrowers' payment-to-income ratios (PTI) when making decisions on issuing loans (microloans). The Bank of Russia applies PTI for the purposes of macroprudential regulation. On 1 October 2019, the Bank of Russia set risk-based buffers for unsecured consumer loans (microloans), depending on a borrower's PTI. The higher debt burden a borrower has, the larger is the buffer applied. On 1 April 2020, the Bank of Russia reduced buffers for mortgage loans where PTI is low and LTV equals 80–85%. In relation to MFOs, the regulator approved a single buffer for the cases where PTI exceeds the threshold of 50%. Rising capital requirements when borrowers' debt burden increases make it less advantageous for creditors to grant loans (microloans) to such borrowers.

The regulator introduced macroprudential buffers due to an increase in households' debt burden. Over the period from 2017 Q2 through 2020 Q1, households' debt burden (the percentage of all households' disposable income used to make scheduled payments on bank loans) rose from 8.3% to 10.9%. Unsecured consumer loans account for the largest portion of debt burden. Over the said period, households' debt burden on unsecured consumer loans increased from 6.9% to 9.2%. A gradual rise in debt burden is typical of emerging market economies. However, when households' debt burden increases quickly, this exacerbates the vulnerability of the financial system to both internal and external shocks (the coronavirus pandemic became such a shock in 2020). As a result of the measures implemented by the Bank of Russia in 2018–2019 to increase buffers, banks have accumulated substantial capital cushions that may be used to cover their loan losses induced by the pandemic.

This report relies on anonymised microdata from three major credit history bureaus (CHBs). This information was used to analyse the trends in households' debt burden over the period from 1 October 2019 to 1 April 2020. This is already the second study the Bank of Russia carried out using aggregate data from the three CHBs.¹ This study identifies the extent to which the growth rate of households' debt after 1 October 2019 may be attributed to new customers and to the rise in existing borrowers' debt burden, as well as changes in a borrower's profile after the implementation of the requirement to calculate PTI. Since the data were provided for the period from 1 October 2019 to 1 April 2020, this report currently shows the impact of the pandemic only to a limited extent.

The composition of the data obtained by the Bank of Russia from the CHBs has significantly expanded, compared to the previous study. This report analyses households' debt burden on both bank loans and microloans, which makes it possible to identify the characteristics of MFO borrowers and verify the hypothesis on the possible migration of customers to MFOs after the significant tightening of the requirements for banks beginning on 1 October 2019. For the first time, this report also offers a regional analysis of borrowers' debt burden and describes the age structure of borrowers.

¹ The first [study](#) was published in November 2019.

1. KEY TRENDS IN LENDING FROM 1 OCTOBER 2019 TO 1 APRIL 2020

Banks' and MFOs' customer base

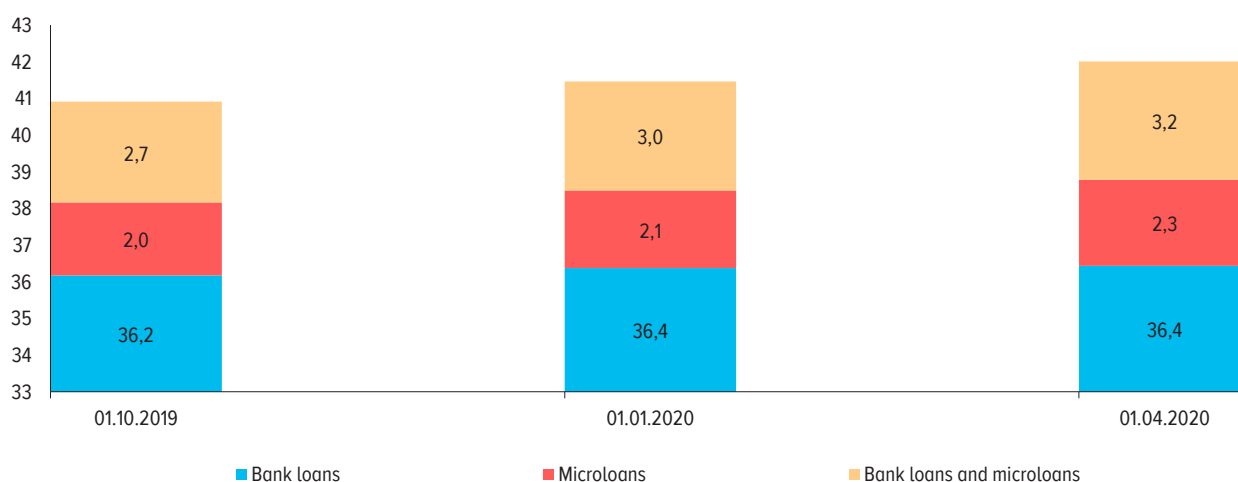
After PTI was introduced into the regulation of banks and microfinance organisations beginning on 1 October 2019, creditors continued to build up their customer base. The number of people having a loan or a microloan as of 1 April 2020 totalled 42 million (29% of permanent residents), growing by 1.1 million people over the six months. In relative terms, MFOs recorded the largest increase in the overall number of borrowers, specifically 17.6% over the six months (banks – 1.9%), which was because MFOs had a relatively small customer base. The influx of new customers to MFOs comprised 56% of previous bank customers and 44% of new borrowers. Nonetheless, bank customers' migration to MFOs was limited since the growth in the number of MFO borrowers was similar to the rate recorded last year.

According to the analysis of the structure of borrowers as of 1 April 2020, 86.7% of them had only bank loans, 5.6% – only microloans, and 7.7% – both outstanding bank loans and microloans (3.2 million people). Of the borrowers having both outstanding bank loans and microloans as of 1 April, 89% applied to MFOs already having a bank loan. Moreover, 31% of them (0.9 million) applied to MFOs already having an overdue bank loan. Such borrowers accounted for 75 billion rubles of debt on microloans and 351 billion rubles of debt on bank loans (less than 2% of debt on bank loans), and their debt burden may turn out to be significant.

Debt servicing by borrowers having only a microloan is worse than that by MFO borrowers also having a bank loan. As to the percentage of borrowers having overdue debt one quarter after the disbursement of a microloan, the analysis shows that it is 1.5 times lower in the group of customers having a bank loan compared to customers without bank loans (14–16% against 19–27%, respectively). The reason for this is that banks set higher requirements for borrowers. While banks tend to limit lending to households with high debt burden, including due to relatively high capital requirements for such loans, MFOs having substantial capital cushions¹ and considerably higher

NUMBER OF BORROWERS HAVING BANK LOANS AND MICROLOANS (DISJOINT SETS)
(MILLIONS OF PERSONS)

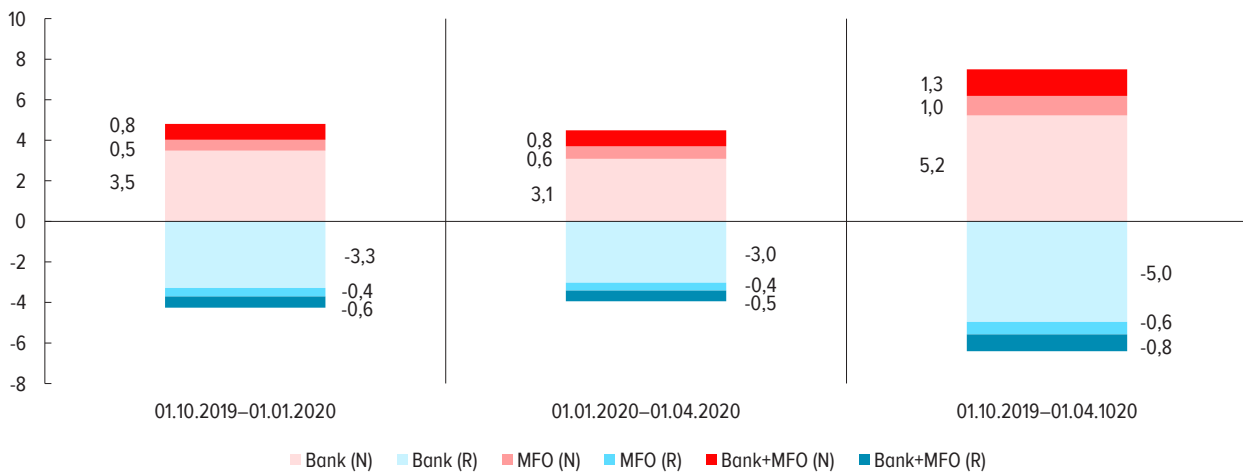
Chart 1



¹ As of 1 April 2020, the median values of the capital adequacy ratios of MFOs operating in consumer microfinance equalled 22.2% (NMFC1) and 48.7% (NMCC1).

CHANGE IN NUMBER OF BORROWERS OVER PERIOD
(N – NEW BORROWERS; R – BORROWERS WHO REPAID ALL LOANS)*
(MILLIONS OF PERSONS)

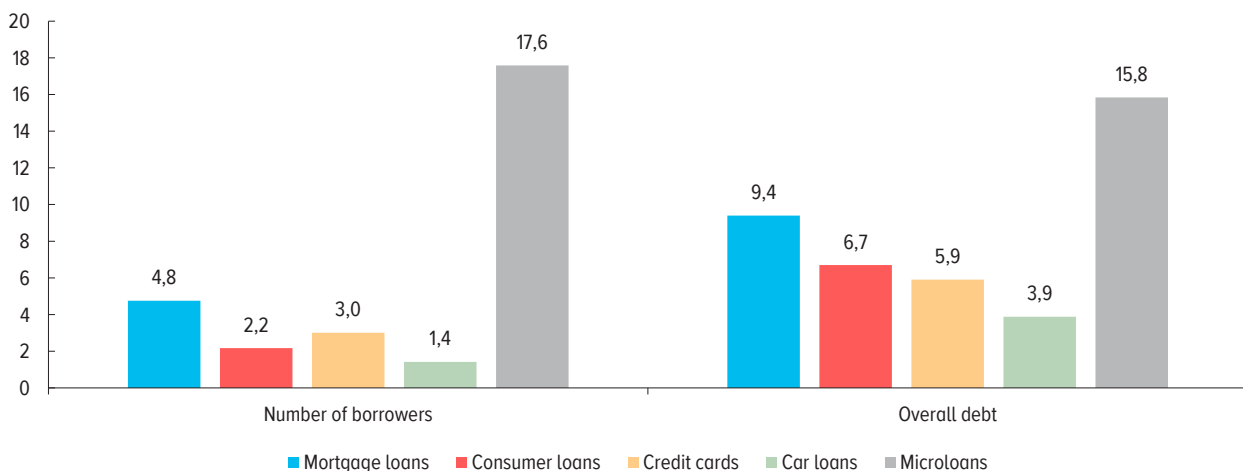
Chart 2



* Disjoint sets of borrowers.

GROWTH IN NUMBER OF BORROWERS AND OVERALL DEBT, BY LENDING SEGMENT,
FROM 1 OCTOBER 2019 TO 1 APRIL 2020
(%)

Chart 3



interest rates on microloans can accept this level of risk. Currently, there are no caps on the number of microloans per customer granted by one MFO.²

As shown in the first study for 2015–2019, banks' customer base is being continuously renewed. The rotation of MFO customers is even higher as microloans are disbursed for relatively short periods. Among MFO borrowers as of 1 April 2020, 36% of customers had no microloans six months before, while among bank borrowers this percentage was 16%. Overall, 4.3 million persons completely repaid their debt they had as of 1 October and raised no new loans or microloans, while 5.4 million persons became new borrowers.

The growth rate of debt across almost all lending segments, except microloans, exceeds the rise in the number of borrowers. This entails an increase in average debt per borrower and households' debt burden, if their incomes grow relatively more slowly.

² The basic standard to protect the rights and interests of individuals and legal entities receiving financial services provided by the members of the financial market self-regulatory organisations of microfinance organisations.

Borrowers' age structure

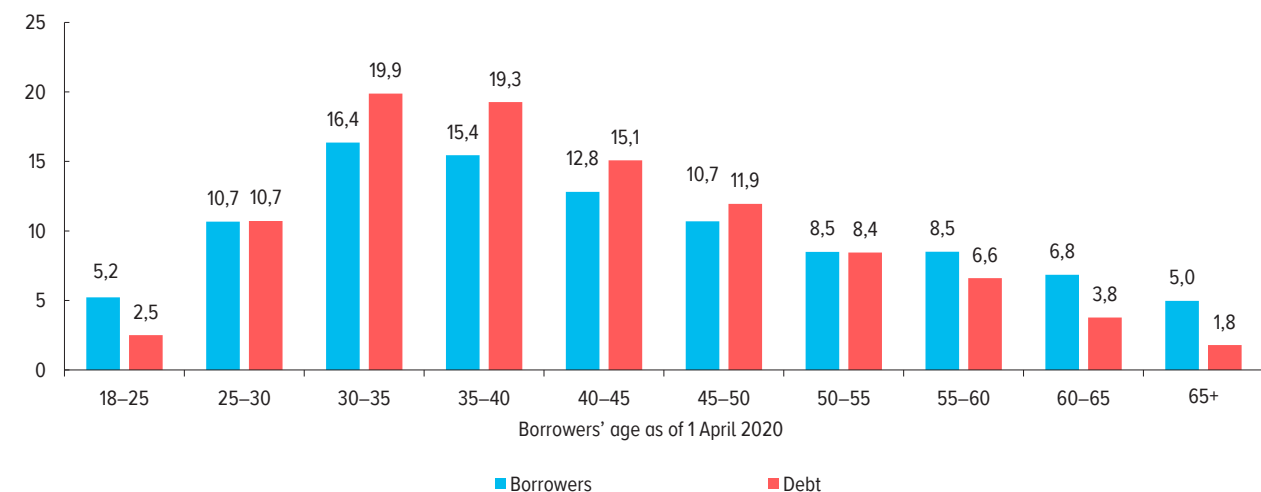
The age structure of borrowers is diverse. Borrowers aged from 25 to 65 (90% of all borrowers) account for 96% of overall debt. People aged from 30 to 40 are the most active borrowers accounting for 40% of overall debt. Moreover, lending segments vary in terms of demographics, e.g. 14% of MFO customers are aged under 25 (9% of debt). Contrastingly, the percentage of such borrowers in bank lending is below 6% (2.5% of debt). Consumer lending stands out as well, with borrowers aged 50+ accounting for nearly one-third of the total number (against 19.4% in MFOs).

Debt by region

The analysis of households' debt burden by region relied on two metrics: credit penetration (the portion of individuals having a loan or a microloan of the total number of permanent residents in a region) and the debt burden of borrowers in the region measured as the ratio of average debt on loans and microloans per borrower in the region to the average monthly income of residents in the region.

GROWTH IN NUMBER OF BORROWERS AND OVERALL DEBT ON BANK LOANS AND MICROLOANS,
BY AGE GROUP (AS OF 1 APRIL 2020)

Chart 4



BORROWERS IN DIFFERENT SEGMENTS,
BY AGE GROUP (AS OF 1 APRIL 2020)

Chart 5



Although the major economic activity centres, namely Moscow and the Moscow Region, Saint Petersburg, the Sverdlovsk and Tyumen Regions, account for over one-third of debt on loans and microloans, these regions do not have the highest credit penetration.

The median level of credit penetration across regions equals 30.6%, varying significantly from 7.5% to 39.2% in different regions (refer to Annex 2).

Borrowers' debt burden in a particular region also varies considerably. The median value of borrowers' debt equals 12.8 of households' regional average monthly income. Debt burden varies across regions from 7.8 to 21.8 of households' regional average monthly income. High debt burden is mostly typical of regions with high mortgage penetration since mortgage lending generally involves larger amounts and longer maturities than consumer lending.

As of 1 April 2020, the highest ratios of mortgage penetration were recorded in the Tyumen Region (9.4%) and the Novosibirsk Region (7.3%), as well as in Saint Petersburg and the Leningrad Region (6.7%) (with the median across regions equalling 5.3%). Mortgage penetration in Moscow and the Moscow Region is as little as 4.9%. As interest rates decrease, the same level of debt burden will imply a higher affordability of credit and lower debt servicing costs.

Broken down by region, the portfolio of unsecured consumer loans is less concentrated than that of mortgage loans, with the three largest regions accounting for only 22% of the overall portfolio (against 32% of the total mortgage portfolio). The penetration level of such loans varies from 5% to 26% across regions (with the median value equalling 19.2%). It should be noted that the penetration levels in the regions with large portfolios of unsecured consumer loans are far from maximum, specifically 12% in Moscow, 17% in Saint Petersburg, and 18% in the Moscow Region.

BORROWERS' AVERAGE AGE ACROSS LENDING SEGMENTS
(AS OF 1 APRIL 2020)

Table 1

Lending segment	Borrowers' age as of loan issue date*		Borrowers' age as of 1 April 2020**	
	Average	Median	Average	Median
Car loans	39	40	41	42
Mortgage loans	33	36	37	39
Credit cards	36	38	40	42
Consumer loans	39	41	41	43
Microloans	33	36	35	38

* Calculated by unique loans in a segment.

** Calculated by unique borrowers in a segment.

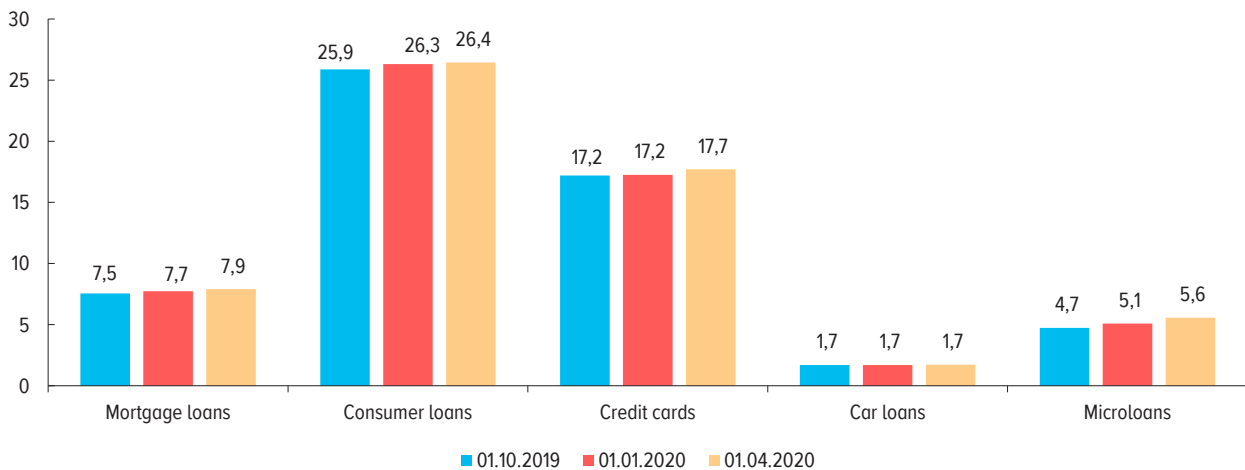
2. BANK LENDING

Over the period from 1 October 2019 to 1 April 2020, the number of borrowers increased across all bank lending segments. This growth was most significant in mortgage lending (4.8%), followed by consumer lending (2.2%), which was associated with a relative saturation of the consumer lending market compared to the mortgage market (26.4 million consumer loan borrowers against 7.9 million mortgage borrowers as of 1 April 2020) and a shift from consumer loans to credit cards.

It is quite a common situation when a borrower has several types of credit products at a time, with such borrowers accounting for 54% of overall debt as of 1 April 2020. This situation is especially characteristic of borrowers in unsecured consumer lending, where borrowers having no other types

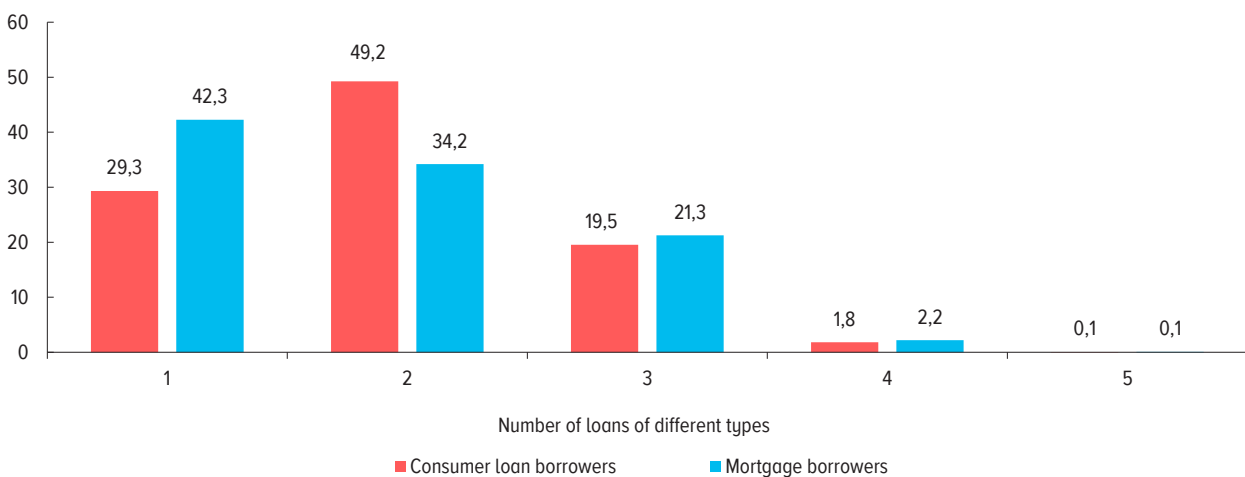
CHANGE IN NUMBER OF BORROWERS IN DIFFERENT SEGMENTS
(%)

Chart 6



DEBT, BY NUMBER OF LOANS OF DIFFERENT TYPES PER BORROWER
(AS OF 1 APRIL 2020)
(%)

Chart 7



of loans in addition to a consumer loan account for as little as 29% of debt on unsecured consumer loans. Among mortgage borrowers, this portion equals 42%, but continues to go down.

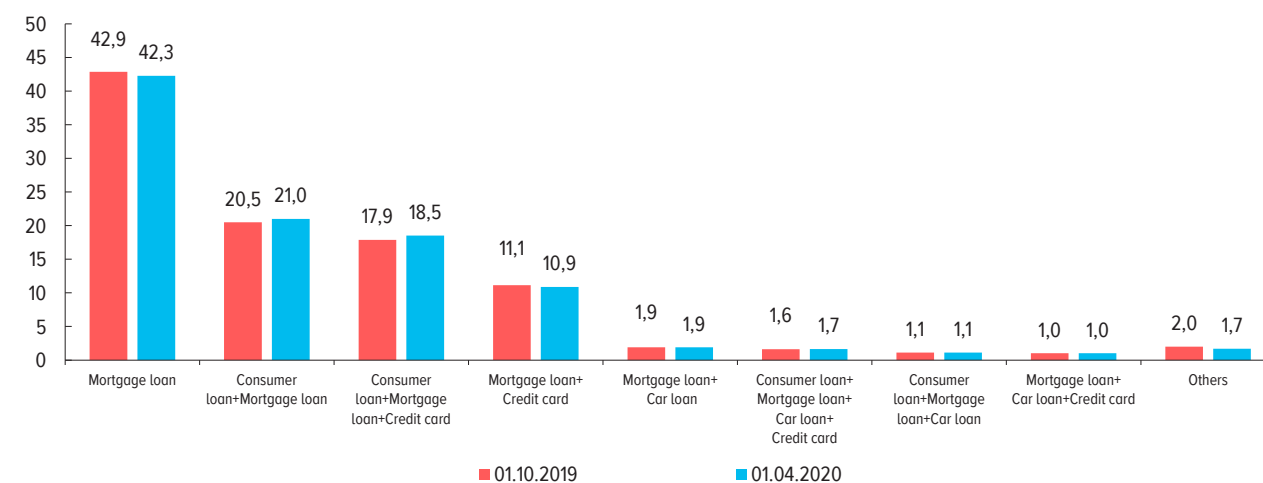
Mortgage lending

Mortgage lending has a significant growth potential since the number of mortgage borrowers is relatively small. Over the period from 1 October 2019 to 1 April 2020, the percentage of borrowers having only a mortgage loan continued to decrease, while the portion of those having, in addition to a mortgage loan, an unsecured consumer loan or simultaneously a consumer loan and debt on a credit card expanded over this period. The percentage of borrowers having another loan of any type in addition to a mortgage loan increased from 46.5% to 47.5%, and of those having a consumer loan – from 34% to 35.2%. The share of non-mortgage debt among mortgage borrowers¹ slightly grew from 14.5% to 14.7%. If we analyse only consumer loans in addition to a mortgage loan (excluding credit cards), the share of debt on consumer loans² expanded from 10% to 10.2%. When a borrower has a mortgage loan and other types of loans simultaneously, this may involve elevated debt burden. In addition, an important aspect is the reason why mortgage loans are raised alongside other consumer loans: whether these are a mortgage loan and a loan for the down payment, or a mortgage loan and a home improvement loan, or loans for unrelated purposes.

We carried out an indirect assessment to analyse the portion of mortgage loans where respective down payments could potentially be made using a consumer loan. We assumed that a consumer loan could be used to make the down payment on a mortgage loan if it exceeded 100,000 rubles and was disbursed to any of the co-borrowers three months or less before the issue of the mortgage loan. Over the six months under review, the percentage of such loans remained almost unchanged, equalling 5.4% of the mortgage loans granted in 2019 Q3 (1.8% of the mortgage loans were issued by the same bank that had granted a consumer loan three months before), and increasing slightly to 5.5% of the mortgage loans issued in 2020 Q1 (2.1% of the mortgage loans granted by the same bank). According to long-term observations, the portion of such loans somewhat expanded, from 3.7% in 2014 to 4.4% in 2018. If a borrower raises a consumer loan to make the down payment on a mortgage loan, this may imply that it is difficult for such a borrower to save money, including

MORTGAGE BORROWERS,
BY DISJOINT SET OF LOANS
(%)

Chart 8



¹ Mortgage borrowers' overall non-mortgage debt as percentage of mortgage borrowers' overall debt.

² Mortgage borrowers' overall debt on unsecured consumer loans as percentage of mortgage borrowers' overall debt.

because a substantial part of earnings is used to consume goods and services. Such borrowers are characterised by increased credit risk, which is evident from the dependence between the frequency of loan defaults and the amount of the down payment (for details, refer to the [report 'Measures Taken by the Bank of Russia to Ensure Sustainable Mortgage Lending Development'](#) published in December 2019). Nonetheless, the portion of such loans is currently small and, therefore, requires no special measures to be taken.

Unsecured consumer lending (excluding credit cards)

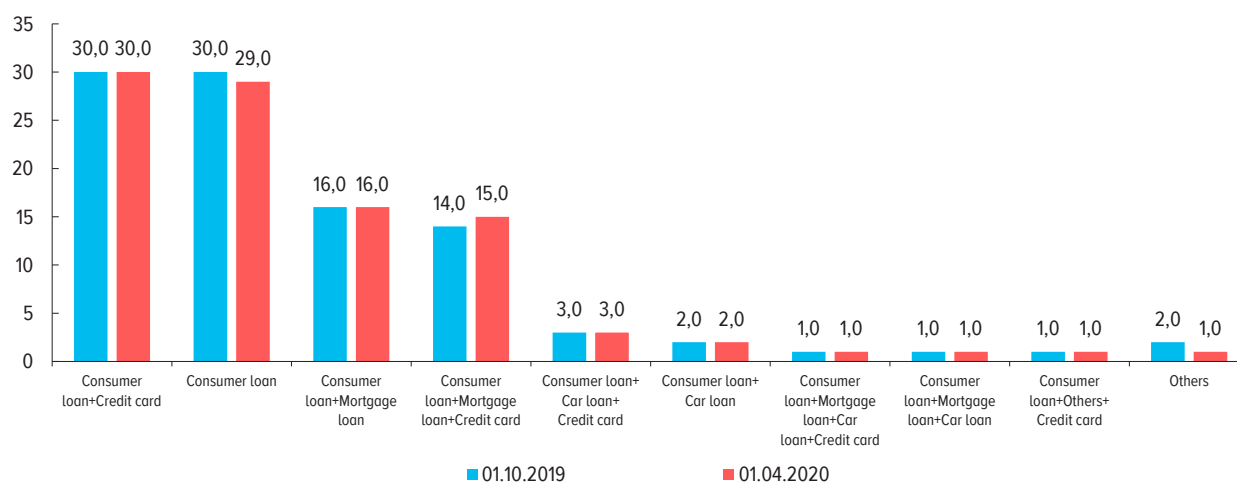
Unsecured consumer lending, just as mortgage lending, continues an upward trend in the percentage of borrowers having various types of loans at a time. Over the six months, the portion of such borrowers increased from 42.7% to 43.7%, and the percentage of those having a consumer loan and a mortgage loan simultaneously – from 9.9% to 10.5%. Where consumer loans are combined with other loans, the share of debt on other loans rose from 35.8% to 36.6%, and the share of mortgage debt – from 23% to 24%. In other words, there is an upward trend in unsecured lending with regard to the number of borrowers combining consumer loans with both mortgage loans and other types of loans. This combination involves the risk of delays in loan servicing by borrowers, and banks should act prudently granting such loans. Since a creditor issuing the first loan cannot limit risks related to the raising of subsequent loans by a borrower, it would be reasonable to later on consider the issue on regular PTI recalculation by banks in order to update information on borrowers' overall debt.

Analysis of the groups of related borrowers

A potential source of systemic risks in retail lending may be the chains of agreements uniting customers into the groups of related borrowers (GRBs). Such chains may form when a borrower has debt on several loans and when a borrower has co-borrowers or loan guarantors. During a period of economic growth, the groups of related borrowers make it possible to reduce risks owing to diversification, that is, one borrower's default does not entail defaults for other borrowers in a group who are capable to service a loan instead of the defaulting borrower. However, in crisis periods,

BORROWERS OF UNSECURED CONSUMER LOANS,
BY DISJOINT SET OF LOANS
(%)

Chart 9



the existence of such groups may amplify shocks if all borrowers in a GRB default simultaneously. The effect of dependent (correlated) defaults may occur when one of related borrowers in a group discontinues payments and other GRB members' debt burden and defaults increase.

The unique anonymised identifier of all loan agreements and borrowers enabled the identification of all existing GRBs in the Russian retail lending market. In addition, the analysis took into account only the relations arising from borrowers' joint liability under loan agreements and the existence of several loans raised by one borrower. Surety was not considered as a sign of the interrelatedness of borrowers.

According to the analysis of the scale of interrelated lending, the proportion of loans granted to GRBs as of the beginning of 2020 was limited: groups comprising three or more borrowers (with any number of loans per group) accounted for approximately 1.7% of overall debt in lending (Table 2).

The number of borrowers in such groups equals about 1.5% (Table 3), which corresponds to their share in overall debt and proves that there is no excessive debt burden as compared to conventional lending options: one borrower – one loan and two co-borrowers – one mortgage loan (Table 4).

The level of credit risk measured as the ratio of debt on overdue loans does not show that there

DISTRIBUTION OF INDIVIDUALS' OVERALL DEBT BY GRB SIZE,
AS OF 1 JANUARY 2020
(%)

Table 2

		Number of loans per GRB, units					
		1	2	3	4	5+	
GRB size, persons	1	26.3	20.3	13.3	7.9	9.5	77.2
	2	5.5	4.8	3.6	2.5	4.5	21.0
	3	0.2	0.3	0.3	0.2	0.6	1.5
	4	0.0	0.0	0.0	0.0	0.1	0.2
	5+	0.0	0.0	0.0	0.0	0.0	0.0
		32.1	25.3	17.2	10.6	14.8	100.0

DISTRIBUTION OF BORROWERS BY GRB SIZE,
AS OF 1 JANUARY 2020
(%)

Table 3

		Number of loans per GRB, units					
		1	2	3	4	5+	
GRB size, persons	1	49.0	20.9	9.4	4.2	3.5	87.0
	2	4.0	2.9	1.9	1.2	1.6	11.5
	3	0.2	0.3	0.2	0.2	0.4	1.3
	4	0.0	0.0	0.0	0.0	0.1	0.2
	5+	0.0	0.0	0.0	0.0	0.0	0.0
		53.2	24.0	11.5	5.6	5.6	100.0

is any significant difference between groups comprising three, four, five, or more related borrowers. However, we observe a positive dependence between the number of outstanding loans and the ratios of overdue debt in GRBs of any size (Table 4).

RATIO OF OVERDUE LOANS BY GRB,
AS OF 1 JANUARY 2020
(%)

Table 4

		Number of loans per GRB, units					
		1	2	3	4	5+	
GRB size, persons	1	10.9	12.8	14.0	15.6	18.4	13.3
	2	1.1	1.8	2.7	3.9	6.0	2.9
	3	1.6	2.2	2.8	3.3	5.6	3.8
	4	1.6	1.6	1.6	2.6	4.8	3.7
	5+	0.7	0.4	3.1	2.8	4.5	4.0
		9.2	10.6	11.4	12.5	13.9	11.0

AVERAGE DEBT BURDEN PER CO-BORROWER IN GRB
(1 STANDS FOR AVERAGE DEBT PER PERSON)

Table 5

		Number of loans per GRB, units					
		1	2	3	4	5+	
GRB size, persons	1	0.54	0.97	1.42	1.85	2.68	0.89
	2	1.39	1.67	1.92	2.17	2.79	1.82
	3	0.76	0.97	1.12	1.27	1.70	1.21
	4	0.49	0.83	1.01	1.15	1.63	1.25
	5+	0.46	0.67	0.76	1.04	1.43	1.22
		0.60	1.05	1.49	1.90	2.62	1.00

This fact is explained by the linear dependence between the number of loans per GRB and the average debt amount per borrower (Table 5).

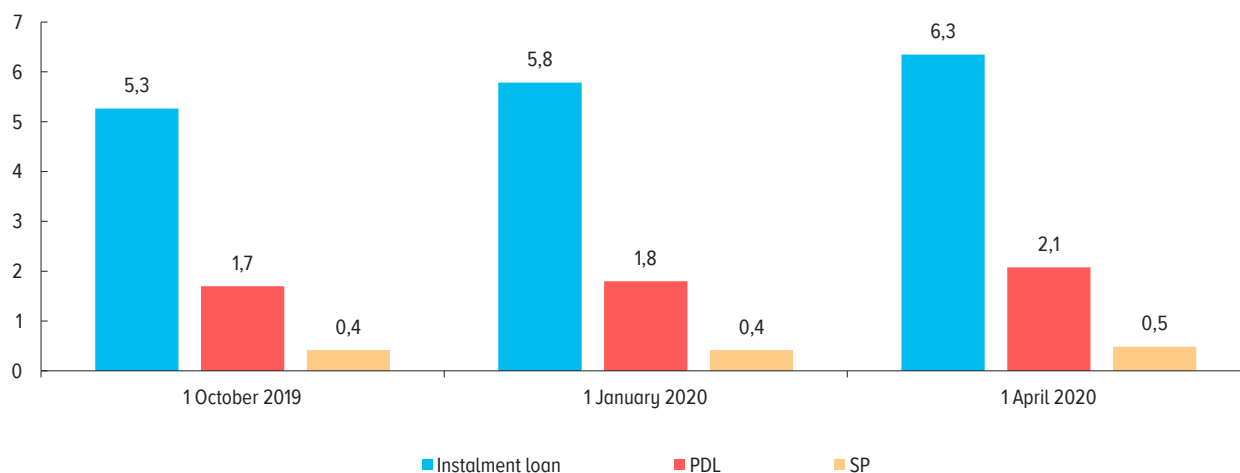
Overall, the analysis revealed no material 'chain risks' in the retail lending market at the moment. Nonetheless, since credit penetration among individuals, mainly in mortgage lending, is growing, this issue requires regular monitoring.

3. MFO BORROWERS' DEBT BURDEN

The number of borrowers having at least one microloan as of 1 April 2020 totalled 5.6 million, or 7.5% of the working-age population. After 1 October 2019, when MFOs were obliged to calculate PTI, MFO borrowers' debt continued to expand. Moreover, instalment lending accounted for the largest portion of microloans, in terms of both the amount of debt and the number of borrowers – 81% and 69%, respectively. The prevalence of instalment lending was largely explained by the activity of MFOs related to credit institutions accounting for 42% of debt in this segment (one-third of the loan portfolio of the analysis sample).

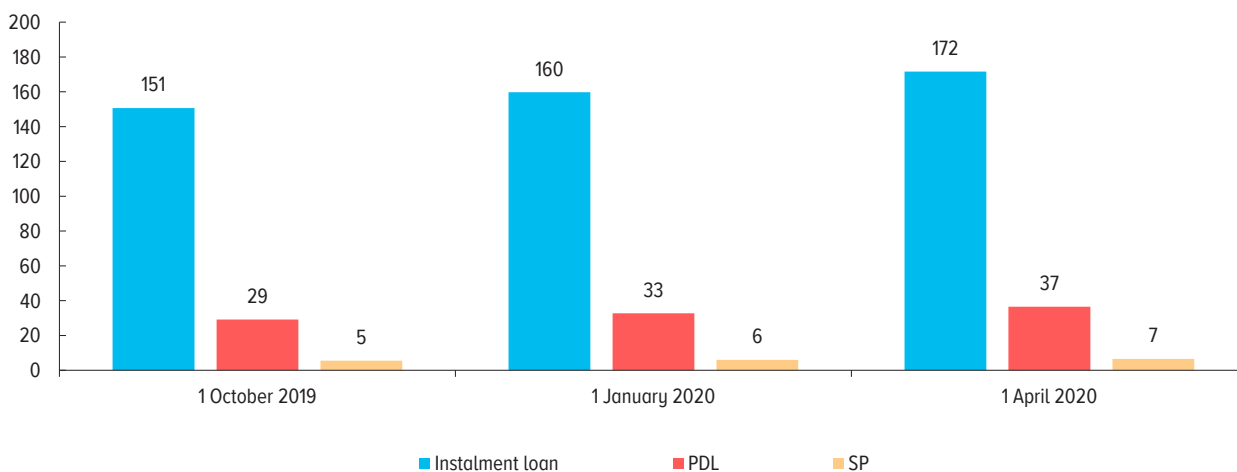
CHANGE IN NUMBER OF AGREEMENTS,
BY LOAN TYPE
(M PCS.)

Chart 10



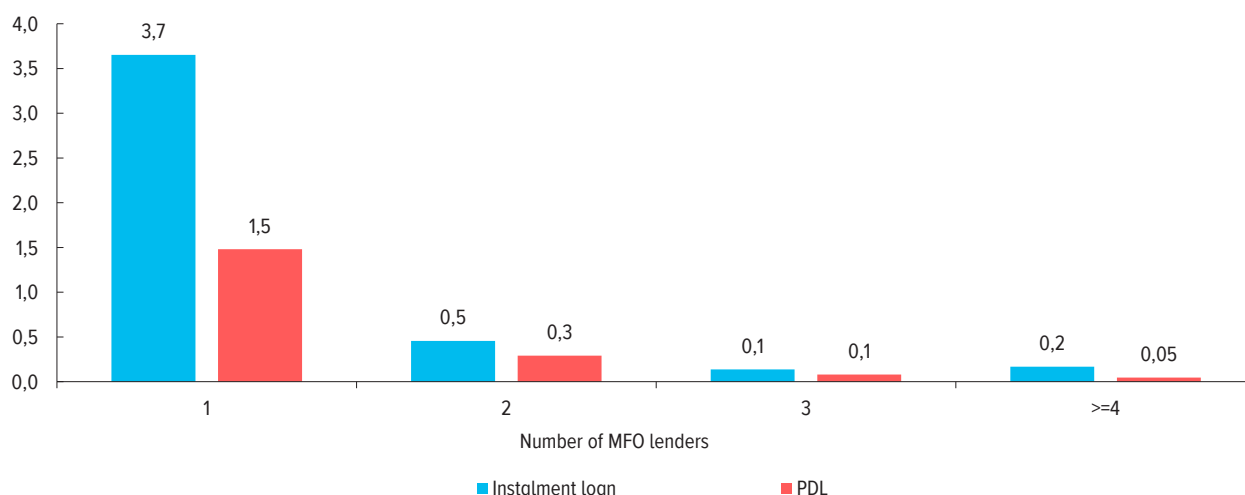
CHANGE IN DEBT IN MICROFINANCE MARKET,
BY LOAN TYPE
(BILLIONS OF RUBLES)

Chart 11



BORROWERS, BY NUMBER OF MFO LENDERS
(MILLIONS OF PERSONS)

Chart 12



It should be noted that along with the maximum daily interest rate on loans and microloans (no more than 1%) introduced beginning from 1 July 2019, the authorities also legislatively stipulated the category of the so-called special loan product (a subtype of a payday loan (PDL) with the initial amount of up to 10,000 rubles disbursed for no more than 15 days¹ – SP) which has not yet become widespread in the market (Charts 10 and 11).

According to the breakdown of borrowers by the number of microloans and creditors as a characteristic of debt burden as of 1 April 2020, only every fourth borrower (24%) raised funds from two or more MFOs, and 1.5 million people (or 28% of all MFO borrowers) had debt on two or more microloans simultaneously. Therefore, borrowers' debt burden by the number of loans per borrower is generally moderate in the microfinance market. Moreover, the payday loan (PDL) segment is characterised by a higher percentage of borrowers having microloans from two or more MFOs compared with instalment lending – 22% and 17%, respectively (Chart 12). One of the probable reasons behind this is that borrowers circumvent the restrictions established by the basic standard² in order to refinance their debt.

The most troubled segment in microfinance is payday lending where the portion of debt overdue at least one day³ is twice as high as in instalment lending – 81% against 44%, respectively. This may be partially explained by the structure of debt repayment in the PDL segment (in a lump sum at the maturity date). Overall, such a high level of overdue debt in PDL is typical of this microfinance segment: traditionally, the percentage of microloans not serviced for over 90 days varies from 45% to 60%.⁴ It should be noted that the share of overdue debt slightly increased (from 79% to 81%) over the six months (from 1 October 2019). To a certain extent, this may be associated with the first week after the restrictions were implemented due to the epidemiological situation, when companies

¹ Article 6.2 of Federal Law No. 353-FZ, dated 21 December 2013, 'On Consumer Loans'. The key feature of this type of loans (microloans) is that they are not subject to the PTI calculation requirements, and this loan product is most typical of the microfinance market.

² The basic standard to protect the rights and interests of individuals and legal entities receiving financial services provided by members of the financial market self-regulatory organisations of microfinance institutions. An MFO may not grant another microloan to a borrower if the latter already has a microloan disbursed by the same MFO as of the moment when the borrower's application is considered. This requirement is applicable to microloans disbursed for a period from 7 to 30 days in the amount of over 3,000 rubles.

³ The ratio of total payments on microloans overdue more than one day to overall current debt of the MFOs under review.

⁴ According to MFOs' statements submitted to the Bank of Russia.

BORROWERS, BY OVERDUE DEBT RATIO (INSTALMENT LOANS)
(MILLIONS OF PERSONS)

Chart 13

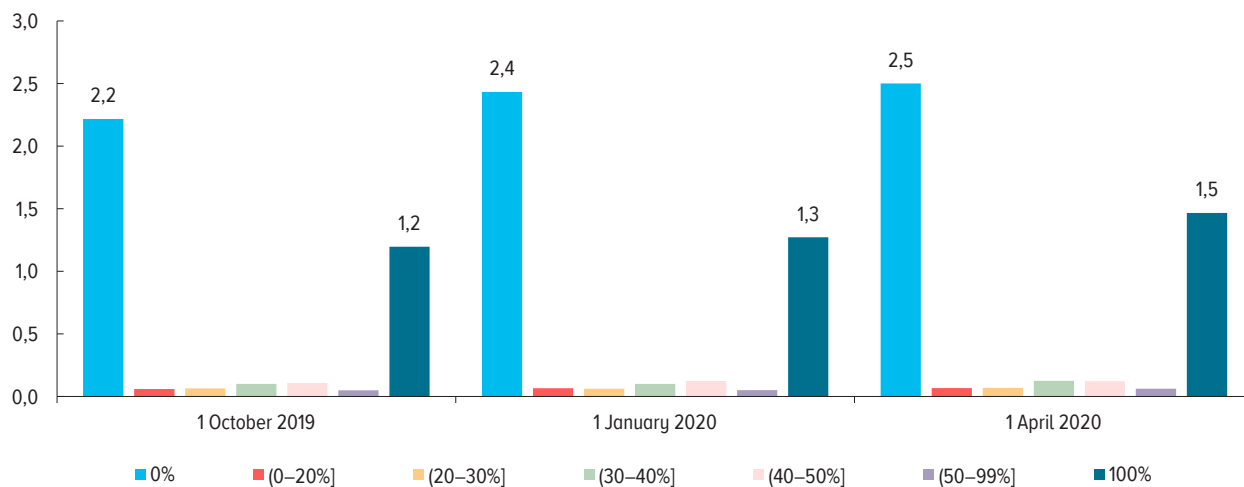
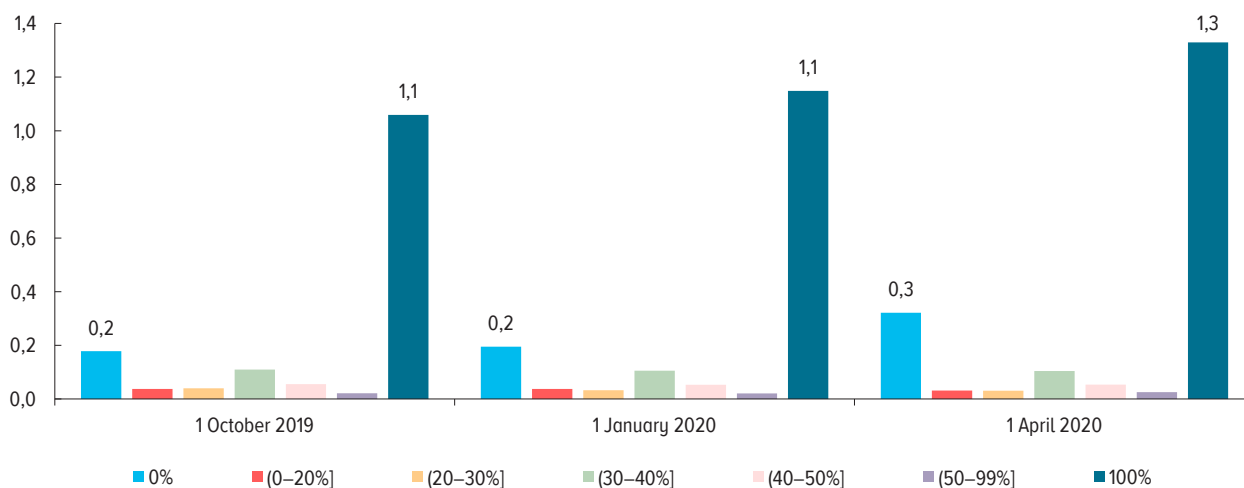
**BORROWERS, BY OVERDUE DEBT RATIO (PAYDAY LOANS)**
(MILLIONS OF PERSONS)

Chart 14



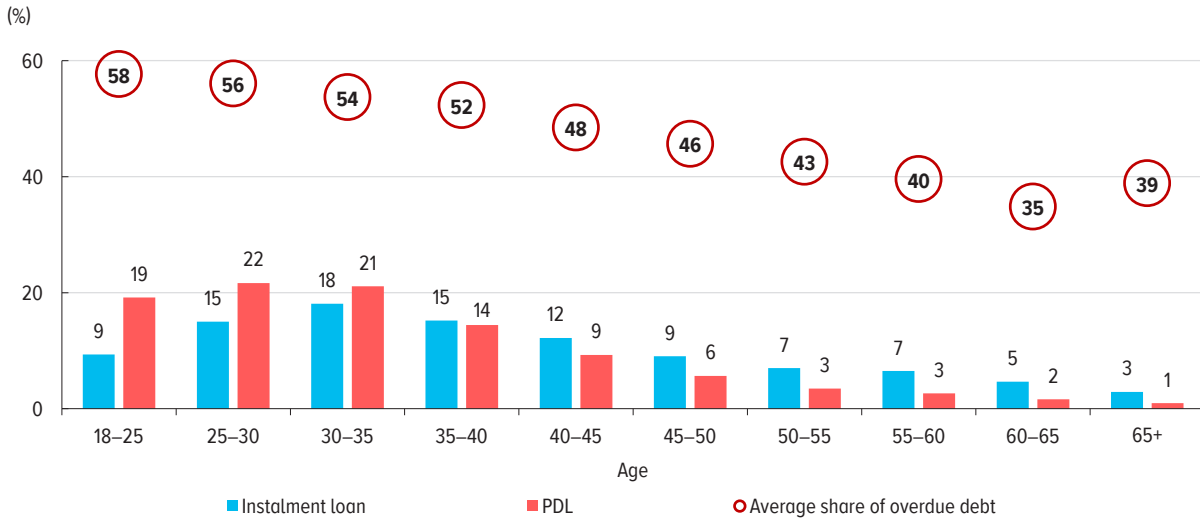
had to close their offices and borrowers were unable to repay their offline microloans. Moreover, debt collection and sales processes were suspended.

The level of individual borrowers' payment defaults in instalment lending is considerably lower. Specifically, only 17% of borrowers in the PDL segment do not have overdue payments, while this portion in instalment lending exceeds one-half – 57%. However, risks to MFOs' financial standing are generally concentrated in the instalment segment accounting for two-thirds (68%) of overdue debt, which is because the share of this segment in the market is large (Charts 13 and 14).

According to the analysis of MFO borrowers' age groups, younger borrowers aged under 40 or 40 demonstrate the highest demand for microloans (61% of debt in the market). Contrastingly, the median amount of a disbursed microloan is larger among older people: 8,600 rubles – the median for borrowers aged under 40 or 40, and 13,400 rubles – the median for borrowers aged 40+. Younger people also raise PDLs considerably more often than instalment loans (Chart 15). This may be explained by lower restrictions within MFOs' scoring procedures or their absence in the PDL segment. It should be noted that MFOs' older borrowers account for a smaller portion of overdue

STRUCTURE OF BORROWERS' AGE GROUPS AND MICROLOAN QUALITY

Chart 15



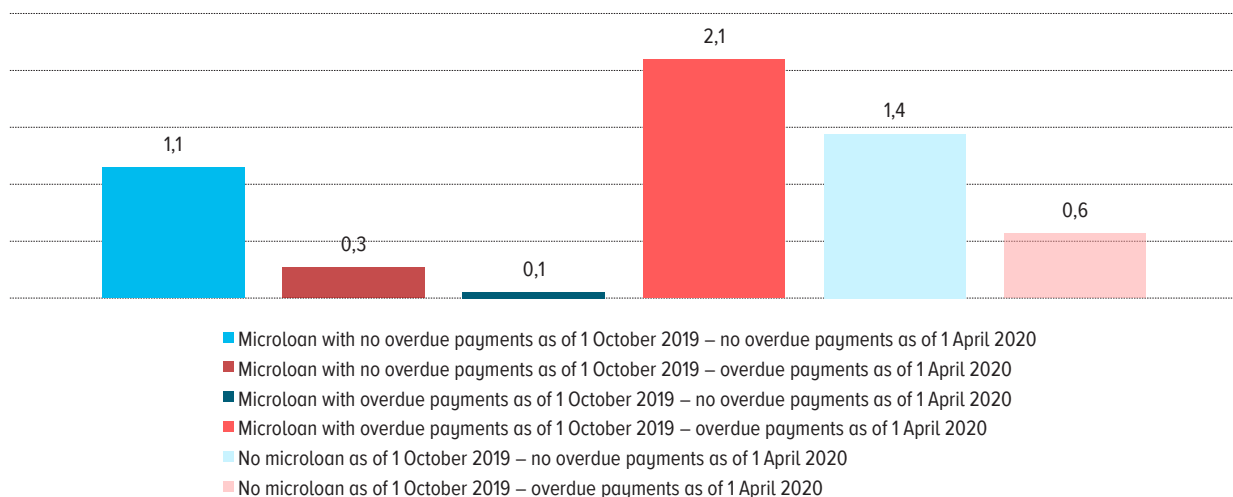
debt, that is, these are young people who are predominantly responsible for troubled assets in this market.

The structure of MFO borrowers' overdue debt is of certain interest as well. As of 1 April 2020, over one-third (38%) of borrowers had payments overdue more than six months, in the first place; and secondly, these borrowers accounted for one-half of overall overdue debt as of the reporting date. Of the borrowers having debt overdue less than 90 days as of 1 October 2019, 15% of people managed to repay their overdue debt. Of all MFO borrowers as of 1 April 2020, 20% had no overdue debt both six months before and as of the reporting date, that is, they maintained good payment discipline (Charts 16 and 17).

It is worth reminding that among the first measures limiting debt burden in the microfinance market, the Bank of Russia established the overpayment threshold for interest, penalties, and other charges stipulated by the agreement of the original principal of a microloan disbursed (the maximum ratio of accrued interest – X). This measure was first implemented in 2016 when the ratio of accrued interest was limited to 4. It was subsequently tightened several times, and beginning from 1 January

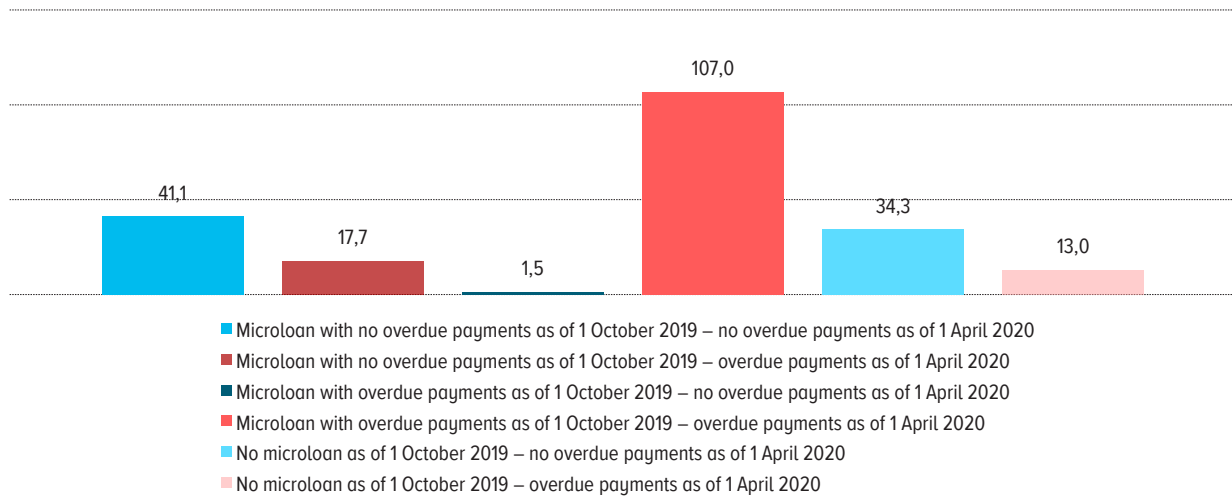
OVERDUE DEBT STRUCTURE AND CHANGES AS OF 1 APRIL 2020 (MILLIONS OF PERSONS)

Chart 16



OVERDUE DEBT STRUCTURE AND CHANGES AS OF 1 APRIL 2020
(BILLIONS OF RUBLES)

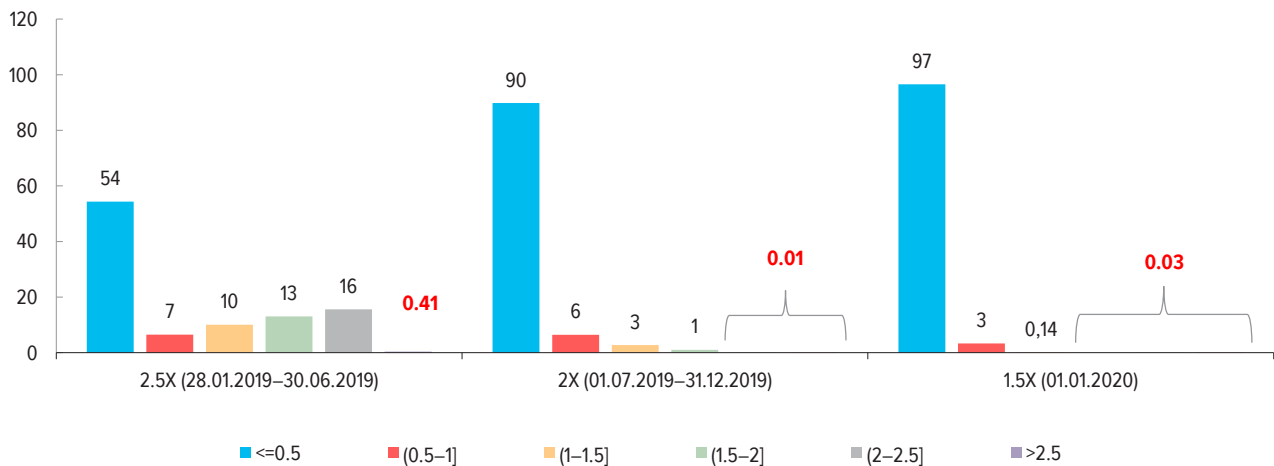
Chart 17



2020 it may not exceed 1.5.⁵ According to the analysis (Chart 18), MFOs complied with the maximum ratio of accrued interest for all the thresholds effective throughout 2019 and at the beginning of 2020 in relation to nearly all borrowers. As regards older-generation loans, there is an upward trend in the portion of borrowers in the cohorts having a higher ratio of accrued interest. For this reason, it will be possible to draw more correct conclusions about how MFOs comply with the effective maximum ratio of accrued interest (1.5X) later on, as the microloan portfolio matures.

BORROWERS, BY MAXIMUM RATIO OF ACCRUED INTEREST
(DEBT TO AGREEMENT AMOUNT RATIO)*
(%)

Chart 18



* For ratio 2.5X of accrued interest, the calculation included microloans issued from 28 January through 30 June 2019; for ratio 2X – from 1 July through 31 December 2019; for ratio 1.5X – from 1 January 2020. These data may be underestimated since they do not take into account the amount of interest and other income accrued and paid over the period.

⁵ Clause 24, Article 5 of Federal Law No. 353-FZ, dated 21 December 2013, 'On Consumer Loans'.

CONCLUSION

After the Bank of Russia introduced the payment-to-income ratio, the growth of unsecured consumer lending slowed down to a certain extent. Nonetheless, the customer base of both banks and MFOs continued to expand and renew. Although a part of people apply for a microloan already having a bank loan, the percentage of such borrowers is currently not high. Over the period under review, from 1 October 2019 to 1 April 2020, there was no rise in risks related to the restrictions on lending to bank borrowers and their shift to MFOs.

In the future, PTI will become increasingly important in the regulation: as the financial market develops, the number of borrowers having debt on several credit products simultaneously and the number of people having debt on both loans and microloans at a time grow. In order to timely limit the risks of an increase in households' debt burden, the regulator needs an instrument making it possible to limit the risks of excessive debt, while maintaining the affordability of loans for borrowers with lower risk levels. According to international experience, regulators apply quantity restrictions to limit the proportion of loans granted to borrowers with high PTI.

ANNEXES

Annex 1. Description of data used

1.1. Data composition

Anonymised data were requested from the CHBs in a single format:

- a borrower's unique identifier;
- a borrower's year of birth;
- a borrower's region of registration/residence;
- dates of loan (microloan) issue and repayment, and of the latest update of information on a loan;
- data on the institution that issued a loan (microloan) (taxpayer identification number and primary state registration number);
- a loan type (mortgage loan, car loan, unsecured consumer loan,¹ credit card, microloan, other)
- overdue debt on a loan (microloan) as of the date;
- total debt (including debt on accrued interest, fines and penalties) on a loan (microloan) as of the date;
- the amount of debt or limit as of the issue date of a loan, a microloan, or a credit card;
- the existence of collateral.

The limitation of the analysis is that a credit history does not include information on a borrower's income (this indicator is not on the list of the information to be provided to CHBs by credit history sources).² Therefore, it is impossible to calculate the debt burden of individual bank customers.

A borrower's unique identifier was formed by the CHBs for data anonymisation. No other data on a borrower's identity were requested from the CHBs. It was possible to deduplicate loans (microloans) recorded at more than one CHB.³ Borrowers' unique identifiers made it possible to calculate the number of loans (microloans) and analyse the combination of different loan (microloan) types per borrower.

As of 1 April 2020, three CHBs provided approximately 270 million records on loans (microloans).

VOLUME OF DATA RECEIVED

	CHB 1	CHB 2	CHB 3
Number of records as of 1 April 2020, million	114	80	76

¹ Cash loans and POS loans.

² According to Federal Law No. 218-FZ, dated 30 December 2004, 'On Credit Histories'.

³ A creditor may submit information on the same loan to several CHBs. When aggregate indicators are measured for the lending market, it is necessary to ensure that such a loan is taken into account only once, that is, to avoid duplication. This requires the deduplication of loans.

1.2. Data processing

The analysis relied on information from banks and MFOs providing data to the CHBs reviewed.

Creditors often submit information on issued loans (microloans) to several CHBs simultaneously, which entails data duplication. Therefore, in order to deduplicate the information, we applied the following approaches:

1. For every bank, we calculated the number of records on loans at each CHB. The further analysis only used the information from the CHB that had the largest number of records on a bank's borrowers.
2. For every MFO, we used data from the CHB that gave the least error compared with the reporting submitted to the Bank of Russia on respective control metrics.

This significantly reduced the volume of data and eliminated the duplication of records on the same borrowers from different CHBs. The unique contract identifier (UCI) introduced on 1 October 2019 improves the quality of data deduplication. However, as of 1 April 2020, the portion of records with UCIs was only 60%.

The survey enabled the comparison of the databases of the three largest CHBs, which is important in terms of how creditors use information to assess a borrower's debt burden. Beginning from 1 October 2019, banks and microfinance organisations shall calculate PTI on newly issued retail loans. PTI is measured as the ratio of a borrower's payments on all loans (microloans) to income. To calculate total payments on a borrower's loans (microloans), a credit institution needs to request relevant information from a CHB. According to the analysis of the three largest CHBs, all the three bureaus have identical information on as little as 28% of borrowers, which means that a creditor needs to apply to any of these CHBs to calculate these customers' PTI. As to all other borrowers, either only one CHB has relevant information, or several CHBs have data on different loans provided to them by different banks. Therefore, a bank has to request information from several CHBs in order to assess a borrower's exposure correctly.

For every bank, debt on particular loan portfolios (mortgage loans, car loans, unsecured consumer loans) calculated based on the information from the CHBs was compared against the data of Reporting Form 0409115 'Information on the quality of assets of a credit institution (banking group)'. Additionally, for every bank, we compared debt in individual regions against the data of Reporting Form 0409316 'Information on loans granted to individuals'. This enabled additional control of the quality of data obtained from the CHBs.

The information from the CHBs and the reporting forms were comparable for the majority of banks. However, discrepancies were revealed in relation to individual banks (mostly, towards higher values according to the CHBs' information). The reason for these discrepancies is that Reporting Form 0409115 does not take into account debt on loans recorded in off-balance-sheet accounts (e.g., information on debt on written-off loans), securitised loans, as well as interest, fines, penalties and forfeits charged on loans. For those banks who transferred the portfolios of bad loans to collectors or closed loans after the writing-off of uncollectible debt, submitting the relevant information to the CHBs, the aggregate data on the portfolio according to the CHBs' information are close to the supervisory reporting.

To carry out further analysis, in relation to banks, we selected only those loans where debt as of the relevant date exceeded 10,000 rubles, there was no collateral (except mortgage and car loans), and the information on a loan (microloan) was last updated at least 12 months before the reporting date. As of 1 April 2020, nearly 3.9 million people had outstanding loans in the amount of up to 10,000 rubles. However, the accounting of such loans hardly changes the size of loan portfolios. Outstanding debt on such loans is as little as 0.3% of debt in the overall loan portfolio.

For each MFO, its control metrics (overall debt in the microloan portfolio, the numbers of microloan agreements and borrowers) obtained based on the CHBs' data were compared against the data of

Reporting Forms 0420840 'Statement of microfinance activity of a microfinance company' and 0420846 'Statement of microfinance activity of a microcredit company'.

Overall, the quality of data on the majority of the largest MFOs may be considered to be satisfactory. However, as compared to banks, the general quality of data submitted by MFOs to the CHBs is currently lower, while showing positive changes. This survey did not include the information on MFOs where the quality of data was inadequate.

In contrast to bank lending, microloans with the original amount of an agreement below 10,000 rubles make a significant portion of the microfinance market. As of 1 April 2020, according to the reporting submitted by MFOs to the Bank of Russia, the average amount of microloans disbursed to individuals equalled 11,300 rubles across the market in general. Therefore, in relation to MFOs, the analysis took into account all microloans. The final sample for the analysis totalled 80.2% of the consumer microfinance market. Therefore, we may say that the study was representative.

To calculate regional statistics, we used the All-Russian Classifier of Administrative-Territorial Entities (OKATO) based on one of the following fields (in priority order): a borrower's residential postal code, passport-issuing region or registration postal code. These indices were compared against OKATO based on data from the Federal Information Address System (FIAS).

Annex 2. Credit penetration and debt burden, by region (as of 1 April 2020)

Credit penetration is the ratio of the number of borrowers in a region as of the reporting date to the number of permanent residents as of the beginning of the calendar year.

Region	Credit penetration (MFOs), %	Credit penetration (mortgage loans), %	Credit penetration (consumer loans, excluding credit cards), %	Credit penetration (total), %
Altai Territory	5.3	5.3	21.6	33.8
Amur Region	4.8	5.3	24.0	35.7
Arkhangelsk Region	4.2	7.3	20.0	32.3
Astrakhan Region	4.2	4.3	21.8	31.0
Belgorod Region	3.8	4.3	19.6	29.5
Bryansk Region	3.0	5.0	16.9	26.5
Vladimir Region	3.4	4.9	16.5	26.4
Volgograd Region	4.1	4.6	17.7	28.1
Vologda Region	3.6	7.1	20.1	31.1
Voronezh Region	3.1	5.4	16.9	26.9
Moscow	2.6	3.9	12.3	23.7
Saint Petersburg	3.0	6.9	15.7	30.7
Sevastopol	5.9	5.1	15.4	37.4
Jewish Autonomous Region	6.9	4.2	22.2	33.9
Zabaikalye Territory	6.5	4.6	23.3	34.9
Ivanovo Region	4.2	4.2	15.9	26.0
Irkutsk Region	5.5	6.5	24.1	37.2
Kabardino-Balkar Republic	3.4	2.1	14.8	20.6
Kaliningrad Region	3.3	4.7	18.1	29.4
Kaluga Region	3.5	6.2	18.1	29.2
Kamchatka Territory	4.0	4.9	22.0	33.1
Karachay-Cherkess Republic	4.2	2.5	18.7	25.7
Kemerovo Region	5.4	5.9	22.2	34.0
Kirov Region	4.0	6.9	19.3	30.6
Kostroma Region	3.7	5.4	17.8	28.3
Krasnodar Territory	4.3	4.3	19.8	30.9
Krasnoyarsk Territory	4.3	6.8	22.6	35.0
Kurgan Region	5.6	5.5	22.0	33.8
Kursk Region	3.5	5.1	19.1	29.3
Leningrad Region	3.5	5.3	17.3	29.2
Lipetsk Region	3.4	4.8	18.1	27.7
Magadan Region	4.0	7.8	24.3	37.7
Moscow Region	3.9	6.0	18.2	31.7
Murmansk Region	4.2	5.1	22.9	34.9
Nizhny Novgorod Region	3.7	5.6	17.5	28.1
Novgorod Region	3.9	5.3	18.5	29.9
Novosibirsk Region	4.6	7.1	21.3	34.3
Omsk Region	4.9	5.7	21.0	33.1
Orenburg Region	4.6	6.5	22.3	34.3
Orel Region	3.9	5.7	18.8	29.6
Penza Region	3.4	5.4	17.5	27.1
Perm Territory	4.8	7.0	20.9	33.6
Primorye Territory	4.8	4.0	20.8	31.2
Pskov Region	3.9	4.3	18.5	29.6
Republic of Adygeya	5.0	3.1	21.0	30.4
Altai Republic	8.4	2.3	26.0	37.8
Republic of Bashkortostan	4.7	6.6	19.6	31.1
Republic of Buryatia	5.4	4.1	23.0	34.5
Republic of Dagestan	1.5	0.6	5.9	8.4
Republic of Ingushetia	0.9	0.2	5.8	7.5
Republic of Kalmykia	6.1	4.9	23.5	34.5

Republic of Karelia	4.0	6.4	21.1	33.6
Republic of Komi	4.7	8.5	23.9	36.8
Republic of Crimea	3.0	0.4	5.3	13.2
Mari El Republic	5.9	6.2	17.2	28.8
Republic of Mordovia	3.4	5.0	16.1	24.5
Republic of Sakha (Yakutia)	5.7	8.0	23.9	36.8
Republic of North Ossetia–Alania	5.1	2.2	20.6	27.7
Republic of Tatarstan	4.5	6.5	18.2	29.9
Republic of Tuva	13.6	3.2	25.2	39.2
Republic of Khakassia	5.5	5.3	23.5	34.3
Rostov Region	3.9	4.2	18.5	28.6
Ryazan Region	3.2	6.2	16.6	26.9
Samara Region	4.3	6.7	19.4	33.4
Saratov Region	4.1	5.2	18.3	29.0
Sakhalin Region	4.5	4.8	22.8	34.7
Sverdlovsk Region	5.0	6.4	20.5	33.5
Smolensk Region	3.5	5.1	17.4	27.2
Stavropol Territory	3.5	4.2	17.7	26.6
Tambov Region	3.6	4.4	17.2	26.3
Tver Region	3.4	5.5	17.1	27.7
Tomsk Region	4.2	5.7	19.9	31.5
Tula Region	4.0	5.1	18.0	28.8
Tyumen Region	4.7	8.9	22.3	35.0
Udmurt Republic	4.8	8.6	21.0	34.2
Ulyanovsk Region	4.1	7.4	19.1	30.6
Khabarovsk Territory	5.1	5.4	21.0	33.7
Chelyabinsk Region	4.8	6.6	20.8	33.1
Chechen Republic	1.3	0.3	8.7	10.4
Chuvash Republic	3.8	8.2	16.0	28.0
Chukotka Autonomous Area	1.7	5.9	18.3	26.7
Yaroslavl Region	3.4	5.2	17.2	27.3

Debt burden is the ratio of average debt per borrower in a region as of 1 April 2020 to average monthly income in a region (seasonally adjusted).

Region	Debt burden (mortgage loans)	Debt burden (consumer loans, excluding credit cards)	Debt burden (total)*
Altai Territory	31.84	8.95	12.9
Amur Region	29.65	8.55	12
Arkhangelsk Region	24.65	8.24	12.4
Astrakhan Region	33.12	10.27	14.1
Belgorod Region	21.9	7.87	10.3
Bryansk Region	22.37	7.85	11.3
Vladimir Region	29.16	9.51	13.9
Volgograd Region	29.98	10.19	14.0
Vologda Region	25.33	9.58	14.0
Voronezh Region	24.57	7.74	11.8
Moscow	34.21	6.93	11.0
Saint Petersburg	33.85	8.61	14.6
Sevastopol	36.36	9.6	11.1
Jewish Autonomous Region	30.44	10.36	12.5
Zabaikalye Territory	19.28	6.04	7.8
Ivanovo Region	26.77	8.88	12.2
Irkutsk Region	32.09	10.89	15.3
Kabardino-Balkar Republic	34.28	10.1	12.7
Kaliningrad Region	33.55	10.45	14.5
Kaluga Region	29.6	9.23	14.3
Kamchatka Territory	24.92	7.87	10.8
Karachay-Cherkess Republic	42.78	13.29	16.5
Kemerovo Region	22.8	8.02	11.0
Kirov Region	28.95	9.43	14.9
Kostroma Region	25.66	8.58	12.6
Krasnodar Territory	25.98	7.53	10.9
Krasnoyarsk Territory	39.8	11.97	18.2
Kurgan Region	31.44	9.94	14.3
Kursk Region	22.28	7.83	10.9
Leningrad Region	36.59	10.14	15.6
Lipetsk Region	21.23	7.65	10.5
Magadan Region	19.3	6.51	9.4
Moscow Region	34.74	9.24	14.1
Murmansk Region	21.22	8.73	10.5
Nizhny Novgorod Region	23.68	7.79	11.8
Novgorod Region	28.34	9.32	13.2
Novosibirsk Region	40.73	10.73	17.6
Omsk Region	32.06	10.19	14.5
Orenburg Region	30.03	9.64	14.4
Orel Region	25.41	8.69	12.5
Penza Region	29.9	10.39	15.1
Perm Territory	26.29	8.7	13.4
Primorye Territory	35.15	8.25	12.0
Pskov Region	27.77	8.95	12.0
Republic of Adygeya	26.82	8.05	10.7
Altai Republic	36.36	10.61	11.8
Republic of Bashkortostan	27.59	8.02	13.1
Republic of Buryatia	31.49	9.94	12.5
Republic of Dagestan	40.17	7.46	9.2
Republic of Ingushetia	65.18	12.19	12.5
Republic of Kalmykia	46.57	13.49	18.8
Republic of Karelia	26.33	9.55	13.1
Republic of Komi	24.71	8.66	13.0
Republic of Crimea	63.62	8.66	7.8

Mari El Republic	31.86	10.02	15.4
Republic of Mordovia	34.58	11.12	16.6
Republic of Sakha (Yakutia)	49.06	13.13	21.8
Republic of North Ossetia–Alania	38.08	9.15	11.5
Republic of Tatarstan	27.85	7.29	12.7
Republic of Tuva	47.4	10.52	12.8
Republic of Khakassia	45.21	14.45	20.2
Rostov Region	30.23	8.33	12.4
Ryazan Region	28.66	9.78	15.1
Samara Region	26.47	9.03	12.9
Saratov Region	30.5	9.98	14.4
Sakhalin Region	26.51	6.73	9.6
Sverdlovsk Region	25.77	7.56	11.5
Smolensk Region	26.24	8.88	12.7
Stavropol Territory	28.61	10.39	14.2
Tambov Region	24.31	8.31	11.6
Tver Region	29.67	9.28	13.9
Tomsk Region	27.42	9.07	13.1
Tula Region	29.14	9.96	14.0
Tyumen Region	23.98	7.74	12.7
Udmurt Republic	26.04	9.69	15.2
Ulyanovsk Region	24.73	9.5	14.2
Khabarovsk Territory	28.23	7.65	11.0
Chelyabinsk Region	29.56	9.77	15.0
Chechen Republic	50.89	8.8	9.5
Chuvash Republic	33.12	10.76	18.6
Chukotka Autonomous Area	16.45	6.57	9.1
Yaroslavl Region	25.81	8.86	12.8

* Including debt on microloans, car loans, and credit cards.

Annex 3. Credit penetration and debt burden, by region (as of 1 October 2019)

Credit penetration is the ratio of the number of borrowers in a region as of the reporting date to the number of permanent residents as of the beginning of the calendar year.

Region	Credit penetration (MFOs), %	Credit penetration (mortgage loans), %	Credit penetration (consumer loans, excluding credit cards), %	Credit penetration (total), %
Altai Territory	4.6	5.1	21.4	33.4
Amur Region	4.0	5.1	23.5	34.8
Arkhangelsk Region	3.7	7.1	19.8	32.0
Astrakhan Region	3.5	4.1	21.7	30.5
Belgorod Region	3.3	4.2	19.2	28.8
Bryansk Region	2.4	4.8	16.7	25.9
Vladimir Region	2.9	4.7	16.4	25.8
Volgograd Region	3.6	4.4	17.5	27.5
Vologda Region	3.1	6.9	19.8	30.6
Voronezh Region	2.6	5.2	16.6	26.2
Moscow	2.3	3.6	11.9	23.2
Saint Petersburg	2.5	6.5	15.2	29.8
Sevastopol	5.2	5.4	16.3	38.3
Jewish Autonomous Region	6.4	4.1	21.7	33.0
Zabaikalye Territory	5.4	4.4	22.5	33.7
Ivanovo Region	3.8	4.1	15.9	25.5
Irkutsk Region	4.6	6.4	23.5	36.3
Kabardino-Balkar Republic	3.0	2.1	14.5	20.2
Kaliningrad Region	2.7	4.3	17.6	28.5
Kaluga Region	2.9	6.0	18.0	28.7
Kamchatka Territory	3.5	4.7	21.1	32.0
Karachay-Cherkess Republic	3.9	2.4	18.3	25.2
Kemerovo Region	4.7	5.7	22.1	33.6
Kirov Region	3.4	6.7	19.2	30.2
Kostroma Region	3.2	5.2	17.7	27.8
Krasnodar Territory	3.7	4.1	19.1	29.7
Krasnoyarsk Territory	3.6	6.6	22.1	34.1
Kurgan Region	5.1	5.2	21.9	33.4
Kursk Region	3.0	5.1	19.3	29.1
Leningrad Region	3.0	4.9	16.7	28.5
Lipetsk Region	2.8	4.6	17.9	27.2
Magadan Region	3.4	7.5	24.0	37.3
Moscow Region	3.3	5.6	17.4	30.7
Murmansk Region	3.7	5.0	22.6	34.7
Nizhny Novgorod Region	3.2	5.5	17.3	27.6
Novgorod Region	3.2	5.0	18.0	29.1
Novosibirsk Region	3.9	6.7	20.9	33.4
Omsk Region	4.5	5.5	20.9	32.7
Orenburg Region	4.0	6.5	22.2	34.0
Orel Region	3.4	5.5	18.6	29.0
Penza Region	3.0	5.1	17.3	26.7
Perm Territory	4.1	6.8	20.6	33.0
Primorye Territory	4.0	3.8	20.2	30.1
Pskov Region	3.4	4.1	18.3	29.3
Republic of Adygeya	4.5	2.9	20.7	29.8
Altai Republic	7.0	2.2	25.6	36.8
Republic of Bashkortostan	4.0	6.3	19.2	30.4
Republic of Buryatia	4.4	3.9	22.3	33.4
Republic of Dagestan	1.4	0.5	5.4	7.9
Republic of Ingushetia	0.8	0.2	5.5	7.2
Republic of Kalmykia	5.3	4.6	23.6	34.1

Republic of Karelia	3.3	6.2	20.7	33.0
Republic of Komi	3.9	8.3	23.7	36.4
Republic of Crimea	2.4	0.3	5.0	12.0
Mari El Republic	5.2	5.9	17.0	28.1
Republic of Mordovia	3.0	4.8	16.1	24.2
Republic of Sakha (Yakutia)	4.2	7.7	23.4	35.4
Republic of North Ossetia–Alania	4.6	2.0	20.0	26.9
Republic of Tatarstan	3.9	6.2	17.9	29.1
Republic of Tuva	11.1	3.1	24.8	37.1
Republic of Khakassia	4.8	5.0	23.1	33.5
Rostov Region	3.3	4.0	18.2	27.8
Ryazan Region	2.8	6.0	16.3	26.3
Samara Region	3.8	6.5	19.2	33.0
Saratov Region	3.6	4.9	18.1	28.5
Sakhalin Region	3.8	4.5	21.9	33.4
Sverdlovsk Region	4.3	6.0	20.1	32.8
Smolensk Region	3.0	5.0	17.2	26.7
Stavropol Territory	3.0	4.0	17.4	25.9
Tambov Region	3.2	4.2	17.0	25.8
Tver Region	2.9	5.3	16.8	27.2
Tomsk Region	3.6	5.6	19.5	31.0
Tula Region	3.4	4.9	17.7	28.1
Tyumen Region	3.9	8.5	21.7	34.1
Udmurt Republic	4.1	8.4	20.9	33.7
Ulyanovsk Region	3.6	7.2	19.1	30.3
Khabarovsk Territory	4.4	5.2	20.4	32.8
Chelyabinsk Region	4.1	6.3	20.6	32.6
Chechen Republic	1.0	0.2	8.5	10.1
Chuvash Republic	3.3	7.9	16.0	27.5
Chukotka Autonomous Area	1.5	5.7	17.7	26.2
Yaroslavl Region	3.0	5.0	17.0	26.8

Debt burden is the ratio of average debt per borrower in a region as of 1 October 2019 to average monthly income in a region (seasonally adjusted).

Region	Debt burden (mortgage loans)	Debt burden (consumer loans, excluding credit cards)	Debt burden (total)
Altai Territory	32.03	8.73	12.77
Amur Region	29.34	8.50	11.90
Arkhangelsk Region	24.79	8.16	12.39
Astrakhan Region	32.99	10.00	13.86
Belgorod Region	21.35	7.62	9.98
Bryansk Region	22.34	7.72	11.33
Vladimir Region	29.30	9.49	13.83
Volgograd Region	29.49	9.83	13.62
Vologda Region	25.12	9.50	13.88
Voronezh Region	24.62	7.60	11.68
Moscow	33.22	6.88	10.63
Saint Petersburg	32.66	8.36	14.08
Sevastopol	38.23	9.65	11.92
Jewish Autonomous Region	30.90	10.18	12.49
Zabaikalye Territory	19.30	5.95	7.73
Ivanovo Region	27.06	8.71	12.23
Irkutsk Region	31.95	10.80	15.22
Kabardino-Balkar Republic	34.25	9.85	12.40
Kaliningrad Region	33.15	10.18	14.18
Kaluga Region	29.51	9.14	14.21
Kamchatka Territory	24.55	7.61	10.47
Karachay-Cherkess Republic	42.92	13.00	16.19
Kemerovo Region	22.65	7.81	10.83
Kirov Region	28.71	9.13	14.47
Kostroma Region	25.59	8.53	12.51
Krasnodar Territory	25.47	7.35	10.61
Krasnoyarsk Territory	39.50	11.71	17.97
Kurgan Region	32.07	9.75	14.17
Kursk Region	22.02	7.81	10.83
Leningrad Region	35.58	9.77	14.85
Lipetsk Region	21.11	7.70	10.50
Magadan Region	19.82	6.69	9.52
Moscow Region	34.04	9.06	13.65
Murmansk Region	21.26	8.60	10.45
Nizhny Novgorod Region	23.33	7.65	11.69
Novgorod Region	27.80	8.99	12.79
Novosibirsk Region	40.19	10.55	17.24
Omsk Region	31.46	10.05	14.14
Orenburg Region	29.46	9.39	14.20
Orel Region	25.20	8.35	12.16
Penza Region	29.52	10.21	14.79
Perm Territory	25.80	8.53	13.16
Primorye Territory	33.56	7.99	11.55
Pskov Region	27.90	8.74	11.80
Republic of Adygeya	26.66	8.04	10.59
Altai Republic	35.91	9.95	11.35
Republic of Bashkortostan	27.13	7.81	12.76
Republic of Buryatia	30.93	9.89	12.52
Republic of Dagestan	41.06	7.61	9.11
Republic of Ingushetia	59.20	11.99	12.06
Republic of Kalmykia	46.13	13.28	18.40
Republic of Karelia	26.18	9.51	12.96
Republic of Komi	24.68	8.36	12.82
Republic of Crimea	64.10	8.44	7.46

Mari El Republic	31.62	9.94	15.22
Republic of Mordovia	34.37	11.00	16.45
Republic of Sakha (Yakutia)	48.56	13.23	21.95
Republic of North Ossetia–Alania	38.35	9.12	11.46
Republic of Tatarstan	25.56	7.02	11.95
Republic of Tuva	47.03	10.19	12.77
Republic of Khakassia	45.09	14.21	19.88
Rostov Region	30.46	8.22	12.30
Ryazan Region	28.15	9.61	14.87
Samara Region	26.21	8.91	12.67
Saratov Region	30.31	9.84	14.15
Sakhalin Region	25.63	6.55	9.32
Sverdlovsk Region	25.53	7.40	11.23
Smolensk Region	26.79	8.96	12.91
Stavropol Territory	28.31	10.21	14.03
Tambov Region	23.70	8.12	11.37
Tver Region	29.72	9.21	13.88
Tomsk Region	27.11	8.82	12.97
Tula Region	28.51	9.84	13.70
Tyumen Region	24.76	7.48	12.61
Udmurt Republic	25.24	9.39	14.75
Ulyanovsk Region	24.19	9.24	13.86
Khabarovsk Territory	28.02	7.49	10.90
Chelyabinsk Region	29.25	9.54	14.56
Chechen Republic	54.28	8.63	9.29
Chuvash Republic	33.01	10.93	18.78
Chukotka Autonomous Area	16.43	6.75	9.19
Yaroslavl Region	25.62	8.72	12.61