



Bank of Russia



September 2022

BANK OF RUSSIA MACROPRUDENTIAL POLICY: IMPLEMENTATION CONCEPT AND DECISIONS PLANNED

Analytical note

Moscow
2022

CONTENTS

Executive summary	3
Introduction	5
Chapter 1. Objectives of macroprudential policy tools and their combined effect.....	6
1.1. The Bank of Russia’s macroprudential policy objectives and tools	6
1.2. Macroprudential tools to limit cyclical vulnerabilities in retail lending and mechanisms for the transmission of their effect.....	7
1.3. Macroprudential tools to reduce structural vulnerabilities associated with foreign currency claims on legal entities.....	12
Chapter 2. Macroprudential measures planned by the Bank of Russia	14
2.1. Measures to limit risks in unsecured consumer lending.....	14
2.1.1. Situation in the market of unsecured consumer loans and consumer microloans.....	15
2.1.2. Macroprudential limits depending on borrowers’ debt service-to-income ratios	20
2.1.3. Macroprudential limits depending on maturities	21
2.1.4. Expected effect of macroprudential limits on the market.....	22
Annex 1. International experience of using macroprudential tools.....	26

This document was prepared by the Financial Stability Department.

The document is based on statistics and other data available as of 1 September 2022.

The electronic version of the document is available at the Bank of Russia website in the Financial Stability / Analytics section.

Please send your feedback at: zdb@cbr.ru.

The reference to the Bank of Russia is mandatory if you intend to use this document.

Cover photo: Shutterstock / FOTODOM

12 Neglinnaya Street, 107016 Moscow

Bank of Russia website: www.cbr.ru

EXECUTIVE SUMMARY

1. This report describes the decision-making system used by the Bank of Russia to develop its macroprudential policy considering the expansion of its toolkit¹ and the accumulated experience in policy implementation, including in crisis conditions. The report also describes and explains macroprudential measures that the Bank of Russia plans to take in the first quarter of 2023 in order to limit systemic risks in the consumer lending market.

2. The Bank of Russia possesses three macroprudential tools to limit cyclical vulnerabilities associated with excessive lending growth. These are the countercyclical capital buffer (CCyB), risk-weight add-ons, and macroprudential limits (MPLs). The CCyB has never been applied, but may be potentially activated in the long run for banks to accumulate capital buffers. Risk-weight add-ons are used both to accumulate capital buffers and to limit high-risk lending. MPLs are applied only to limit high-risk lending. In order to reduce structural vulnerabilities in corporate lending (in the first place, in foreign currency lending), the Bank of Russia uses risk-weight add-ons.

3. Despite a decline in the credit quality amid the sanctions and lower GDP, the growth in unsecured consumer lending is recovering gradually owing to a decrease in interest rates in the economy and an easing of the lending standards. To restrict the rise in households' debt burden, the Bank of Russia plans to establish MPLs for banks with a universal licence and microfinance organisations (MFOs). In contrast to macroprudential buffers that were significantly eased by the Bank of Russia after the outbreak of the crisis, the MPLs will not involve any additional burden on banks' and MFOs' capital. The MPLs will contribute to a more balanced structure of consumer lending.

3.1. For banks with a universal licence, the Bank of Russia will establish the MPLs separately depending on borrowers' debt service-to-income (DSTI) ratios and maturities of unsecured consumer loans (other than loans with a credit limit) and loans with a credit limit. The proportion of loans (limits) issued to borrowers with DSTI above 80% will be restricted to 25% of the overall amount of issued consumer loans (established/increased limits). The proportion of unsecured consumer loans with maturities of over five years is planned to be restricted to 10%. Thus, there will be simultaneously four limits for banks.

3.2. For MFOs, the Bank of Russia will apply two DSTI-based limits (on the proportion of loans to borrowers with DSTI above 80% in the total amount of issued loans) – for consumer loans and loans with a credit limit (with each of them at the level of 35%).

3.3. For banks with a basic licence, the Bank of Russia will not introduce MPLs for the time being as these banks' contribution to the growth of households' debt burden is minor.

3.4. The availability of loans may decrease for borrowers who already have high DSTI and borrowers wishing to raise a very long-term unsecured loan. The restrictions may cover up to 10% of the amount of loans issued by banks over a quarter (approximately two times less in quantitative terms) and 14% of consumer microloans issued by MFOs.

3.5. The establishment of the MPLs will promote a more balanced distribution of high-risk loans in the banking sector. A number of banks will need to adjust their underwriting standards in consumer lending.

3.6. The MPLs will help slow down the expansion of the loan portfolios of over-indebted households. The macroeconomic impact on inflation and GDP will be limited. Initially, the MPLs will restrict the flow of funds borrowed by households from banks and MFOs. Further on, the MPLs will contribute to a decrease in the proportion of households' income used to service

¹ At the end of 2021, amendments were introduced into laws, which authorised the Bank of Russia to establish macroprudential limits.

loans (compared to the potential percentage without MPLs), which will help restore demand. Overall, the MPLs will promote growth in the economy without excessive risks.

4. Later on, in order to mitigate systemic risks in unsecured consumer lending, the Bank of Russia will adhere to the following procedure for applying macroprudential tools:

4.1. The MPLs for unsecured consumer loans will be used to restrict the countercyclical growth of households' debt burden and maintain consumer lending standards.

4.2. Risk-weight add-ons for unsecured consumer loans may be introduced when needed to cover the residual risk not mitigated by the MPLs. When calibrating the matrix of the risk-weight add-ons, the Bank of Russia will factor in the planned changes in the procedure for calculating the total cost of credit (TCC)² (the expansion of the list of borrowers' payments taken into account in the calculation of the TCC).

5. In the future, risk-weight add-ons may be used in mortgage lending, both to accumulate capital buffers and to limit high-risk lending. This tool has two objectives because the Bank of Russia is not empowered to establish MPLs for mortgage loans.

6. The Bank of Russia will fine-tune the macroprudential tool for foreign currency claims on legal entities and ensure the differentiation of the add-ons depending on the jurisdiction of the currency issuer (friendly or unfriendly countries). In case it is needed to increase the motivation to abandon 'toxic' currencies, the Bank of Russia Board of Directors will set specific values of the add-ons as the regulatory easing is scaled back, while considering banks' capacities to allocate capital in these assets. These measures will complement the policy pursued in Russia to discourage banks to raise liabilities in 'toxic' foreign currencies.³

7. In the near future, the Bank of Russia does not plan to activate the CCyB as this could reduce Russian banks' potential to issue corporate loans amid the transformation of the Russian economy. Further on, the CCyB will be applied in case of high growth rates in a number of lending segments simultaneously for banks to accumulate capital buffers.

8. The Bank of Russia will continue regular communication on its macroprudential policy and the evaluation of its effects, primarily in the semi-annual Financial Stability Review or (if the situation changes and it is reasonable to promptly adjust the measures) in special reports on macroprudential policy.

² Draft Federal Law No. 48749-8 'On Amending the Federal Law 'On Consumer Loans' and Certain Laws of the Russian Federation'.

³ Banks may set fees exceeding interest on corporate deposits, which is equivalent to negative returns on deposits.

INTRODUCTION

The Bank of Russia pursues countercyclical policy in macroprudential regulation. In the conditions of the crisis in 2022 Q1, the Bank of Russia fully released the macroprudential capital buffer and significantly reduced the risk-weight add-ons for newly issued loans. This easing supported lending to the economy.

After the tightening of the lending standards by banks, which is typical of the outbreak of a crisis, unsecured consumer lending (traditionally, a high-margin segment) demonstrated an emerging recovery trend and started to restore high-risk practices in recent months. Amid high uncertainty, banks might face increased risks associated with retail lending development. On the one hand, this might entail excessive growth in households' debt burden. On the other hand, this might adversely affect the structural transformation of the Russian economy due to inadequate financing of the corporate sector and cause a rise in long-term macroeconomic risks.

Considering these conditions, it seems reasonable to introduce the MPLs for banks with a universal licence and MFOs beginning from 1 January 2023. This is a new tool that will help limit the proportion of issued high-risk consumer loans and microloans without the need to increase capital for such loans.

This report describes the procedure for using and combining the macroprudential tools available to the Bank of Russia and considers the near-term plans for the development of macroprudential regulation.

CHAPTER 1. OBJECTIVES OF MACROPRUDENTIAL POLICY TOOLS AND THEIR COMBINED EFFECT

1.1. The Bank of Russia's macroprudential policy objectives and tools

The key goals of the Bank of Russia is to maintain financial and price stability. To ensure price stability, the Bank of Russia implements monetary policy. Financial stability is achieved through the combination of microprudential regulation, supervision over certain financial institutions, macroprudential and anti-crisis policies. Anti-crisis policy aims to maintain financial stability when a crisis scenario has already materialised, whereas macroprudential policy minimises the probability of and alleviates the consequences of future financial crises.

- The main objectives of macroprudential tools are to:
- Mitigate or reduce vulnerabilities in the financial system.

Accumulate capital buffers and liquidity in the financial system to enhance the resilience of financial institutions in case of shocks and to maintain operations, e.g. lending, during a turbulence period in financial markets.

Depending on the nature of vulnerabilities they address, such tools are divided into structural and cyclical ones. Cyclical vulnerabilities arise during a credit cycle expansion accompanied by the accumulation of risks in the financial system and then aggravate shocks in the course of an economic decline. Among others, such vulnerabilities include an increase in households' or companies' debt burden and an accelerated rise in prices for assets securing loans.

THE BANK OF RUSSIA'S MACROPRUDENTIAL TOOLKIT

Table 1

Type	Vulnerability	Tool	Currently
Cyclical	Household debt burden	MPLs Increased capital requirements CCyB	Add-ons are used only for high-risk unsecured consumer loans*
	Corporate debt burden	CCyB	Not used
	Accelerated growth in asset prices	Increased capital requirements CCyB	Add-ons are used only for loans secured by assets with LTV 90+
Structural	Dollarisation of the financial system	Increased capital requirements Required reserve ratios	Add-ons are applicable only to retail loans in foreign currency; increased ratios for required reserves in foreign currency are established
	Ratio of banks' claims and liabilities in foreign currency	Limit on the open foreign currency position (OFCP)	Easing for sanctioned banks failing to comply with the OFCP is valid through 31 December 2022; additional easing for banks failing to comply with the OFCP in US dollars and/or euros is valid through 31 December 2022 for: <ul style="list-style-type: none"> – opposite positions on the US dollar and the euro; – a failure to comply with the total OFCP
	Ratio of banks' claims and liabilities in terms of maturities	Liquidity coverage ratio Long-term liquidity ratio	An expanded list of conditions when a decrease in the liquidity coverage ratio is not deemed to be a violation is effective for systemically important credit institutions (SICIs) through 31 December 2022
	Risk concentration in large financial institutions	Systemic importance buffer	Banks are allowed not to maintain the buffers provided that they do not pay out dividends

* For loans (microloans) issued to individuals in rubles for consumption purposes with the TCC above 35% and loans (microloans) with the TCC from 20% to 35% and DSTI above 80%..

Structural vulnerabilities are associated with the expansion of the economy and lending to a lesser extent and reflect the established relations in the financial system. Structural vulnerabilities include a high dollarisation of assets in the financial system, a low proportion of long-term funds in the financial system, risk concentration in large financial institutions, and others.

Table 1 lists the macroprudential tools that the Bank of Russia may employ to limit cyclical and structural vulnerabilities.

1.2. Macroprudential tools to limit cyclical vulnerabilities in retail lending and mechanisms for the transmission of their effect

The Bank of Russia limits the risks of an excessive rise in household lending through macroprudential regulation of banks and MFOs. The available macroprudential tools vary depending on their objectives, the transmission mechanism, and the pace of their effect on financial institutions. Furthermore, some tools may simultaneously address the same objective. Therefore, it is essential to factor in their combined effect. For this, it is necessary to consider the transmission mechanism of their influence on creditors.

POSSIBLE OBJECTIVES OF MACROPRUDENTIAL POLICY TOOLS

Table 2

Tool	Possible objectives	Scope of regulation
MPLs	Limiting vulnerabilities	Banks MFOs
Risk-weight add-ons	Limiting vulnerabilities Accumulating capital buffers	Banks MFOs
CCyB	Accumulating capital buffers	Banks

Countercyclical capital buffer

The CCyB is introduced for banks to accumulate capital buffers that may be used during a crisis period.¹ This tool was developed by regulators in response to the 2007–2009 global financial crisis and is part of the Basel III package.

According to the international experience, the CCyB is applied in situations of an accelerated increase in lending whether in all important segments or only in some of them. A number of central banks consider it reasonable to introduce the CCyB even when there is no quick growth in lending in order to create an additional capital buffer that they will be able to use in case of a crisis (for details, see Annex 1).

A failure to comply with the CCyB is not a violation of the capital adequacy ratio and imposes profit distribution restrictions on banks, that is, a percentage of earnings is to be retained as capital and may not be paid out as dividends to shareholders. The amount of retained earnings depends on the difference between the value of the ratio and the minimum level of the ratio including buffers. For example, with the CCyB at the level of 0.25%, if a Russian systemically important bank's minimum holdings across all capital adequacy ratios range from 2.8125% to 3.75%, the bank will be allowed to distribute only 60% of its profit, and if its holdings are below 0.9375%, the bank will be obliged to retain all its profit as capital.

Although the primary objective of the CCyB is to form a capital buffer, its activation might impact banks' credit activity as well. This effect might arise for banks with a low level of capital adequacy, for example. An alternative to a capital increase for such banks can be slower growth or even a reduction in assets (deleveraging).

¹ Bank of Russia Instruction No. 199-I, dated 29 November 2019, 'On Required Ratios and Capital Adequacy Buffers for Banks with a Universal Licence'.

The Bank of Russia has not activated the CCyB because the past decade recorded a considerable rise in retail lending that surpassed the expansion of corporate lending and the risks were mitigated predominantly by the risk-weight add-ons for retail loans. In the conditions of the crisis and the transformation of the Russian economy, the Bank of Russia does not intend to activate the CCyB in the near future as this might produce a negative effect on corporate lending and the economic recovery.

Risk-weight add-ons

Since 2013, the Bank of Russia has been applying increased capital requirements as a tool to limit the growth of high-risk lending. In 2018, the Bank of Russia was entitled to raise the capital requirements for high-risk loans by establishing the risk-weight add-ons that are applied for the calculation of banks' capital adequacy ratios.² The Bank of Russia has accumulated a vast experience in using macroprudential buffers because the Russian market demonstrated several episodes of accelerated growth in consumer lending over the past decade.

Box 1. Calibration of risk-weight add-ons

After the introduction of the MPLs as one of the Bank of Russia's tools, the risk-weight add-ons will be applied for credit institutions to form capital buffers that shall be sufficient to cover any potential stress losses caused by the materialisation of systemic (i.e., common for all loans) risk factors. The amount of stress losses can be computed both analytically, for example, by using the Vasicek formula [1] recommended by the Basel Committee on Banking Supervision for calculating risk-weight add-ons based on a bank's internal ratings,¹ and relying on the results of stress tests.

$$KP = 12.5 \times LGD \times \left(N \left(\frac{N^{-1}(PD) + \sqrt{R} \times N^{-1}(0.999)}{\sqrt{1-R}} \right) - PD \right), \quad (1)$$

where:

LGD – the level of losses in case of default;

PD – the probability of a borrower's default on a loan;

R – the level of the correlation of defaults;

N – the cumulative standard normal distribution; and

N⁻¹ – the inverse cumulative standard normal distribution.

These approaches are complementary as stress testing enables the estimation of losses, including in the conditions of structural shifts in the economy, that may be omitted in the statistics of defaults across the loan portfolio segments. The statistics might also leave out the external effects on the economy produced by banks through an increase in households' debt burden. The Bank of Russia will employ both approaches to calibrate the risk-weight add-ons.

The TCC, DSTI, and loan maturities are the risk factors (see Box 2 in Chapter 2) determining the level of credit losses. In view of this, these indicators will be used when establishing the risk weight add-ons considering the following specifics.

As a strong determinant, the TCC is taken into account by banks when establishing the add-ons because banks factor in the risk of a borrower's default in their credit product pricing. Thus, when the TCC increases from 10% to 20%, the average risk level rises from 0.5% to 4.5%. However, the TCC has a number of drawbacks. In the first place, the TCC for new loans changes over a long time horizon concurrently with interest rate changes in the economy, whereas the risk premium can remain unchanged. In this case, the

¹ Formula [1] is applied to the unsecured retail loan portfolio. The formula is also stipulated in Bank of Russia Regulation No. 483-P, dated 6 August 2015.

² Bank of Russia Ordinance No. 5782-U, dated 20 April 2021, 'On the Types and Characteristics of Assets for Which Risk-weight Add-ons are Set and on Applying These Add-ons to the Said Types of Assets for Credit Institutions to Calculate Their Capital Adequacy Ratios'.

risk-weight add-ons should be recalibrated in order to maintain the requirements for banks' capital at the same level. In addition, a recalibration of the add-ons will be needed in case of amendments to the TCC calculation method envisaged by the draft law² adopted by the State Duma of the Russian Federation in the first reading on 8 June 2022. The draft law provides for a significant expansion of the list of borrowers' payments taken into account in the calculation of the TCC. This will require a recalibration of the current risk-weight add-ons.

² Draft Federal Law No. 48749-8 'On Amending the Federal Law 'On Consumer Loans' and Certain Laws of the Russian Federation'.

Decisions on establishing risk-weight add-ons are made by the Bank of Russia Board of Directors and do not require any amendments to Bank of Russia regulations. This accelerates the response of macroprudential policy. In case of an increase in the capital requirements, the relevant decision may become effective no earlier than in two months, which enables banks to get prepared. When the capital requirements are decreased, the decision comes into force immediately.

An increase in the capital requirements may be necessary both for limiting the growth of high-risk lending and for banks to form a capital cushion.

There are two channels for the transmission of the effect of the increased capital requirements on the supply of credit.

The first one is the direct effect on the capital adequacy ratios. Banks having a small capital cushion might fail to comply with the capital adequacy ratios or the add-ons to these ratios if they maintain high growth rates of risky loans. In the short run, a slowdown in the lending growth by this group of banks may be offset by an expansion of the loan portfolio by banks having a significant capital cushion who are ready to use it up for a certain period.

The second transmission channel is the effect on the profitability of lending (whether the credit margin ensures sufficient capital growth as compared to the rise in the regulatory burden on capital). The increased capital requirements reduce the profitability of lending. Banks with high profit can use up a part of it to maintain lending amounts if they are able to keep their profitability at an acceptable level. However, other banks will be forced either to include the expenses they incur in the cost of credit, which will decrease the demand for loans, or to discontinue issuing certain high-risk loans, for example, with high TCC and/or DSTI levels. When the capital requirements are very high, the profitability of lending may decrease to an extent that it will become cost-ineffective to issue high-risk loans, including for banks with a large capital and margin cushion. In such a case, these requirements will actually produce the same effect as a ban on issuing loans with high TCC and/or DSTI levels.

The described effect of the add-ons enables the Bank of Russia to influence the pace of issuance of new loans in certain segments and with certain parameters and causes changes in the structure of lending. However, the impact on banks is extended over time as the risk-weight add-ons are applied to newly issued loans, while it takes time to renew the loan portfolio.

Banks accumulate capital cushions by increasing the amount of capital needed to issue high-risk loans. Banks may use these capital cushions either to cover their losses or to build up lending if the Bank of Russia allows the use of the risk-weight add-ons during a crisis period. During the pandemic, the Bank of Russia allowed the use of the add-ons for both mortgage loans and unsecured consumer loans, with the amount of these add-ons equivalent to 400 billion rubles of capital. During the crisis at the beginning of 2022, the add-ons for retail and corporate loans that were released amounted to approximately 900 billion rubles of capital.

Thus, the macroprudential risk-weight add-ons have several effects on banks simultaneously: they limit growth rates in high-risk segments, which changes the structure of lending, and augment the capital buffer through the increased capital requirements.³

Macroprudential limits

In 2022, the Bank of Russia was authorised to establish the MPLs⁴ for unsecured consumer loans (microloans). MPLs are not applicable to mortgage- or motor vehicle-secured consumer loans (microloans).

The MPLs place restrictions on the structure of lending and may be set separately for unsecured consumer loans (microloans) with a credit limit⁵ and for other unsecured consumer loans (microloans). The classification into two groups is necessary because the MPLs for loans with a credit limit are calculated depending on the amount of the available (increased) credit limit, whereas the MPLs for other loans depend on the amount of a loan.

In furtherance of the provisions of the law, the Bank of Russia adopted its regulation,⁶ pursuant to which the MPLs may restrict the proportion of loans (microloans) issued over a quarter depending on the values of the following parameters: DSTI and the contractual maturity of a loan (microloan). For MFOs, there is also an option for establishing the MPLs depending on the amount of a microloan.

The MPLs are calculated according to the formulas:

$$MPL = \frac{\text{Amount of loans (microloans) with maturities exceeding a certain period}}{\text{Amount of loans (microloans) issued}}$$

$$MPL = \frac{\text{Amount of loans (microloans) to borrowers with DSTI above a certain level}}{\text{Amount of loans (microloans) issued}}$$

Note: including acquired claims.

When establishing the MPLs, the Bank of Russia Board of Directors determines the values of the parameters of the loans and microloans (DSTI and maturities), the proportions of which shall be restricted, and the levels and effective periods of the limits.

Banks and MFOs shall comply with the limits on a quarterly basis. For any loans or microloans issued over a quarter in violation of the MPLs, the capital requirements are raised,⁷ which is economically equivalent to the direct deduction of claims on the loans and microloans from capital, thus making violations of the MPLs cost-ineffective. Besides, the MPLs for the next quarter are reduced by the amount of the excess of the MPLs over the reporting period (in percentage points). Lenders breaching the MPLs may also be subject to supervisory measures.

³ The effectiveness of the risk-weight add-ons is analysed in detail in the Bank of Russia's report [Assessment of the Effectiveness of the Bank of Russia's Macroprudential Measures in Unsecured Consumer Lending, December 2021](#).

⁴ Federal Law No. 398-FZ, dated 6 December 2021, 'On Amending the Federal Law 'On the Central Bank of the Russian Federation (Bank of Russia)' and Articles 9 and 14 of the Federal Law 'On Microfinance Activities and Microfinance Organisations'.

⁵ Examples of loans with a credit limit are bank cards and credit lines. The maturity of loans with a credit limit is determined by computing the prescribed term based on the minimum payment amount stipulated by the loan agreements (in proportions of the credit limit established).

⁶ Bank of Russia Ordinance 'On the Types of Loans Subject to Macroprudential Limits, on the Parameters of the Said Loans, on the Procedure for Setting and Applying Macroprudential Limits in Relation to the Said Loans, on Risk Factors Increasing Individual Borrowers' Debt Burden, and on the Procedure for Applying Measures Provided for by Part Five of Article 45.6 of Federal Law No. 86-FZ, Dated 10 July 2002, 'On the Central Bank of the Russian Federation (Bank of Russia)'.

⁷ The 'prohibitive surcharge' remains effective throughout the 'life cycle' of a loan (microloan): the overall risk weight including the surcharge will total 1,250% for banks, 1,667% – for MFOs – 1667%, and 2,000% – for micro-lending companies.

If banks or MFOs comply with the MPLs established, the MPLs will not result in the accumulation of capital buffers, but will help restrict the risk level in the financial system owing to a more balanced structure of lending. Thus, the MPLs produce a direct effect on the structure of lending.

Combined effect of macroprudential policy tools and decision-making procedure

To ensure financial stability, it is reasonable to combine various macroprudential tools. The use of MPLs does not always mean that there is no need to form capital buffers for unsecured consumer loans. Having a sound lending structure is crucial, but MPLs cannot eliminate all credit risks. For example, the probability of a borrower's default on a consumer loan depends on the borrower's debt burden, but even a borrower with a low debt burden might face loan servicing difficulties if this person loses the job due to a surge in unemployment in the country.

In addition, the vulnerability of the financial system might be aggravated not only by lending standards, but also by the level of credit penetration in the economy and the effects of the responsiveness in stress conditions (when a worsening of the economic situation entails an additional decline in households' repayment capacity). A rise in the number of borrowers and the related growth in households' debt burden at the macro level, even when certain borrowers have relatively low DSTI, might exacerbate the vulnerability of the economy and, ultimately, the financial system to shocks. For instance, in an economy where every individual has a loan, the responsiveness of consumer demand to real income shocks is higher than in a similar economy where one in three persons has a loan. A tightening of lending conditions in such a situation will induce a greater decline in aggregate demand, which will affect the financial system more seriously. The capital cushion accumulated by banks to cover historical losses recorded at a lower level of debt burden might turn out to be insufficient because the debt burden will aggravate the shocks in the economy and entail a more significant decrease in aggregate demand.

This suggests that it is necessary to combine the tools that mitigate systemic risks and increase banks' capital cushion. The objective of discouraging the issuance of high-risk loans, which was settled in 2019–2021 by differentiating the values of the risk-weight add-ons and raising their levels in general, will be addressed by using the MPLs. By influencing the structure of lending through the MPLs, rather than the add-ons, it will be possible to reduce the general level of the requirements for credit institutions' capital, while maintaining the stability of the banking sector.

When using various macroprudential tools simultaneously, it is essential to take into account their combined effect on financial institutions and the current situation in the financial system. For example, in the conditions of the transformation of the Russian economy and its adjustment to the new environment, it is unreasonable to activate the CCyB as it would limit corporate lending that supports the transformation process.

Therefore, macroprudential tools can duplicate each other's functions. It is possible to restrict the proportion of issued high-risk consumer loans both through the MPLs and capital buffers. Considering this factor, the Bank of Russia will adhere to the following approach when making its macroprudential policy decisions:

1. The CCyB is activated when a number of segments (corporate, mortgage and consumer lending) simultaneously demonstrate a surge in lending and it is necessary to encourage banks to form capital cushions for them to be able to cover their losses in case of a future crisis. The Bank of Russia does not plan to activate the CCyB in the next few years as this will be a period of an active transformation of the Russian economy amid the sanctions.
2. The MPLs for unsecured consumer loans (microloans) are established to reduce the vulnerability associated with a rise in households' debt burden. When calibrating the MPLs, it is critical to balance the objectives of ensuring financial stability and maintaining the availability of loans to households.

3. The risk-weight add-ons are used for fine-tuning and are set at a level that will make it possible to cover potential losses in a specific lending segment in case of a crisis if these losses are not addressed by the CCyB and are not eliminated through the MPLs.
4. The risk-weight add-ons for mortgage loans are established when it is needed to restrict the practice of issuing loans to borrowers with high DSTI and loans with a low down payment. Besides, the risk-weight add-ons will still be used in mortgage lending both to accumulate a capital buffer and to reduce the proportion of high-risk bank loans (loans with a low down payment and loans to borrowers with high DSTI). This is needed because the Bank of Russia is not entitled to establish MPLs for mortgage loans.
5. The add-ons for foreign currency credit claims on legal entities are established to decrease the structural vulnerability associated with the dollarisation of the banking sector.

The suggested approach to the implementation of macroprudential policy requires a detailed evaluation of the effect of every tool to prevent a double-accounting of risks.

1.3. Macroprudential tools to reduce structural vulnerabilities associated with foreign currency claims on legal entities

A traditional vulnerability of the Russian financial sector has been a high dollarisation of banks' balance sheets and settlements, which in turn depends on fundamental factors, namely the reliance of the Russian economy on exports, the use of 'natural hedging' by companies (by raising debt funds and holding funds in the currency of their business operations), and the widespread practice of households to make savings in foreign currency. A high proportion of foreign currency assets and liabilities involves foreign exchange risks not only for borrowers not receiving export revenues in the loan currency (e.g., a typical problem for commercial real estate companies), but also for the market as a whole. During high volatility periods, exporters who needed to service their own debts reduced the amounts of foreign currency revenues they sold in the market, which exacerbated the volatility in the foreign exchange market (for instance, in autumn 2014). The problem of dollarisation is quite frequent in most emerging market economies, and a number of countries are implementing measures to reduce dollarisation (see Annex 1).

A successful stabilisation of the macroeconomic situation with low inflation and a floating exchange rate has ensured a progressive dedollarisation of the Russian economy since 2014. The proportion of foreign currency loans decreased from 40% in early 2016 to 24% as of 1 February 2022 (adjusted for foreign currency revaluation, at the exchange rate as of 1 February 2022). Besides, the dedollarisation has been promoted by the Bank of Russia's macroprudential policy aimed at discouraging foreign currency lending. Until 2022 Q1, the Bank of Russia preserved the add-ons for newly issued foreign currency loans and banks' investments in foreign currency-denominated debt securities. Moreover, borrowers who lacked sufficient revenues in corresponding foreign currencies were to comply with the increased add-ons.

After the outbreak of the sanctions crisis, the Bank of Russia allowed banks to use the accumulated capital buffer for foreign currency claims and cancelled the add-ons for new foreign currency loans. The sanctions enacted against Russia by unfriendly states in 2022 have demonstrated that dollarisation involves not only foreign exchange risks, but also uncontrollable sanctions risks and operational risks.

To take into account sanctions risks, the Bank of Russia will additionally adjust the macroprudential mechanism and will envisage the option to establish the risk-weight add-ons for foreign currency credit claims depending on the type of the country which is the issuer of the currency of denomination of these credit claims and where the principal and interest are to be repaid (friendly/unfriendly states). In addition, the add-ons will depend on whether a borrower has sufficient foreign currency revenues to meet its liabilities in the relevant currency or whether a borrower has a surety from a

company having sufficient export revenues (exporter/non-exporter). However, conceptually, it is suggested to preserve the criteria for recognising legal entities as exporters for the purpose of using the risk-weight add-ons.⁸

Hence, the add-ons will address the main groups of risks:

- foreign exchange risks for a borrower and credit risks for a bank in foreign currency lending, if the borrower lacks sufficient foreign currency revenues to meet its liabilities; and
- sanctions risks: if a borrower or a bank is subject to blocking sanctions, this will increase risks on the earlier issued loans (credit and payment risks), while the magnitude of risk will depend on the currency of denomination of the credit claims and of the principal and interest payments.

Considering the combination of foreign exchange risks and sanctions risks, foreign currency claims, for which differentiated add-on values may be set in the future, will be grouped as follows (Table 3).

TYPES OF FOREIGN CURRENCY CLAIMS

Table 3

Asset code according to 5782-U*	Asset code description
6006	Credit claims** in unfriendly states' currencies on a non-exporter not secured by a surety from an exporter
6007	Credit claims in unfriendly states' currencies on a non-exporter not secured by a surety from an exporter, provided that a borrower has the opportunity to meet its liabilities in rubles or in currencies of countries not recognised as unfriendly
6008	Credit claims in unfriendly states' currencies on an exporter (or secured by a surety from an exporter)
6009	Credit claims in unfriendly states' currencies on an exporter (or secured by a surety from an exporter), provided that a borrower has the opportunity to meet its liabilities in rubles or in currencies of countries not recognised as unfriendly
6010	Credit claims in currencies of countries not recognised as unfriendly on a non-exporter
6011	Credit claims in currencies of countries not recognised as unfriendly on an exporter (or claims secured by a surety from an exporter)

* Bank of Russia Ordinance No. 5782-U, dated 20 April 2021, 'On the Types and Characteristics of Assets for Which Risk-weight Add-ons are Set and on Applying These Add-ons to the Said Types of Assets for Credit Institutions to Calculate Their Capital Adequacy Ratios'.

** Claims on loans issued to legal entities and claims on investments in debt securities.

The Bank of Russia will not use the risk-weight add-ons for the credit claims related to the financing of operations that are strategically important for the Russian Federation, specifically if these claims are:

- secured by a state guarantee, whether directly or indirectly;
- aimed at financing projects implemented under international contracts of the Russian Federation.

In the near future, the Bank of Russia does not plan to establish positive values of the add-ons for foreign currency credit claims. In case it is needed to further promote the dedollarisation and increase the motivation to abandon 'toxic' currencies, the Bank of Russia Board of Directors will set specific values of the add-ons as the regulatory easing is scaled back, while considering banks' capacities to allocate capital in these assets.

⁸ The following legal entities are recognised as exporters:

1. Legal entities – residents of the Russian Federation whose revenues in foreign currency over the last completed financial year simultaneously amount to:
 - at least 60% of their total revenues; and
 - at least 120% of their total loan repayments over the current year (the principal and interest, both already paid since the beginning of the year and due according to the effective contracts, on all liabilities of a borrower to all credit institutions) in the same foreign currency as revenues.
2. Legal entities – residents of the Russian Federation who raised loans to finance their export contracts providing for a (total) amount of earnings (revenues) under the effective export contracts of at least 120% of the loan issued by a credit institution.

CHAPTER 2. MACROPRUDENTIAL MEASURES PLANNED BY THE BANK OF RUSSIA

2.1. Measures to limit risks in unsecured consumer lending

At the end of 2021, the growth rate in unsecured lending in Russia equalled nearly 20%, which was accompanied by a considerable easing of the lending standards. In 2021 Q4, the proportion of loans issued to borrowers with DSTI above 80% reached 34%.

In December 2021, the Bank of Russia published the preliminary parameters of the MPLs¹ for banks and MFOs to get prepared for their introduction from 1 July 2022. In the conditions of the unprecedented sanctions enacted against the Russian Federation, at the beginning of 2022, the Bank of Russia implemented a whole range of regulatory easing measures and countercyclical support measures, including by releasing all accumulated buffers and postponing the introduction of the MPLs until 1 January 2023. Currently, considering the situation in the consumer lending market, the Bank of Russia confirms that it is reasonable to introduce the MPLs beginning from 1 January 2023.

RISK FACTORS OF HOUSEHOLDS' DSTI GROWTH

Table 4

Indicator and its number under Annex 8 to Ordinance No. 6037-U	Indicator value	Trigger value
Proportion of loans with DSTI above 80% in the total amount of loans issued over a quarter (1)	34.2%* (2022 Q1) 28.4% (2022 Q2)	10%
Proportion of microloans with DSTI above 80% in the total amount of microloans issued by MFOs over a quarter (6)	38.4%** (2022 Q1) 41.3% (2022 Q2)	25%
Annual growth of households' outstanding loans: 1. Exceeds the change in households' money income, in relative terms, over the period under review (2) 2. Is two times faster than the change in the number of borrowers, in relative terms, over the period under review (3)	11.7%*** (as of 1 July 2022)	15.2%(household income) 8%(twofold increase in the number of borrowers)
Growth in household income (2)	15.2%**** (2022 Q2 on 2021 Q2)	–
Annual increase in the number of borrowers of consumer loans (3)	4%***** (as of 1 July 2022)	–
Bad debt ratio on unsecured consumer loans***** (4)	1.2% (as of 1 July 2022)	2%
Proportion of loans issued for over five years in the total amount of issued loans (5)	18%***** (2022 Q1) 13% (2022 Q2)	5%

* According to Reporting Form No. 0409704, taking into account the debt that emerged during a quarter on loans with a credit limit.

** The ratio of the amount of loans issued to borrowers with DSTI above 80% to the total amount of loans issued over the same period (according to Reporting Forms No. 0420840 and No. 0420846).

*** According to Reporting Form 0409101. For operating credit institutions (including restructured ones).

**** According to Rosstat.

***** According to data from the four largest credit history bureaus on the borrowers whose debt on consumer loans and/or credit cards exceeds 10,000 rubles.

***** Calculated as the ratio of a 12-month increase in outstanding loans overdue for more than 90 days, including debt on written-off and sold loans, to the average debt on unsecured consumer loans over the said period.

***** According to data from the four largest credit history bureaus on the borrowers whose debt exceeds 10,000 rubles.

¹ Information and analytical commentary [Possible Values of Macroprudential Limits for Unsecured Consumer Loans \(Microloans\), 2021](#).

2.1.1. Situation in the market of unsecured consumer loans and consumer microloans

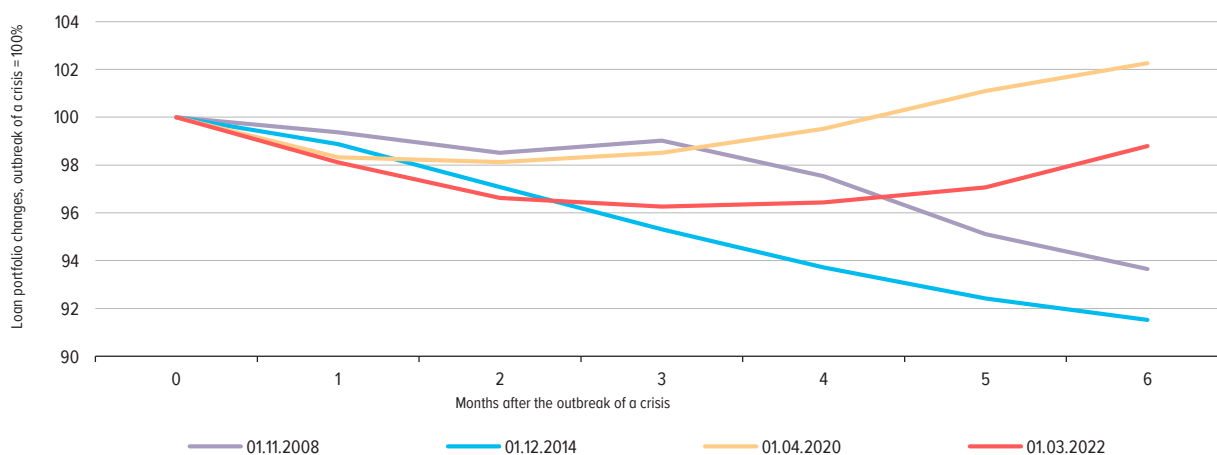
Banks

At the beginning of the sanctions crisis amid worsening expectations and high uncertainty, banks substantially toughened their price and non-price conditions in retail lending,² and the loan portfolios started to contract.

In 2022 Q2, the proportion of unsecured consumer loans with DSTI 80+ decreased to 28.4% (-5.8 pp over the quarter), which was the result of higher requirements for borrowers. Traditionally, borrowers having lower official income or not having officially confirmed income account for a considerable proportion of loans with DSTI above 80%, and, in the first place, banks started to reduce such disbursements after the outbreak of the crisis, just as during the pandemic.

UNSECURED CONSUMER LENDING IN CRISIS PERIODS

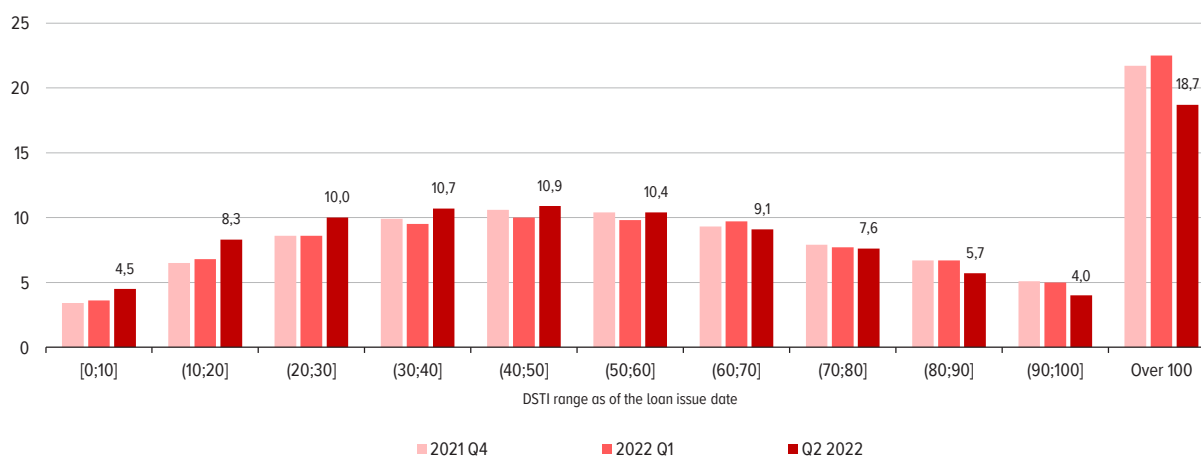
Chart 1



Source: Reporting Form 0409115.

DISTRIBUTION OF ISSUED UNSECURED CONSUMER LOANS, BY DSTI (%)

Chart 2

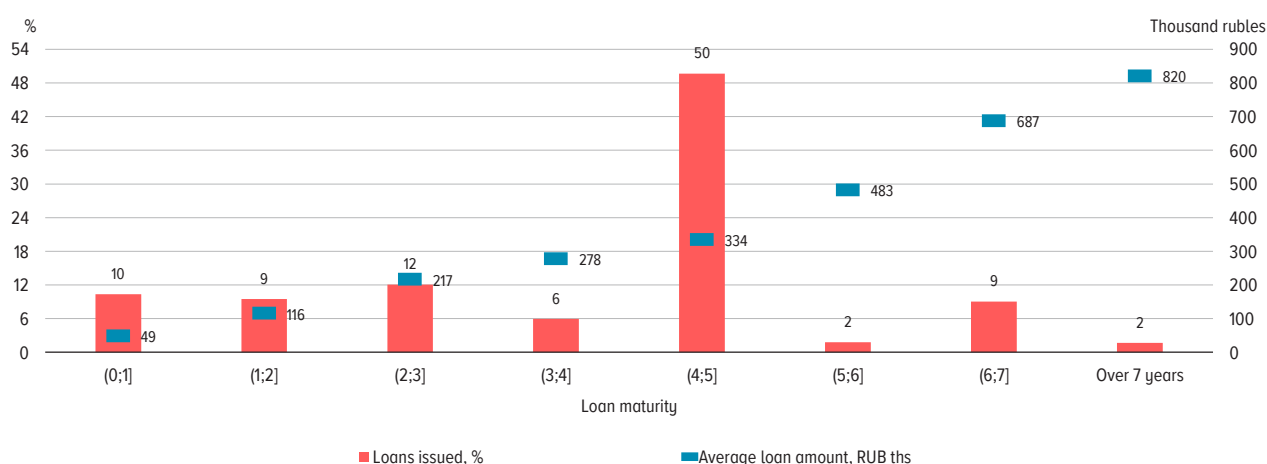


Source: Reporting Form 0409704.

² According to the Bank of Russia's survey *Changes in Bank Lending Conditions*.

DISTRIBUTION OF UNSECURED CONSUMER LOANS (OTHER THAN LOANS WITH A CREDIT LIMIT)
ISSUED BY BANKS IN 2022 Q2, BY MATURITY

Chart 3



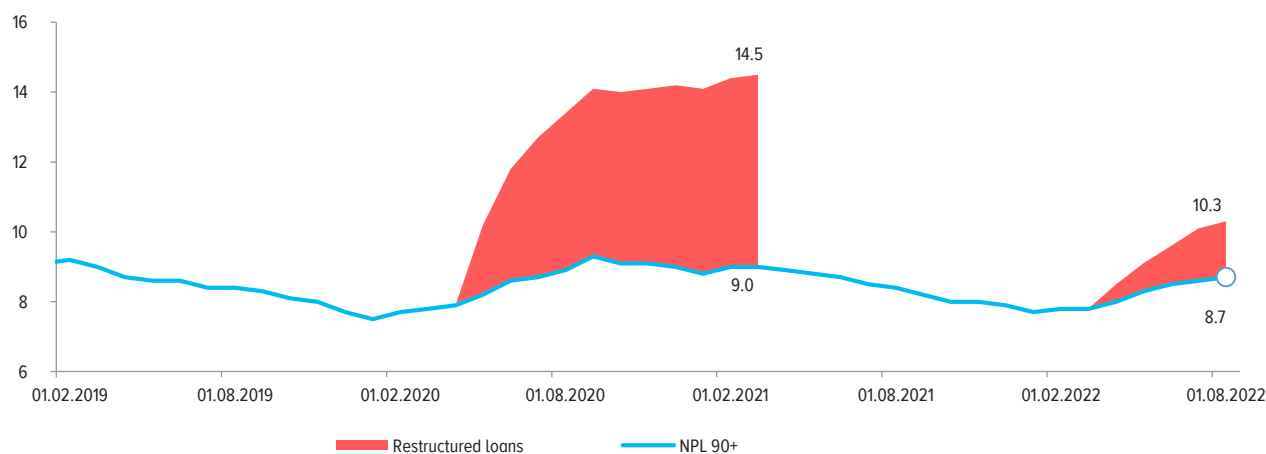
Source: credit history bureaus' data.

In addition to DSTI, banks also tightened their practices in relation to loan maturities. Beginning from 2018, banks were increasing the proportion of issued long-term unsecured consumer loans as they wished to lend the maximum amount to a borrower. The proportion of unsecured consumer loans issued for over five years did not exceed 5% in 2018 and 10% before the pandemic, whereas in the middle of 2021, these loans accounted for 25–26% in total disbursements. In the conditions of the crisis, banks toughened their standards, as a result of which, in 2022 Q2, these loans accounted for 13%. However, the proportion of these loans in a number of banks considerably exceeds the market average (see Chart 12).

Currently, amid a decline in real household income, the quality of unsecured consumer loans has been worsening: a rise in restructured loans is coupled with an increase in non-performing loans (NPL 90+). Consequently, by the middle of 2022, the proportion of bad debts (NPL 90+ and restructured loans) exceeded 10% of the portfolio.

NON-PERFORMING AND RESTRUCTURED UNSECURED CONSUMER LOANS*
(%)

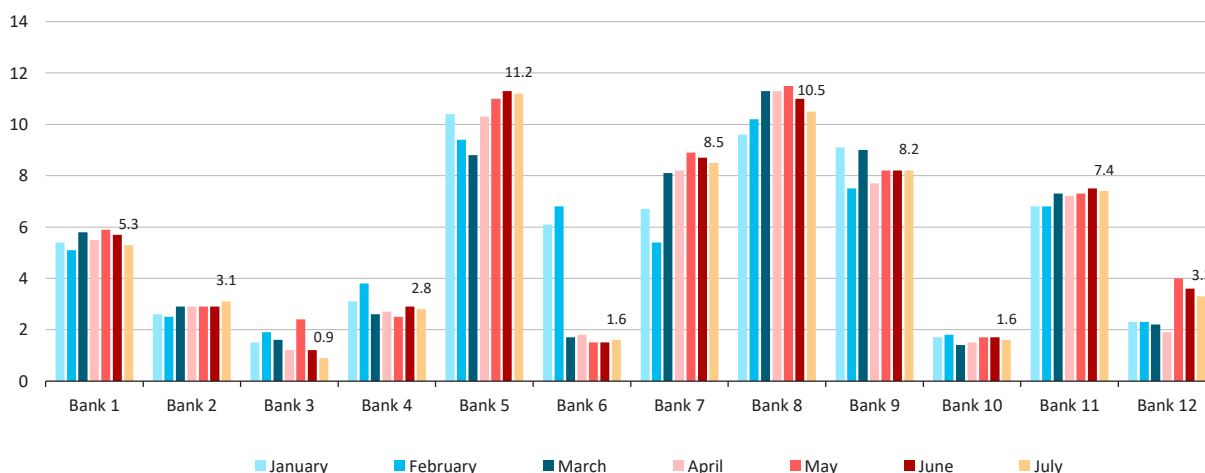
Chart 4



* The percentage of restructured loans is cumulative from the start and until the termination of the regulatory easing.
Source: Reporting Form 0409115 and banks' survey.

PERCENTAGE OF LOANS OVERDUE FOR THE FIRST TIME IN JANUARY–JULY 2022 (%)

Chart 5



Note: the proportion of non-overdue loans as of the start of a reporting period with a missed payment during the reporting period.
Source: banks' survey.

The majority of retail lending market participants recorded a higher number of unsecured consumer loans that were overdue for the first time.

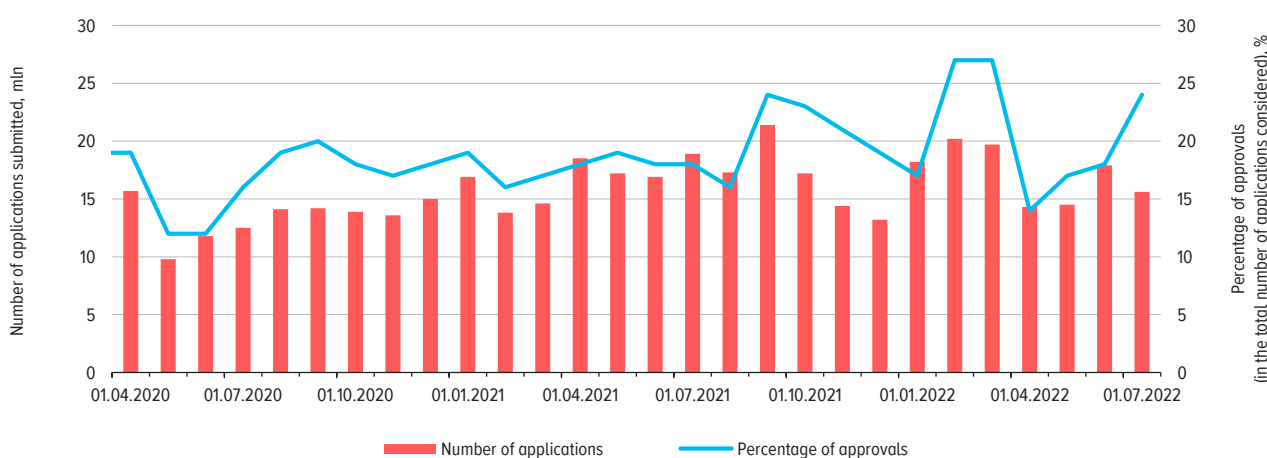
However, despite the deterioration of the credit quality, already in May–June amid the easing of monetary policy, banks began to reduce their credit rates (in cash lending, the TCC decreased by 1.7 pp in June, compared to April, to reach 23.2%)³ and ease their requirements for borrowers.⁴

To boost the demand for their credit products, many banks launched marketing campaigns, for example, offering loans with an interest rate staying at the minimum level during the first several months and surging afterwards (to attract borrowers who hope to quickly repay a loan).

As a result, the expansion of the portfolio of unsecured consumer loans resumed in June–July 2022 (+0.2% in June and +0.7% in July). Amid the earlier reduction in the Bank of Russia key rate, the market could be expected to move into a steady growth phase already in the second half of 2022.

CHANGES IN THE NUMBER OF CONSUMER LOAN APPLICATIONS AND PERCENTAGE OF THEIR APPROVALS

Chart 6



Source: credit history bureaus' data.

³ According to Reporting Form O409704.

⁴ According to the Bank of Russia's survey *Changes in Bank Lending Conditions*.

The possible recovery in issued loans and debt growth is also evidenced by a rise in the number of applications for unsecured loans and a higher percentage of approvals that, after the decline in March 2022, started to return in April–June 2022 to the levels observed before the outbreak of the sanctions crisis.

Microfinance organisations

In the conditions of the crisis, annual growth in the MFO market also slowed down somewhat, specifically from 41% as of the end of 2021 to 24% as of 1 July 2022. This was accompanied by a surge in the TCC, namely from 249% to 290% in instalment lending, on average (including due to the suspension of the limit on the TCC from 1 March 2022 through 30 June 2022).⁵

As compared to banks, the proportion of microloans issued to over-indebted borrowers in the MFO segment is higher. In 2022 Q2, microloans issued to borrowers with DSTI above 80% accounted for 41.3% (+2.9 pp over the quarter). There is a correlation between DSTI and the level of risk. Thus, microloans with principal and interest payments overdue for more than 90 days (NPL 90+) in the segment of DSTI 80+ accounted for 48.6%. The mean value of NPL 90+ for all microloans with calculated DSTI reaches 43.4%.

Accordingly, if the restoration of consumer lending growth is coupled with an easing of the lending standards (which was the case in the past), the vulnerability of the financial system to potential shocks might increase. In the short term, banks consider that consumer lending involves lower risks, as compared to corporate lending. However, in the long run, households' ability to repay loans depends on economic prospects (and, consequently, unemployment and real household income trends). If banks continue to significantly increase household lending, the corporate sector will face a deficit of credit resources, the growth of the economy will be slower, and the credit quality (including in consumer lending) will worsen. The situation is aggravated by a rise in the proportion of over-indebted borrowers who are most vulnerable to possible financial difficulties.

Therefore, in the current conditions when the economic and credit cycles are out of sync, the relevance of the MPLs is growing as they are able to promptly restrict the risks of a potential increase in households' debt burden. Moreover, in contrast to macroprudential buffers, the MPLs do not divert banks' capital that will be needed in the next few years to finance the structural transformation of the Russian economy.

Box 2. Risk factors in unsecured consumer lending

The level of credit losses depends on both macroeconomic conditions and specific parameters of loans and borrowers. During a crisis, losses on the riskiest loans increase more significantly than those on any other loans, which might jeopardise banks' financial stability.

The main parameters of loans affecting the risk level are DSTI, the TCC, and maturity. When each of these parameters increases, the probability of default becomes higher as well. The Bank of Russia has traditionally relied on these parameters in its macroprudential regulation: the level of the add-ons depends on DSTI and the TCC, and long maturities are taken into account indirectly in the DSTI calculation (limited to four years for the calculation).¹

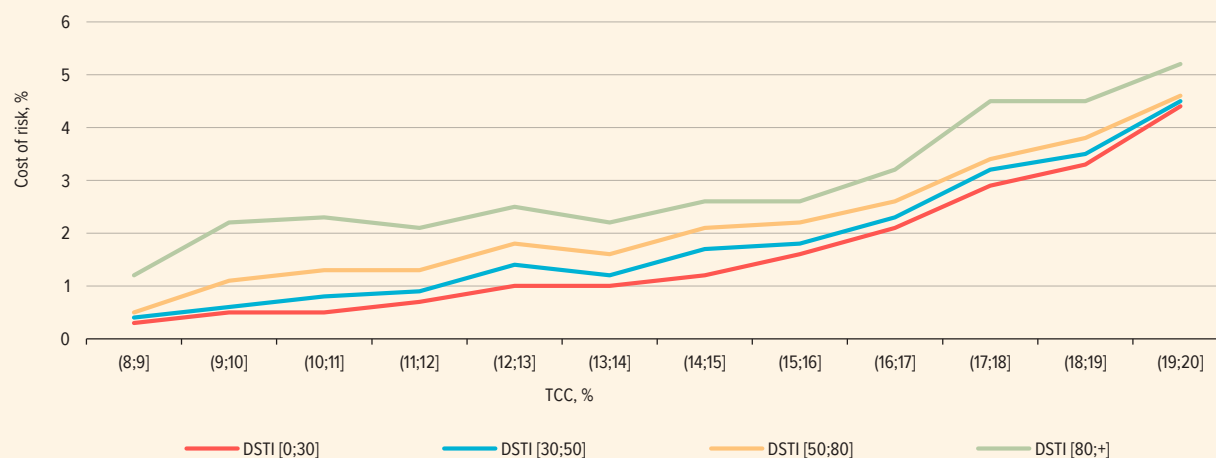
¹ In connection with the introduction of the MPLs, the Bank of Russia plans to cancel the limit on the maturity for DSTI calculations.

⁵ Pursuant to Bank of Russia Ordinance No. 6077-U, dated 28 February 2022, 'On the Period of Suspension of the Limit on the Total Cost of a Consumer Loan (Microloan)'.

CORRELATION BETWEEN CREDIT RISK OF THE UNSECURED CONSUMER LOAN PORTFOLIO
IN 2020–2021 AND TCC/DSTI LEVELS

Chart 7

(%)



Source: banks' survey.

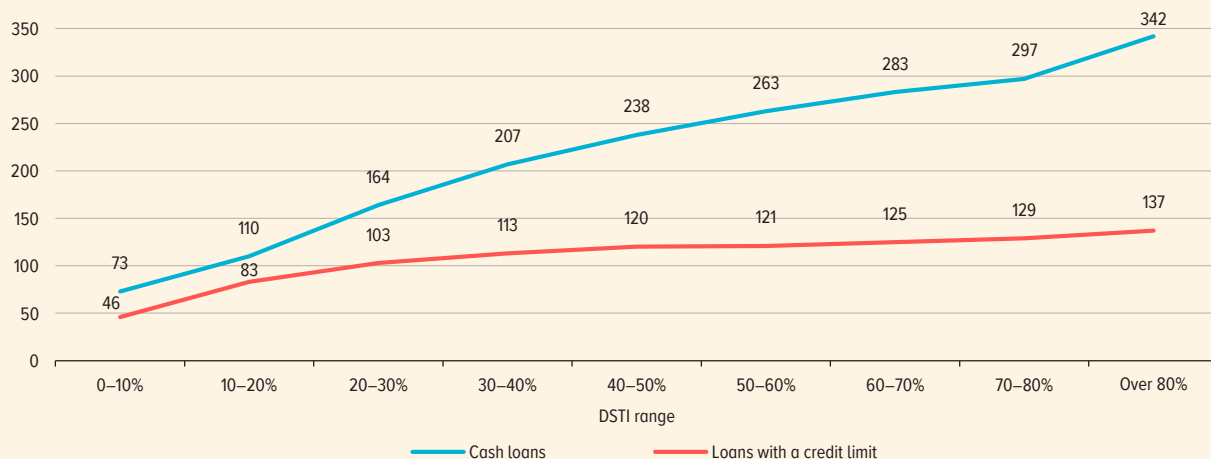
According to the survey of major retail banks² (including the requested additional data on the portfolio of loans issued after 1 October 2019), the level of credit risk³ demonstrated the following empirical correlation with DSTI and the TCC (Chart 7). The risk level rises mostly due to the segment of loans with excessive debt burden (DSTI above 80%), whereas the dependence of risk on DSTI for other segments is considerably lower. For all TCC ranges, the difference in the level of losses between borrowers with DSTI up to 30% and DSTI above 80% equals 1–1.4 percentage points.

Moreover, there is a positive correlation between the average amount of a loan and DSTI. In particular, the amount of loans issued to borrowers with DSTI above 80% is three times larger than the amount lent to borrowers with DSTI ranging from 10% to 20% (see Chart 8). Thus, borrowers with higher DSTI have larger debt on loans.

AVERAGE AMOUNT OF LOANS ISSUED IN 2021 Q4 DEPENDING ON DSTI (ACCORDING TO THE SURVEY
CONDUCTED IN EARLY 2022)

Chart 8

(THOUSAND RUBLES)



Source: banks' survey.

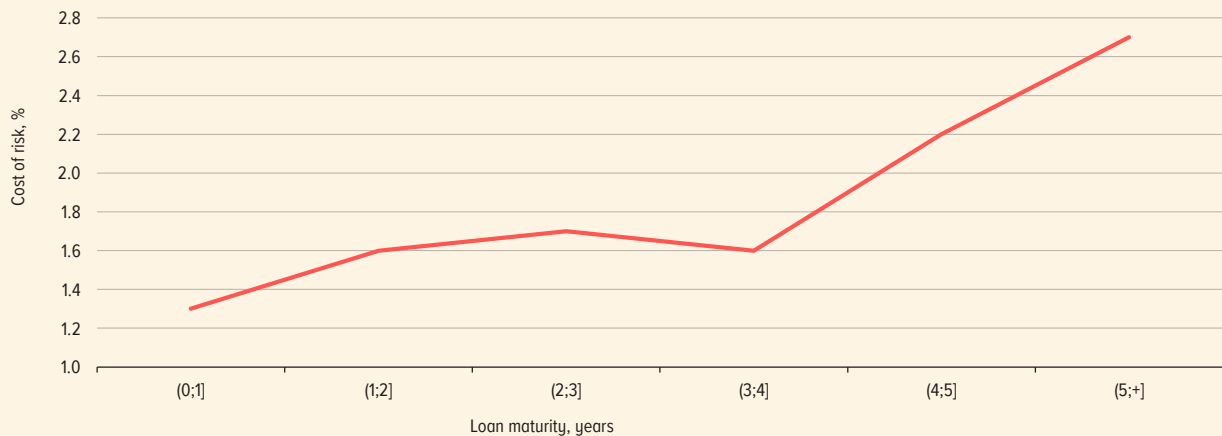
² Six credit institutions, together accounting for over 70% in the unsecured consumer lending market, took part in the survey.

³ The cost of credit risk of the loan portfolio over the reporting period was taken to be equal to the ratio of the increase in loan loss provisions to the average debt balance of the loan portfolio over the said period.

Long-term loans demonstrate a persistently higher risk level. This might be associated with the fact that longer maturities involve higher probabilities of a decline in borrowers' income during that period. In addition, long-term loans may be more frequently requested by borrowers who are unable to service shorter-term loans, although longer maturities improve their repayment capacity only slightly.

CORRELATION BETWEEN CREDIT RISK OF THE UNSECURED CONSUMER LOAN PORTFOLIO IN 2020–2021 AND MATURITIES

Chart 9



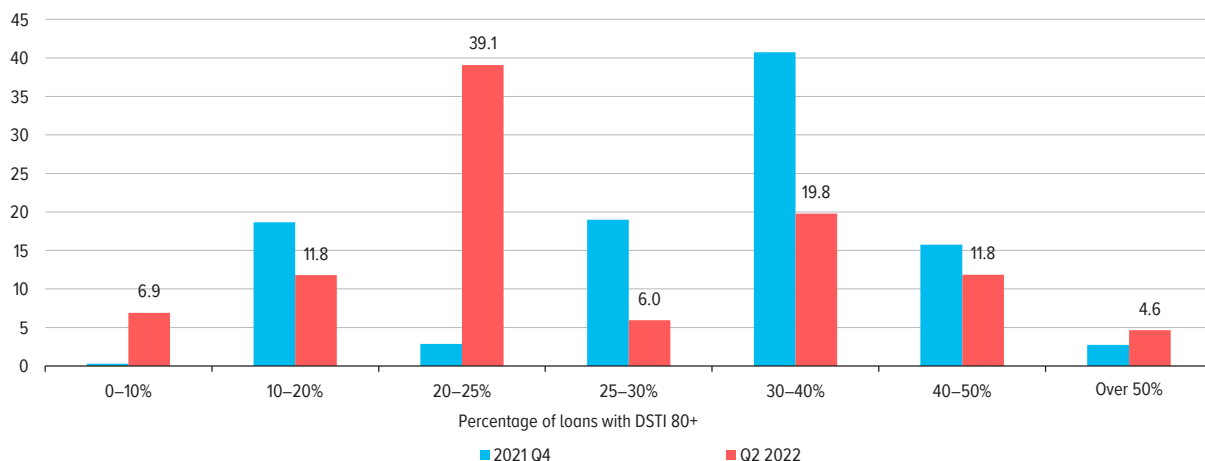
Source: banks' survey.

2.1.2. Macroprudential limits depending on borrowers' debt service-to-income ratios

The analysis of the results of the survey carried out in early 2022 and of recent data proves that it is reasonable to establish the MPLs for loans issued to borrowers with **DSTI above 80%**, including loans with a credit limit, **at the level of 25%**. The effect of the MPLs on banks will vary as their proportions of loans issued to borrowers with DSTI above 80% significantly differ. Banks where loans with a credit limit to borrowers with high DSTI exceed the MPLs at the level of 25%, as a rule, exceed a similar limit for all other consumer loans as well.

MARKET SHARE OF MAJOR BANKS WITH VARIOUS PERCENTAGES OF LOANS WITH DSTI 80+ (%)

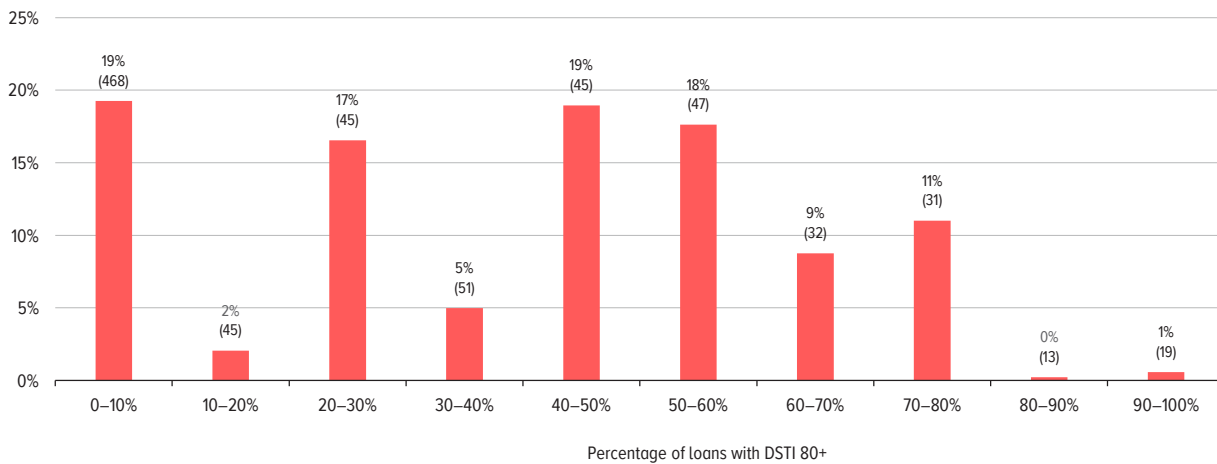
Chart 10



Source: Reporting Form 0409704.

MARKET SHARE OF MFOS WITH VARIOUS PERCENTAGES OF MICROLOANS WITH DSTI 80+ IN 2022 Q2*
(%)

Chart 11



* The sample includes MFOS that issued consumer microloans in 2022 Q2 (excluding state-owned MFOS).

Note: the number of MFOS is given in the brackets.

Source: Reporting Forms 0420840 and 0420846.

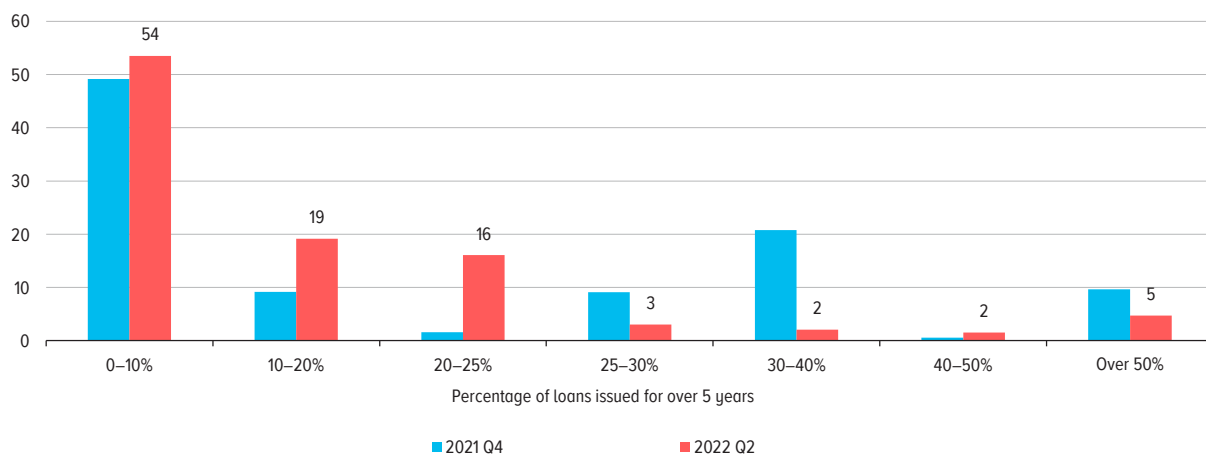
Considering the specifics of MFOS' business, it is reasonable, at the first stage, to set the MPLs for consumer microloans issued to borrowers with DSTI above 80% at the level of 35%. Accordingly, there will be two limits for MFOS, namely for consumer microloans and microloans with a credit limit. That said, microloans with a credit limit have not become widespread yet in the MFO segment.

2.1.3. Macroprudential limits depending on maturities

The MPLs for loans issued for over five years are planned to be set at the level of 10%. For certain banks, this limit is even more important than the limit depending on DSTI because the proportion of long-term loans in these banks' portfolio considerably exceeds the market average. Overall, the proportion of loans issued for over five years accounted for 13% in 2022 Q2. However, in a number of banks, this figure exceeded 50%. Moreover, loan maturities may be significantly longer than five years and, in some banks, loans issued for over seven years might account for over 25% in their portfolios.

MARKET SHARE OF BANKS WITH VARIOUS PERCENTAGES OF LOANS ISSUED FOR OVER 5 YEARS
(%)

Chart 12



Source: credit history bureaus' data.

The proportion of loans with a credit limit issued for over five years is minor – 0.7% on average (according to the Bank of Russia’s survey conducted in early 2022). Nevertheless, the MPLs depending on maturities are also necessary for such loans in order to reduce the likelihood of regulatory arbitrage between conventional consumer loans and loans with a credit limit.

At the moment, the Bank of Russia does not plan to establish the MPLs depending on maturities for MFOs as they typically do not issue microloans for over five years. If the proportion of agreements signed for over five years grows, the Bank of Russia may revise the MPLs for this category of microloans.

2.1.4. Expected effect of macroprudential limits on the market

Banks shall comply with the MPLs based on DSTI and maturities separately in relation to conventional consumer loans and loans with a credit limit. Thus, there will be simultaneously four limits for banks. For MFOs, there will be two limits based on DSTI, namely for consumer microloans and microloans with a credit limit (with each of them at the level of 35%).

PLANNED MPL VALUES FOR UNSECURED CONSUMER LOANS (MICROLOANS)

Table 5

Loans (microloans), other than those with a credit limit		
	with DSTI above 80%	issued for over 5 years
Banks with a universal licence	25%	10%
MFOs	35%	–
Loans (microloans) with a credit limit		
	with DSTI above 80%	issued for over 5 years
Banks with a universal licence	25%	10%
MFOs	35%	–

As for banks with a basic licence, it is unreasonable to establish MPLs for the following reasons. As of the beginning of 2022, outstanding consumer loans (other than loans with a credit limit)⁶ with these banks totalled as little as 14 billion rubles, as compared to 219 billion rubles in MFOs’ portfolio⁷ (borrowers numbered 69,000 and 7.3 million, respectively). Furthermore, the overall amount of average monthly payments on these loans does not exceed 1 billion rubles, as compared to 98 billion rubles for MFOs. Accordingly, the contribution of banks with a basic licence to the overall level of households’ debt burden is minor. The potential for an increase in this contribution is also negligible as banks with a basic licence have limited opportunities to build up their loan portfolios (their capital may not exceed 1 billion rubles) and shall comply with the limit on the TCC, the level of which is the same as for other banks and significantly lower than for MFOs.

PROPORTION OF BANK LOANS SUBJECT TO THE MPLS

Table 6

Consumer loans (other than loans with a credit limit)			Loans with a credit limit			All loans taking into account all MPLs
DSTI-based MPL	Maturity-based MPL	Both MPLs	DSTI-based MPL	Maturity-based MPL	Both MPLs	
7%	5%	11%	5%	1%	6%	10%

⁶ According to credit history bureaus.

⁷ Based on the sample of MFOs accounting for 82.1% of the consumer finance market, according to consolidated data from the three largest credit history bureaus.

As a result of the combined effect of the four MPLs, the proportion of loans covered by the MPLs⁸ is estimated for banks at a level of about 10%⁹ of the total amount of disbursements over a quarter (the estimate takes into account the results of the survey in 2021 Q4 which provided information on the overall distribution of DSTI and maturities and on the distribution of DSTI and maturities of established/increased limits on loans with a credit limit).¹⁰ Table 6 presents the proportion of loans covered by each of the MPLs (the total for the MPLs based on both DSTI and maturities is not equal to the total for the MPLs based on each of the criteria as it takes into account the adjustment for loans issued to borrowers with DSTI above 80% and, simultaneously, for a period of over five years – this adjustment decreases the reduction in loans).¹¹ For MFOs, the proportion of consumer microloans covered by the MPLs might reach 14%¹² of total disbursements. The actual percentage of loans and microloans subject to the restriction might be even lower if clients with high DSTI migrate to organisations having an MPL margin.

Effect on the availability of loans

The introduction of the MPLs will not cause a significant decrease in the availability of loans and microloans to households, except the already over-indebted borrowers who will likely have to defer their decision to raise a loan (microloan). Borrowers with moderate debt burden who wish to raise another loan (microloan), which might increase their DSTI above 80%, will probably have to reduce the amount of the loan they apply for in order to lower their debt burden. Borrowers will be able to submit the most complete information on their incomes to banks and MFOs for the latter to have the most accurate data on borrowers' actual DSTI ratios.

The number of loans subject to the MPLs is smaller than the total amount of these loans (as the average amount is notably larger for long-term loans and loans with high DSTI): the decrease in consumer loans (other than loans with a credit limit) might equal about 5% of the total number of issued loans. When using the MPLs, the Bank of Russia will monitor the availability of loans.

Macroeconomic effect

The introduction of the MPLs will reduce risks for borrowers – individuals having high DSTI or applying for long-term consumer loans. The use of the MPLs will restrict the growth rates of unsecured consumer lending – as a result, at the end of the 2023–2025 period, the unsecured consumer loan portfolio is forecast to be smaller by nearly 800 billion rubles than it could be without the MPLs.

The MPLs influence both the amounts of newly issued unsecured household loans and the subsequent amounts of households' repayments to banks and MFOs. Thus, lenders will reduce disbursements to comply with the restrictions on their loan portfolios within the MPL system. Households in turn will then make smaller principal and interest payments.

The change in the balance of money flows between individuals and the financial sector resulting from the introduction of the MPLs may be both positive or negative during a particular period. This will depend on the ratio between the decrease in individuals' repayments and the reduction in loan disbursements over this period. The model calculations suggest that, after the introduction of the MPLs from the beginning of 2023, this quarterly change in the flows will first be negative (that is,

⁸ Loans covered by the MPLs are loans that may be issued to borrowers later on when their DSTI on their outstanding loans decreases.

⁹ The estimate takes into account the assumption that, for a portion of loans that may be subject to the MPLs, DSTI will decrease below 80% and maturities will be reduced (no more than five years). The estimate does not factor in a possible migration of clients with high DSTI to banks and MFOs having an MPL margin.

¹⁰ As regards loans with a credit limit, disbursements mean the actual debt that emerged over a quarter.

¹¹ The adjustment for banks – leaders in the consumer lending market.

¹² The percentage of the amount of consumer microloans with DSTI above 80% issued in excess of the MPLs set at 35% in the total amount of consumer microloans disbursed over a quarter.

households will have a smaller amount of funds because of a decrease in borrowings), but, already in 2024 Q2, the situation will reverse: the amounts of savings on loan repayments will exceed the decrease in borrowings. The net amount of funds not borrowed by individuals from banks and MFOs over the forecast 2023–2025 horizon will total approximately 540 billion rubles.

The change in the balance of money flows between individuals and the financial sector will impact consumption cycles that depend on consumer lending, among other factors. A decrease in consumption following the introduction of the MPLs will slow down the growth of gross output and produce a temporary disinflationary effect. In particular, the MPLs will have the most significant effect on macro indicators in 2023: their cumulative contribution to real gross output and to annual inflation may reach up to -0.25 pp and about -0.15 pp, respectively. Further on, in 2024, as a result of the adjustment in the economy and the above-mentioned reduction in individuals' repayments, the MPLs will have a certain positive contribution. Therefore, the Bank of Russia forecasts that, by the end of 2025, the cumulative effect of the MPLs on gross output and inflation will be close to zero, considering that the introduction of the MPLs will be taken into account in future monetary policy decisions.

Hence, the use of the MPLs will help smooth consumption and reduce the accumulation of risks, while the negative effect on economic activity will be offset gradually. Moreover, the economy will be growing in the conditions of a more sound structure with a lower level of households' debt burden and a higher resilience of the financial system.

Effect on competition and risk concentration

As opposed to the risk-weight add-ons, the MPLs will enhance the competitive environment as the restrictions on banks' capacities to issue high-risk loans will depend not on their capital cushions, but on the structure of issued loans considering their maturities and borrowers' DSTI. Accordingly, banks with a substantial proportion of issued high-risk loans will be forced to decrease their concentration, whereas banks with a low proportion of these loans will be able, if they wish, to increase it. This may result in a possible redistribution of risk across the system, but overall risk concentration in it will also decrease because the MPLs will be established at a level below the current averages.

Regulatory arbitrage

Within the discussion with the banking community of the approaches to establishing the MPLs presented by the Bank of Russia in December 2021, the participants raised the issue of the reasonableness of eliminating the difference between the MPL values for banks and MFOs.

It is suggested that, at the first stage, the DSTI-based MPL for MFOs should be lower. This is associated with a considerable difference between MFOs and banks as the former issue loans to higher-risk clients and, accordingly, have a different structure of issued unsecured consumer loans. As a rule, MFO clients find it more difficult to raise bank loans; therefore, it is necessary to take into account how the MPLs established might impact the availability of loans to households.

On the one hand, differences in the MPL values create conditions for possible regulatory arbitrage because a part of clients with high DSTI might migrate from banks to MFOs and from banks with a universal licence to banks with a basic licence. On the other hand, the potential for a quick redistribution of the client base is rather limited owing to the following factors:

- Banks and MFOs generally offer different financial products (the total cost of credit offered by MFOs is significantly higher than of banks, whereas an average microloan, to the contrary, is considerably smaller than a bank loan).
- The scales of MFOs' and banks' operations are incomparable: the portfolio of consumer microloans does not exceed 2% of the banking sector's retail loan portfolio; hence, the migration of clients to the operating MFOs cannot be massive.

- Banks with a basic licence have limited opportunities to build up consumer lending as their capital may not exceed 1 billion rubles.

The Bank of Russia will carry out monitoring of regulatory arbitrage associated with the use of the MPLs and, if needed, will take measures to eliminate it. In particular, the Bank of Russia may consider the issue of compliance with the MPLs at the level of a banking group in order to restrict the opportunity for the redistribution of clients between a bank and its subsidiary MFO. In addition, the Bank of Russia may consider the option of setting the same MPL values for both banks and MFOs.

ANNEX 1. INTERNATIONAL EXPERIENCE OF USING MACROPRUDENTIAL TOOLS

Tools to mitigate cyclical risks

In the international practice, the most widespread macroprudential tools are the CCyB and borrower-based measures.

A number of countries, just as Russia, use increased risk weights to mitigate cyclical risks in consumer lending: before the pandemic, India applied the risk weight of 125%; beginning from 1 July 2021, Turkey raised the risk weight for loans with maturities of over one year to 150%.

Considering that this tool is not widely used globally, there are no evaluations of its actual effectiveness in foreign literature. Nonetheless, academic papers study the issue of the reasonableness of using increased risk weights in certain lending segments to mitigate cyclical risks. Specifically, based on a structural model,¹ it has been demonstrated that the IRB approach² may lead to procyclical capital requirements, that is, they become looser in the boom phase and tighter – in the bust phase. As a result, during favourable periods, banks underestimate potential future losses, which in turn aggravates an economic decline and a reduction in households' welfare during a crisis period. To mitigate these risks, the authors suggest using sectoral risk-weight additions that would help eliminate the procyclicality in the dynamics of the risk weights and take into account the accumulation of systemic risks in the economy. Some countries, including Sweden and the Netherlands, introduced into their regulation the minimum risk weights for mortgage loans to be applied by banks that are using the IRB approach. A number of countries, including Iceland, Ireland, Germany, Hong Kong, and the Czech Republic, use the CCyB to mitigate sectoral cyclical risks in the housing segment.

Originally, it was assumed that the CCyB, which is part of the Basel III regulation package, will be increased if the growth rate of the private sector's debt (on loans and bonds) deviates from its long-term trend, but in the recent decade, many countries have been actively using the CCyB not only in response to this trigger. Only a relatively small number of countries (France, Belgium, and Hong Kong) activated the CCyB relying predominantly on positive values of the credit gap. Most regulators (in Germany, Norway, Bulgaria, Denmark, Iceland, Ireland, and Slovakia) established positive values of the CCyB despite negative credit gaps, mainly to reduce cyclical vulnerabilities in the mortgage and unsecured consumer lending market.

The Bank of England suggested setting positive values of the CCyB even when lending growth is not excessively high (positive neutral rate). The cancellation of this buffer in stress conditions makes it possible to promptly support banks and the economy. Considering the experience during the pandemic in 2020, when many banks avoided using other buffers (wary of the effect of stigma), the same conclusion was drawn by other regulators as well (in the Czech Republic, Sweden, Iceland, and Lithuania).

There is a number of empirical papers analysing the effectiveness of tools that are similar to the CCyB which find that a release of a capital buffer could be effective in supporting credit in downturns.³ Theoretical studies, generally based on DSGE models, argue that credit and output volatility decreases when the CCyB is activated, which improves economic agents' welfare.

Due to a large number of papers criticising the mechanistic application of the credit gap to establish the CCyB, there is an increasing trend towards differentiating a credit cycle based on

¹ A. Hodbod, S. Huber, K. Vasiliev. *Sectoral risk-weights and macroprudential policy*, *Journal of Banking & Finance*, 2020.

² *The IRB approach is the internal ratings-based approach to assessing borrowers' credit risk.*

³ *Towards a sectoral application of the countercyclical capital buffer: A literature review.* BCBS, 2018.

structural models that describe the dynamics of the key indicators of the economy and lending within the framework of a single model.⁴ Thus, most countries apply the CCyB either as an alternative to sectoral tools, or as an option enabling them to accumulate a capital buffer in favourable times that can be released in crisis periods.

In addition to the measures aimed at increasing the capital cushion, countries also apply quantitative restrictions to limit the level of risks in the financial system. The economies that simultaneously used both quantitative restrictions and the CCyB include the United Kingdom, Hong Kong, and Norway.

The international experience shows that quantitative restrictions based on borrowers' DSTI⁵ (or DTI)⁶ are applied to both housing mortgage loans and consumer loans. In consumer lending, countries (Slovakia, Slovenia, Portugal, and Latvia) set the maximum allowable DSTI values at the level of 40–60%. Concurrently, they limit the maximum maturity of issued loans to 7–8 years. In an econometric paper of the ECB,⁷ researchers analysing a sample of 19 European countries find that this tool can effectively decrease the probability of default of borrowers, especially those with low income.

The experience of the Central Bank of Ireland in using quantitative restrictions introduced in 2015 in the mortgage market evidences an improvement of the portfolio structure⁸ and a redistribution of loans towards borrowers with lower levels of debt burden.

By analysing the international experience, it is possible to draw a conclusion that several macroprudential tools used simultaneously can effectively limit cyclical credit risks. While quantitative restrictions reduce the risk level in the financial system, tools which are based on capital requirements help form capital buffers to be used in case of future crises.

Tools to mitigate structural risks

A number of countries use increased risk weights to mitigate structural risks emerging, for example, due to a high proportion of foreign currency loans. Many economies (first of all, emerging market economies), besides Russia, apply increased risk weights for foreign currency loans that are frequently differentiated depending on whether or not a borrower is an exporter.⁹

For borrowers not having foreign currency revenues:

- **Croatia:** in June 2006, the risk weights for foreign currency loans were raised from 50% to 75%, and in March 2008 – from 75% to 100%.¹⁰
- **Mongolia:** in June 2014, the risk weights for corporate foreign currency loans were raised to 120%, and in 2019 – to 150%.
- **Serbia:** the risk weights were increased to 125%.
- **Albania:** in December 2014, the risk weights for foreign currency loans were raised by 50 pp.

⁴ Beltran, Daniel O., Mohammad R. Jahan-Parvar, and Fiona A. Paine (2021). *Optimizing Credit Gaps for Predicting Financial Crises: Modelling Choices and Tradeoffs*, International Finance Discussion Papers 1307. Washington: Board of Governors of the Federal Reserve System. IMF Working Paper WP 20/6J. *How Should Credit Gaps Be Measured? An Application to European Countries*. January 2020.

⁵ DSTI is the debt service-to-income ratio measured as the ratio of a borrower's monthly payments to service debt on all loans to the borrower's average monthly income.

⁶ DTI is the debt-to-income ratio measured as the ratio of a borrower's debt to the borrower's 12-month income.

⁷ *On the effectiveness of macroprudential policy*, May 2021.

⁸ *Lending above macroprudential mortgage limits: The Irish experience since 2015*. Central Bank of Ireland, Financial Stability Notes No. 8, 2019.

⁹ <https://www.elibrary-areaer.imf.org/Macroprudential/Pages/iMaPPDatabase.aspx>.

¹⁰ <https://www.bis.org/publ/bppdf/bispap86l.pdf>.

- **Kazakhstan:** the risk weights were increased to 200%.
- **Georgia:** for non-hedged borrowers, the risk weight for foreign currency loans was raised by 75 pp.
- **Costa Rica:** the risk weights for foreign currency loans were raised to 120%.

For any borrowers, regardless of whether or not they have foreign currency revenues:

- **Peru:** in January 2013, the risk weight for US dollar loans was increased from 102.5% to 108%.
- **Uruguay:** in 2006, the risk weight was raised to 125%.
- **Armenia:** the risk weights for foreign currency loans are 50 pp higher on average.
- **Tajikistan:** the risk weights were increased to 150%.

Turkey: from January 2018, resident companies may not borrow foreign currency loans if they do not have foreign currency revenues (e.g. , from exports, transit trade, provision of services). The regulation provides for a range of exceptions (the list was expanded in summer 2018). For example, foreign currency loans may be raised by government authorities, banks, leasing and factoring companies, and companies to finance large projects (including in the renewable energy sector) and purchase equipment.¹¹

¹¹ <https://www.esin.av.tr/2018/05/04/fx-borrowing-restrictions-in-turkey-softened/>.