Methodology for Calculation of Indices of Changes in Bank Lending Conditions and Demand for Loans

General

The table 'Indices of changes in bank lending conditions (BLC) and demand for loans based on a quarterly survey of top Russian banks' and information and analytical notes Changes in Bank Lending Conditions contain information on the indices of changes in bank lending conditions for the main borrower categories. The quarterly survey of lending institutions (Changes in Bank Lending Policy) performed by the Bank of Russia is the source of information used to calculate indices; it is similar to the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) of the U.S. Federal Reserve System, and to Bank Lending Survey (BLS) of the European Central Bank. The survey involves top Russian banks. The survey addresses changes in lending to three main borrower categories: large companies, small and medium-sized enterprises, and households.

For the survey purposes, **large companies** are non-bank businesses and organisations that are not referred to as small and medium-sized enterprises. **Small and medium-sized enterprises (SME)** are small and medium businesses (pursuant to Federal Law No. 209-FZ, dated 24 July 2007, 'On the Development of Small and Medium-Sized Businesses in the Russian Federation'). **Mortgage loans** refer to housing mortgage loans. **Consumer loans** within the survey are any loans used to pay for services and acquire personal property, including car loans. Since Q4 2011, indices of changes in conditions of lending to households are calculated as an arithmetic average of indices of mortgage and consumer lending. Indices of tightness of lending conditions and indices of changes of demand for loans to households are calculated in the same way.

Indices of changes in bank lending conditions and demand for loans are qualitative indicators. Values of these indices between -5 and +5 are interpreted as absence of noticeable changes

Characteristics of Individual Indicators

Indices of changes in bank lending conditions are calculated in percentage points and may range from –100 (all banks eased lending conditions) to +100 (all banks tightened lending conditions). Indices of changes in bank lending conditions stated in the tables represent diffusion indices of tighter lending conditions compared to the previous period. These indices are calculated with the following formula:

$I_D = N_{-2} + 0.5 \times N_{-1} - 0.5 \times N_{+1} - N_{+2}$, where

I_D is the diffusion index;

N_{-2} is the share of banks that have reported considerable tightening of bank lending conditions (%);

N_{-1} is the share of banks that have reported moderate tightening of bank lending conditions (%);

N_{+1} is the share of banks that have reported moderate easing of bank lending conditions (%);

N_{+2} is the share of banks that have reported considerable easing of bank lending conditions (%).

The indicators of **overall bank lending conditions, BLC for short-term loans** and **BLC for long-term loans** specify a general change in lending conditions for each borrower category in terms of availability of loans; their tightening means a reduced availability of loans, whereas easing means increased availability of loans. Short-term loans consist of loans issued for up to and including 12 months, and long-term loans mean loans granted for longer periods.

For the **amount of loan** indicator, tightening of lending conditions means a reduction of the maximum amount of loan that can be granted to the borrower, whereas easing means an increase in the amount of loan. For the **term of loan** indicator, tightening of lending conditions means a shorter maximum term of loan, whereas easing means an increase in this term. For the **interest rate** on loan and **extra charges** indicators, tightening of lending conditions means an increase in rates, extra fees and charges, whereas easing means their reduction. For the **borrower requirements** and **security requirements** indicators, tightening of lending conditions means an increase in the existing requirements for the borrower's financial status, quality and value of loan collateral, or introduction of new requirements, whereas easing means a reduction or cancellation of the existing requirements. For the **lending range** indicator, easing of lending conditions means the introduction of new loan programmes, whereas tightening of lending conditions means the discontinuation of existing loan programmes.

Indicators of the **impact of certain factors on BLC change** group reflect how certain factors have affected BLC change, according to the banks involved in the survey. Indices of this group are calculated in percentage points, and may range from –100 (according to all banks, a certain factor has favoured a considerable easing in lending conditions) to +100 (according to all banks, a certain factor has favoured a considerable tightening in lending conditions). These indices are calculated with the following formula:

$I_D = N_{-2} + 0.5 \times N_{-1} - 0.5 \times N_{+1} - N_{+2}$, where
I_D is the diffusion index;
N_{-2} is the share of banks that have reported that the given factor favoured a considerable tightening in bank lending conditions (%);
N_{-1} is the share of banks that have reported that the given factor favoured a moderate tightening in bank lending conditions (%);
N_{+1} is the share of banks that have reported that the given factor favoured a moderate easing in bank lending conditions (%);
N_{+2} is the share of banks that have reported that the given factor favoured a considerable easing in bank lending conditions (%).

The **bank policy** indicator specifies the effect on BLC caused by the changing priorities of the bank asset formation policy (including those related to the types of assets, their risk level and maturity), and by the changing priorities of the commitment formation policy, which results in a liability structure change (due to changed maturity, currency mix and other liability characteristics). The **liquidity** indicator specifies the influence of bank liquidity on lending conditions. The **competition** indicator specifies the effect on BLC caused by bank competition in the lending market, as well as by competition between banks and other financial institutions. The **Bank of Russia operations** indicator specifies the effect on BLC caused by changing price terms (rates) and non-price terms (timing, minimum transaction volumes, security requirements) of Bank of Russia operations related to bank refinancing and raising bank funds, as well as volume limits established for such operations. The **internal funding** and **external funding** indicators specify the effect on BLC caused by terms of raising funds from residents of the Russian Federation (except the Bank of Russia) and from non-residents, respectively. The **non-financial sector situation** indicator specifies the effect on BLC caused by the changing financial status of non-financial businesses and their business outlook which affects borrowers' ability to repay loans that have been granted and the ability of potential borrowers to repay new loans.

The indices of **change in loan demand** are calculated in percentage points, and may range from –100 (all banks report a considerable demand decrease) to +100 (all banks report a considerable demand increase). These indices are calculated with the following formula:

$I_D = N_{+2} + 0.5 \times N_{+1} - 0{,}5 \times N_{-1} - N_{-2}$, where
I_D is the diffusion index;
N_{-2} is the share of banks that have reported a considerable decrease in loan demand (%);
N_{-1} is the share of banks that have reported a moderate decrease in loan demand (%);
N_{+1} is the share of banks that have reported a moderate increase in loan demand (%);
N_{+2} is the share of banks that have reported a considerable increase in loan demand (%).

Since Q4 2011, the index of total demand for new loans has been calculated as the arithmetic mean of indices of demand for short-term loans and long-term loans.

The **Expectations** section indicators specify the future change in bank lending conditions and loan demand. Indicators contained in this section are calculated using a methodology similar to the methodology for the calculation of indices of overall BLC change and change in loan demand, respectively.

In contrast to the indicators of previous sections, the **Tightness** section indicators specify the extent of tightness of lending conditions, according to banks' estimates, rather than their change. The Tightness section indicators are calculated in percentage points, and may range from –100 (according to all respondent banks, being very relaxed, lending conditions do not restrict access to loans for the overwhelming majority of potential borrowers, moreover, they attract borrowers by considerably stimulating demand for loans) to +100 (according to all respondent banks, being very tight, lending conditions restrict access to loans for the majority of potential borrowers, thereby causing a significant reduction in demand for loans).

These indices are calculated with the following formula:
$I_D = N_{-2} + 0.5 \times N_{-1} - 0.5 \times N_{+1} - N_{+2}$, where

I_D is the diffusion index;
N_{-2} is the share of banks viewing the extent of tightness of lending conditions as considerable (lending conditions restrict access to loans for the majority of potential borrowers, thereby causing a significant reduction in demand for loans), %;
N_{-1} is the share of banks viewing the extent of tightness of lending conditions as moderate (lending conditions restrict access to loans for certain groups of potential borrowers, thereby causing a moderate reduction in demand for loans), %;
N_{+1} is the share of banks viewing the extent of easiness of lending conditions as moderate (in addition to not restricting access to loans for the majority of potential borrowers, lending conditions attract borrowers by moderately stimulating loan demand) %;
N_{+2} is the share of banks viewing the extent of easiness of lending conditions as considerable (in addition to not restricting access to loans for the overwhelming majority of potential borrowers, lending conditions attract borrowers by considerably stimulating loan demand) %.