## **METHODOLOGICAL NOTES**

## **Interest Rate Statistics**

The statistics of the interest rates applied by the banks, compiled by the BNB, is based on a harmonized methodology for the euro area countries specified in Regulation (EU)  $N_{\rm P}$  1072/2013 of the European Central bank of 24 September 2013 (ECB/2013/34)<sup>1</sup>. This statistics presents information about the interest rates, volumes of new business and outstanding amounts of deposits and loans of the *Non-financial Corporations* and *Households and NPISHs*<sup>2</sup> sectors. The classification by institutional sectors is in accordance with the requirements of the *European System of National and Regional Accounts 2010* (ESA 2010)<sup>3</sup>.

Data on the *Base Interest Rate*, the *LEONIA Plus* index, the *interest rate on excess reserves*, the interest rates on interbank deposits and the yield to maturity on *government securities* are published as well.

## Loans and Deposits of the Non-financial Corporations and Households and NPISHs sectors

## I. Types of interest rates and methods of calculation

The interest rates are effective annual rates. They are average weighted with the volumes of new business throughout the reporting period or the outstanding amounts as of the end of the reporting period. They include all interest payments on deposits and loans excluding other charges related to these instruments. The interest rate statistics also presents *Annual percentage rate of charge*, which is the total cost of the loan to the borrower expressed as an annual percentage of the amount of the extended loan.

The *Annual percentage rate of charge* comprises all interest payments on a loan, as well as all fees, commissions and other charges a client has to pay in order to obtain the loan. It is calculated for *consumer loans* and *loans for house purchases* only.

## II. <u>Interest rate statistics provides information on interest rates and volumes on new business and</u> <u>outstanding amounts</u>

1. New business – every new agreement between the client and the reporting agent. New agreements are contracts that specify the interest rate, maturity and other conditions of the deposit, repurchase agreement or loan for the first time. A new agreement is also every renegotiation of the interest rate, maturity and/or other conditions of an existing contract when the possibility for this renegotiation has not been previously provided for in it, as well as the renegotiation of the maturity with the active involvement of the client.

<sup>&</sup>lt;sup>1</sup> Regulation (EU) No 1072/2013 of the European Central bank of 24 September 2013 concerning statistics on interest rates applied by monetary financial institutions(ECB/2013/34).

<sup>&</sup>lt;sup>2</sup> Non-profit institutions serving households.

<sup>&</sup>lt;sup>3</sup> Detailed sectoral classification is available on the BNB website in section *Statistics/ Methodological Notes/ Institutional Sectors*.

2. Outstanding amounts – in accordance with the statistical reporting requirements of the ECB<sup>4</sup> all liabilities of the reporting agents to their clients on deposits and repurchase agreements and all claims of the reporting agents on loans are included with the exception of non-performing loans and restructured loans with forbearance measures which directly or indirectly lead to a decrease of the interest rate to levels below market conditions for the respective segments (currency, maturity, purpose, etc.). Non-performing<sup>5</sup> are the loans meeting at least one of the criteria of Article 178 of *Regulation (EU)*  $N_{2}$  575/2013<sup>6</sup>. The restructured exposures according to *Commission Implementing Regulation (EU)*  $N_{2}$  680/2014<sup>7</sup> are considered to be restructured loans<sup>5</sup>.

## III. Breakdown by sector

The interest rate statistics covers loans and deposits of non-financial corporations, households and NPISHs residents of the Republic of Bulgaria.

1. *Non-financial corporations* sector (Sector S.11 by *ESA 2010*) – consists of institutional units which are market producers and whose principal activity is the production of goods and/or non-financial services.

2. *Households and NPISHs* sector (Sectors S.14 and S.15 by *ESA 2010*) includes the following subsectors:

- Households sector (Sector S.14) – individuals or groups of individuals as consumers and possibly also as entrepreneurs producing market goods and services (market producers), as well as producers of goods and non-financial services for exclusively own final use. The subsector also includes sole proprietors and other partnerships without independent legal status.

- Non-profit institutions serving households sector (Sector S.15) – separate legal entities, whose principal activity is connected to serving, supporting and assisting households. Their principal resources, apart from those received from occasional sales, are derived from voluntary contributions in cash or in kind from households in their capacity as consumers, from payments made by the *General government* sector and from property income. Trade unions, political parties, foundations, associations, churches or religious societies, social, cultural and sports clubs, etc. are included here.

<sup>&</sup>lt;sup>4</sup> Regulation (EU) No 1071/2013 of the European central Bank of 24 September 2013 concerning the balance sheet of the monetary financial institutions sector (ECB/2013/33) and <sup>4</sup> Regulation (EU) No 1072/2013 of the European central Bank of 24 September 2013 concerning statistics on interest rates applied by monetary financial institutions (ECB/2013/34).

<sup>&</sup>lt;sup>5</sup> The current definitions of non-performing and restructured loans are applicable as of the February 2018 data. Previously non-performing and restructured loans were defined respectively as the non-performing loans past-due over 90 days and all restructured loans corresponding to the "non-performing exposures", "loss" and "restructured loans" categories of repealed Ordinance No. 9 of the BNB of 3 April 2008 on the Evaluation and Classification of Risk Exposures of Banks and the Allocation of Specific Provisions for Credit Risk.

<sup>&</sup>lt;sup>6</sup> Regulation (EU) No 575/2013 of The European Parliament and of The Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.

<sup>&</sup>lt;sup>7</sup> Commission Implementing Regulation (EU) No 680/2014 of 16 April 2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council.

#### IV. Breakdown by instrument

1. *Overnight deposits* – deposits without fixed maturity, which are immediately convertible in cash and/or transferable at demand by cheque, banker's order without any restriction or penalty. The instrument includes deposits up to 1 day as well as transferable deposits Transferable saving deposits are part of transferable deposits. Interest rates and volumes on new business and on outstanding amounts for this instrument coincide.

2. Deposits redeemable at notice – non-transferable deposits without any agreed maturity, which cannot be paid in cash without a period of prior notice. The instrument includes non-transferable savings deposits without a fixed maturity, which serve as store of money belonging to the households against the issue of a personal savings book or similar document, as well as other deposits with similar characteristics. Interest rates and volumes on new business and on outstanding amounts for this instrument coincide.

3. *Deposits with agreed maturity* – deposits that are not immediately available as they have an agreed term or other restrictions on their withdrawal. These deposits cannot be used in settlements and they are not convertible in cash without any restrictions or penalties. *Time deposits* and other deposits with similar characteristics (restricted deposits such as margin deposits, amounts pledged as collateral, accumulation accounts, amounts blocked in relation to legal proceedings, etc.) as well as liabilities on loans are included here. For analytical purposes, interest rates and volumes of new business and outstanding amounts on time deposits are presented in separate tables.

4. *Repos* – agreements for purchase of securities with a firm commitment for the buyer to sell the securities back to the initial seller at a fixed price on a specified future date. Repo liabilities of the reporting units are presented in a separate indicator, while claims on repurchase agreements are included in the indicator *loans other than overdraft*.

5. *Loans* – claims on funds lent by reporting agents to borrowers as well as claims transferred from third parties. Loan terms are set in an non-transferable document (contract) and earn income in the form of interest. Non-performing loans and loans restructured with measures which directly or indirectly lower the interest rate to levels below market conditions for the respective market segment (currency, maturity, purpose etc.) are not included in the scope of interest rate statistics. Loans are divided in two subcategories: *overdraft and credit card credit* and *loans other than overdraft*<sup>8</sup>:

- Overdraft and credit card credit – Overdraft is a debit balance on a current account. Overdraft also includes revolving loans, drawdowns on credit lines and credit card credit. Interest rates and volumes on new business and on outstanding amounts for overdraft and credit card credit coincide.

*Credit card credit* includes credit on cards with a delayed debit function and cards with a credit function. The delayed debit function allows cardholders to use funds up to a predefined limit. The debt incurred is settled in full by the end of a predefined period of time. The credit function allows cardholders to make purchases and in

<sup>&</sup>lt;sup>8</sup> Claims on repurchase agreements of the reporting agents are included in the instrument *loans other than overdraft*.

some cases draw cash up to a limit agreed in advance. The credit may be repaid in full by the end of a predetermined period of time or in several installments.

*Convinience credit card credit* includes the outstanding amounts on cards with a delayed debit function and interest-free outstanding amounts on cards with a credit function.

Extended credit card credit includes interest-bearing outstanding amounts on cards with a credit function.

Loans, other than overdraft – includes all loans which are not classified as overdraft.

For analytical purposes, the interest rate statistics presents information on the new business for the following *loans, other than overdraft* categories:

- Collateralised loans – loans secured with collateral or/and guarantees using funded or unfunded credit protection according to Regulation (EU) No 575/2013 of the European Parliament and the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms the sum of collaterals and/or guarantees on which is equal to or larger than the loan amount. Only interest rates on such loans are published.

- Renegotiated loans and loans for refinancing

Renegotiated loans are partially or fully withdrawn and not fully repaid loans one or more of the conditions on which have been altered with the active involvement of the client during the reporting period. Changes in parameters which are not relevant from economic standpoint such as correspondence address, etc. are not deemed renegotiations.

Loans for refinancing are loans with which other outstanding loans from the same or other reporting agents are repaid. Increases in the amounts of existing loans, when the funds are used to repay outstanding loans, as well as loan consolidations of a debtor are recognised as refinancing. Loans extended for the purpose of repaying debts to creditors outside the monetary-financial sector are not deemed as *loans for refinancing*.

The new business volumes on renegotiated loans and loans for refinancing are included in the total the new business volume on *loans, other than overdraft*.

## V. Breakdown by currency

BGN, EUR and USD presented in their BGN equivalent.

#### VI. Breakdown by purpose of loans, other than overdraft (only for sector Households and NPISHs)

1. *Consumer loans* – loans granted for the purpose of personal use of the households in the consumption of goods and services. Consumer loans secured with mortgage are also included.

2. *Loans for house purchases* – loans extended to households for the purpose of investing in housing for own use or rental including building and home improvements.

3. *Other loans* – loans extended to the *Sole Proprietors* subsector for funding production and business purposes as well as loans other than consumer or housing loans, extended to households such as loans financing specifically medical, educational or business expenditures. Loans to *NPISHs* are also included.

## VII. Breakdown by agreed size of the loan (only for sector Non-financial corporations)

- 1. Loans up to an amount of EUR 0.25 million expressed as its BGN equivalent
- 2. Loans over an amount of EUR 0.25 million and less than EUR 1 million expressed as its BGN equivalent
- 3. Loans over an amount of EUR 1 million expressed as its BGN equivalent.

Each loan is placed in one of the three categories according to its amount regardless of the total credit exposure of the client.

## VIII. Breakdown by agreed period

1. *Original maturity* – the initially agreed period of time from the negotiation of a loan or deposit to the agreed moment of its full repayment.

2. *Period of initial rate fixation* – the predetermined period of time at the start of a loan contract during which the value of the agreed interest rate cannot change. All loans with variable interest rates are included in the shortest period of fixation category.

3. *Period of notice* – the period of time between the moment the holder gives notice of an intention to withdraw funds to the reporting unit and the date on which the holder is allowed to convert it in cash without incurring a penalty. The period of notice is applicable only to deposits.

4. *Residual maturity* – the remaining period from a reference date to the negotiated date for the full repayment of the instrument. The reference date is the last day of the reporting period. The residual maturity is applicable to *loans, other than overdraft*.

5. *Interest rate reset period* – the period from the last day of the reporting period to the next date on which the interest rate on a loan may be changed according to the loan agreement. The breakdown by reset period applies to *loans, other than overdraft*.

## IX. <u>Reporting period</u>

The reporting period is one calendar month. End-of-month information is presented for the purpose of interest rate statistics on *outstanding amounts*. Interest rate statistics on *new business* includes data on all new agreements concluded during the reporting period.

## X. <u>Revision policy</u>

In accordance with the requirements set out in the European Central Bank *Guideline ECB/2014/15*<sup>9</sup> revisions of data may be:

– Monthly – revisions which refer only to data for the period preceding the last reporting period;

- Quarterly – carried out when revisions would involve data for periods prior to the last. Quarterly revisions are made with the publication of the data for March, June, September, and December. Thus, consistency between monetary and interest rate statistics is ensured.

Revisions of published data are made in the following cases:

- Obtained additional information, incorrect classification, improved reporting procedures and correction of mistakes in the data submitted by reporting agents;

- Change in the methodological standards of monetary and interest rate statistics.

Revisions of the data as well as the periods affected are announced in the press release and the respective data tables.

Upon changes in methodological standards, whenever possible, revisions of historical data starting from the date of event occurance or methodological change are carried out.

Upon occurrence of prerequisites for publishing a new indicator – sector, instrument, etc. – historical time series are constructed by using statistical methods as of the moment of the occurrence of the indicator (where appropriate conditions exist).

#### XI. Data source

Reporting agents are all banks in Bulgaria, including branches of foreign banks.

The information is provided in accordance with Ordinance No. 17 of the BNB of 29 March 2018 on the Monetary and Interest Rate Statistics and Financial Accounts Statistics, as ammended and Guideline for defining the content of and the order for the submission of Information on Interest Rate Statistics of the BNB.

<sup>&</sup>lt;sup>9</sup> Guideline of the European Central Bank of 4 April 2014 on monetary and financial statistics (ECB/2014/15) as amended.

## Key Interest Rates and Yield on Government Securities

## Interbank market

## I. <u>Scope</u>

1. Base interest rate  $^{10}$  (BIR) – the BIR for the current month equals the simple average of the values of the index LEONIA Plus for the business days of the preceding calendar month, and when this simple average amounts to a value less than zero, the BIR is set to a value equal to zero.

2. *LEONIA Plus (LEONIA Plus: LEv OverNight Interest Average Plus)* is a reference rate of concluded and effected BGN unsecured overnight deposit transactions in the interbank market in Bulgaria.

3. Interbank money market deposits – interest rates and amounts on deposit transactions (secured and unsecured) concluded and effected between banks. The deposits are broken down by agreed maturity and currency. Deposits in EUR and USD are presented as their BGN equivalent.

#### II. Data processing

Monthly data on the LEONIA Plus index are calculated as simple averages of daily data<sup>11</sup>.

- Interest rates on interbank deposits are calculated by weighing with the amounts of the deposit transactions concluded during the reporting period. They are presented as annual effective rates.

#### III. <u>Reporting period</u>

The reporting period is one calendar month.

#### IV. Data source

The data source for the *BIR*, the daily values of *LEONIA Plus* and the interbank deposits is the Methodology and Financial Markets Directorate of the BNB.

<sup>&</sup>lt;sup>10</sup> Effective as of 1 July 2017 *LEONIA* is replaced by the *LEONIA Plus* reference rate as the basis for the calculation of the *Base Interest Rate*. The Bulgarian national bank calculates the *base interest rate* according to the "Methodology for the Determination of the base interest rate".

<sup>&</sup>lt;sup>11</sup> The daily values of the index are calculated according to the "Methodology for calculation of the LEONIA PLUS reference rate of concluded overnight deposit transactions in Bulgarian levs on the interbank market".

## **Interest Rate on Excess Reserves**

## I. <u>Scope</u>

*Interest rate on excess reserves* – applied by the BNB in accordance with article 6 of Ordinance No 21<sup>12</sup> on the excess reserves maintained by banks with the central bank.

#### II. <u>Reporting period</u>

The reporting period coincides with the maintenance period as per article 8 (2) of Ordinance No 21. The maintenance period starts from the fourth day of the basis<sup>13</sup> period and ends on the third day of the next basis period.

## III. Data source

The data source for the *interest rate on excess reserves* is the Payment systems and Required Minimum Reserves Directorate of the BNB.

# Yield to maturity on government securities. Long-term interest rate for convergence assessment purposes

## I. <u>Scope</u>

1. Primary and secondary market yield to maturity on interest-bearing government securities.

2. Long-term interest rate for convergence assessment purposes (LTIR) is determined on the basis of the secondary market yield to maturity of a long-term government bond (benchmark bond) issued by the Ministry of Finance (*Central Government* sector) and denominated in the national currency. The LTIR is calculated in accordance with the requirements of the European Central Bank. Additional information regarding the LTIR is published on the web site of the BNB (*Statistics/Monetary and Interest Rate Statistics/ Interest Rate Statistics/ Interest Rate for Convergence Assessment Purposes*).

## II. Data processing

1. The yield to maturity of government securities is the average weighted effective yield to maturity achieved respectively on the primary and secondary market during the reporting period. The securities are grouped by their original maturity.

2. The monthly values of the *LTIR* are calculated as simple averages of its daily values.

<sup>&</sup>lt;sup>12</sup> Ordinance No. 21 of the BNB of 26 November 2015 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks.

<sup>&</sup>lt;sup>13</sup> Basis period coincides with each calendar month.

## III. <u>Reporting period</u>

The reporting period is one calendar month.

#### IV. Data source

The data source for the yield on government securities data is the Fiscal Services Directorate of the BNB.

## **Data Dissemination**

The Bulgarian National Bank publishes press releases as well as monthly data on interest rate statistics organised as a set of predefined data series in Excel format on its website. An archive of interest rate statistics time series as of the date of publication for the respective reporting period is available on the website of the BNB in the *Interest Rate Statistics Archive* subsection.

The Monetary and Interest Rate Statistics section, Archive subsection/ Interest Rate Statistics (historical data) contains data-series the dissemination of which has been discontinued for methodological or other reasons.

Selected indicators, representative for the interest rate statistics and organised in tables are published in the BNB Report January – June and BNB Annual Report.

Interest statistics data are simultaneously released to all interested parties. The publication dates are announced in the *Statistical Data Release Calendar*<sup>14</sup>.

## Contacts

Should you have any questions on the data and the applied methodology, please do not hesitate to contact the press office of the Bulgarian National Bank (<u>press\_office@bnbank.org</u>), Ms. Nadya Aleksandrova, Head of Monetary and Financial Statistics Division (<u>Aleksandrova.N@bnbank.org</u>) or send them via e-mail to Monetary and Financial Statistics Division (mbstatistics@bnbank.org).

Last update as of 25 February 2021

<sup>&</sup>lt;sup>14</sup> The Statistical Data Release Calendar is available on the BNB website in section Press Office/ Calendar.