

### 3. INTEREST RATES AND DINAR EXCHANGE RATE MOVEMENTS

#### 1.3.1 NBS Interest Rates

This table shows the level of interest rates which the NBS calculates and charges on placements from reserve money issue and on all other claims, as well as the rates of interest paid on the assets deposited with the NBS.

#### INTEREST RATES UNDER THE NEW METHODOLOGY (Tables 1.3.2 – 1.3.9 and 1-7)

As of September 2010, the NBS compiles and publishes interest rate statistics in accordance with the methodology prescribed by the European Central Bank. This methodology sets out the data that banks are required to record, process and submit to the NBS with a view to monitoring the level of weighted average interest rates on loans and deposits for outstanding amounts and new business. The NBS publishes tables showing weighted average monthly interest rates offered by banks, quoted in % per annum. These rates are calculated as the weighted average of the amount of loans or deposits and the level of interest rate on certain loans and/or deposits, reported by banks to the NBS on a monthly basis. All published tables also show the appertaining amounts in RSD million.

In submitting data on the level of interest rates on loans and deposits, banks use the following three types of calculated interest rates: 1) annualised agreed rate – interest rate agreed between the bank and the client for loans and deposits, converted to yearly terms and quoted in percentages per annum (AAR); 2) narrowly defined effective rate – interest rate that on an annual basis equalises the present value of all future or existing commitments (loans or deposits, repayment of principal, interest payments), excluding any other charges agreed by the bank and the client (NDER); 3) effective interest rate for statistics – interest rate that in annual terms equals the present value of all financial commitments, existing or future, including any other charges agreed by the bank and the client (EIRS). The effective interest rate for statistics is calculated only for new business, specifically consumer and housing loans to the household sector. AAR, NDER and EIRS interest rates are derived from annual nominal rates.

*Outstanding amounts* include gross carrying amounts of bank loans (excluding allowances for impairment) and carrying amounts of bank deposits as at the last calendar day of the reporting month. Loans classified as NPLs and loans for debt restructuring at rates considerably below market rates are not included in outstanding amounts when reporting interest rates on loans and deposits. Interest rates on outstanding amounts are calculated as weighted average interest rates applied on the carrying amount of loans and deposits as at the last day of the reporting month.

*New business* includes all new loan or deposit contracts concluded between the bank and the client during the reporting month, except for loans for debt restructuring at rates considerably below market rates. Contract conclusion date is the deciding factor for qualifying and including new loan or deposit into the report on the level of bank interest rates for the reporting month. New business includes all financial arrangements whose conditions have been agreed for the first time during the reporting month, and all existing contracts whose conditions have been re-agreed with active participation of the client. Interest rates on new business represent weighted average interest rates on all new loans and deposits agreed in the reporting month. When calculating interest rates on new business, all interest rates applying to new contracts are taken into account, even those that may never be shown in the bank's interest rate statistics

for outstanding amounts. For example, a bank and a client may agree on an interest rate to be applied to a certain amount, but the client may ultimately decide not to withdraw or deposit funds or the contract may be cancelled. In that case, the agreed interest rate and the loan or deposit amount will be included in interest rate statistics for new business but not in the interest rate statistics for outstanding amounts.

For *volatile instruments* (overnight deposits, deposits redeemable at notice, revolving loans, credit card debt and current account overdrafts), interest rates on outstanding amounts and new business coincide. The concept of new business for those volatile instruments does not pertain only to new business in the given month, but is extended to include total balance for these instruments. Since for volatile instruments data referring to the total balance are reported, there is no differentiation between outstanding amounts and new business. Interest rates for volatile instruments are calculated as weighted average interest rates applied to the carrying amount of those instruments on the last calendar day of the reporting month.

For the purposes of this Methodology, banks' investment into non-transferable securities that may not be traded in the secondary market is considered to be a loan. Non-transferable security is a security whose ownership is not transferable from one party to another. A bank buys a security from a client at a set price, with the firm obligation on the client's part to redeem the same (or similar) security at a set price at an agreed future time. Purchase of securities and agreeing to sell in future (reverse repo) is classified as loan business. Investment into transferable securities traded in the secondary market, e.g. shares, is treated as investment into securities, not loans, and is not shown in reports on bank lending interest rates.

From September 2010 to December 2014, the category "Other Loans" in household sector pertained to cash and other loans aggregately. As of the adoption of the Decision on the Chart of Accounts and Contents of Accounts in the Chart of Accounts for Banks and the Decision on Collection, Processing and Submission of Data on the Balance and Structure of Accounts in the Chart of Accounts, these two loan categories are shown separately. Owing to this change, as of January 2015, cash and other loans in our tables 1.3.2 and 1.3.3 are shown separately. This explains discontinuity in the level of interest rates and loan amounts in the category "Other loans" in the household sector.

Under this methodology, for the purposes of reporting on interest rates on bank loans and deposits, *household sector* includes households (natural persons), private entrepreneurs, farmers (registered agricultural producers) and NPISHs (non-profit institutions serving households). *Non-financial sector* (non-financial legal persons) includes public enterprises and companies, i.e. independent legal persons whose core activity is production of goods and non-financial services.

Tables 1.3.2 and 1.3.6 which show interest rates, loan amounts and outstanding amounts do not include loans classified as non-performing and loans for debt restructuring at interest rates significantly below market rates.

Tables 1.3.3 and 1.3.7 which show interest rates, loan amounts and new business do not include interest rates on loans for debt restructuring at interest rates significantly below market rates.

In March 2017, the coverage of bank reporting in the area of interest rates statistics was broadened (Tables 1–7). In accordance with Article 6 of the Accounting Law, loans and deposits are divided by size into micro-, small-, medium-sized and large enterprises.

In addition, interest rates were divided by dinar loans and corporate and household deposits by type of interest indexation: the key policy rate of the National Bank of Serbia, one-, three- and six-month BELIBOR and other indexations (CPI, BEONIA etc.).

**BANK INTEREST RATES UNDER OLD METHODOLOGY – data updated concluding with June 2011:****1.3.10 and 1.3.11 Weighed Interest Rates on Bank Loans and Deposits, 2005-2011**

The tables show weighted average monthly interest rates on bank loans and deposits quoted in % per annum. Data on interest rates on loans (new business) and deposits (stock of deposits as at the last day of the reporting month) are given on the basis of nominal (agreed) interest rate in dinars. Household sector includes natural persons, farmers and entrepreneurs. Dinar loans include also foreign currency-indexed loans without the possibility to disaggregate them. New business includes all loan contracts concluded in the reporting month, whose disbursement commenced in the same month. Banks' investments into securities are considered to be loans and are subject to reporting.

The table Weighted Interest Rates on Loans shows weighted average annual interest rates agreed between banks and clients for loans whose disbursement commenced in the given month. They are calculated as a weighted average of the amount of approved loans and the level of interest rate on certain loans reported by banks to the NBS on a monthly basis.

The table Weighted Interest Rates on Deposits shows weighted average interest rates at which banks calculate and pay interest on term and demand deposits of households and legal entities. Weighted average interest rates are calculated based on the data on interest rates on particular types of deposits and the stock of deposits at the end of the given month, submitted by banks to the NBS on a monthly basis.

As of September 2010, statistics of loan and deposit interest rates is fully aligned with the ECB regulations.

**1.3.12 Interest rates on securities**

The table shows weighted interest rates at auctions organised by the National Bank of Serbia. The weight used in calculating the average interest rate is the purchase price of the securities sold. Weighted yield rates on government securities are derived from the Ministry of Finance's auction reports. The weight used in calculating the average interest rate is the market value of sold government securities (discount amount). The weighted average yield rate on frozen foreign currency savings bonds is calculated based on the daily Belgrade Stock Exchange data on trading, prices achieved and yield to maturity. The weight used in calculating the average yield rate is the daily volume of trading. The Belgrade Stock Exchange calculates daily yield rates based on the closing price. All interest rates are shown on an annual basis.

**1.3.13 Dinar Exchange Rates against Foreign Currencies – End of Period**

Exchange rates represent the official middle exchange rates of the dinar against foreign currencies applied at the end of the relevant period.

**1.3.14 Dinar Exchange Rates against Foreign Currencies – Average for the Period**

Exchange rates represent average exchange rates of the dinar against foreign currencies in a month/year, calculated as an arithmetic mean of the official middle exchange rates of the dinar against foreign

currencies applied on business days during the relevant month/year. The nominal effective dinar exchange rate index is the weighted geometric mean of the indices of the average exchange rates of the dinar against the euro and the dollar, calculated as set out above. The real effective dinar exchange rate index is the nominal effective exchange rate index adjusted by CPI and the weighted geometric mean of CPI in the euro area and the United States. The weights are derived as a function of the share of individual currencies in the country's total foreign exchange inflows and outflows. They currently equal 0.8 for the euro and 0.2 for the dollar. The size of the weights is subject to periodic revision. Index value below 100 indicates depreciation (nominal and real), while index value above 100 indicates appreciation of the dinar.