

Rules for the Calculation and Publication of the Indices of the Tbilisi Interbank Interest Rate (TIBR)

Article 1. Definition of TIBR Indices

1. The Rules for the Calculation and Publication of the Indices of the Tbilisi Interbank Interest Rate (hereinafter referred to as the Rules) describe the criteria for transactions concluded on the money market between Commercial Banks and Microbanks (hereinafter referred to as the banks) participating in the calculation of the Tbilisi Interbank Interest Rate (hereinafter referred to as the TIBR rate/TIBR), as well as the calculation, publication, and other procedural matters related to TIBR indices.
2. The TIBR indices of the Georgian interbank money market are determined on the basis of the lari (GEL) interest rates applicable in the Georgian interbank money market; these are indicative benchmarks reflecting the interest rates in the lari money market and include:
 - a) Tbilisi Interbank Interest Rate - TIBR Rate;
 - b) Tbilisi Interbank Term Interest Rate -TIBR Term Rate;
 - c) Tbilisi Interbank Interest Rate Compounding Index – TIBR CI.
3. TIBR Rate is the risk-free benchmark representing the volume-weighted average interest rate based on the central 80% of volume-weighted distribution of rates on the eligible interbank transactions conducted in the national currency between banks operating in Georgia (hereinafter interbank).

3¹ TIBR is a measure of the rate at which banks in Georgia lend to and borrow from each other in circumstances where credit, liquidity and other risks are minimal, and acts as a reference rate for the floating rate financial instruments denominated in GEL.

4. TIBR Term Rate is rate calculated using backward looking term rate compounding methodology based/linked to the historical TIBR rate.
5. The TIBR CI is a TIBR interest rate calculated over a period of time by a compound interest accrual technique.
6. The TIBR rate and the TIBR term rate are annual interest rates (using the ACT/365 convention) with precision to four decimal places after the decimal point.

Article 2. Eligible Interbank Trades for TIBR Rate Calculation

1. Interbank trades, which meets the following criteria are eligible for TIBR Rate calculation:
 - a) Trades are unsecured overnight Loans/Deposit;
 - b) Trades are in national currency;
 - c) Trades are uncollateralized;
 - d) Trades are conducted on the Bloomberg trading system;
 - e) Trades are made with same settlement date;
 - f) Settlement of the conducted trades are done during the operational hours of Real Time Gross Settlement (RTGS) system of National Bank of Georgia. RTGS operational hours is

defined by the RTGS system rules.

2. TIBR rate calculation does not include s.c. Deposit SWAP trades (exchange of two deposits in two currencies between parties). If the identification of the Deposit SWAP transaction requires additional clarification, the staff of the National Bank of Georgia (hereinafter referred to as the NBG) requires additional information from treasuries of respective banks.

Article 3. TIBR Rate Calculation Methodology

1. Every business day, NBG receives conducted interbank trades of the current business day from the FXTB<GO> page of Bloomberg system.
2. For TIBR Rate calculation purposes, only those trades that meet the requirements of the 2nd article of this regulation and identified as eligible trades are considered.
3. Using the eligible trades for TIBR Rate calculation, the NBG acts as following:
 - a) All eligible transactions that took place on current business day are ranked from the smallest to the largest with respect to the nominal interest rate of each transaction.
 - b) From the total volume of interbank transactions sorted by increasing interest rates, the upper transactions and/or parts thereof and the lower transactions and/or parts thereof are deducted, whose volume corresponds to 10%-10% of the total volume of interbank transactions. These transactions do not participate in the calculation of the TIBR rate.
 - c) TIBR Rate is calculated as the weighted average of the remaining transactions.
 - d) The volume-weighted average percentage of the TIBR rate is calculated using the following formula:

$$TIBR = \frac{\sum_{i=1}^n v_i * r_i}{\sum_{i=1}^n v_i}$$

Where:

v_i – is the cumulative volume of transactions with the same interest rate r_i ;

r_i – is the annual interest rate fixed on the transaction;

n – is the number of different interest rates in the transactions.

Article 4. TIBR Term Rate Calculation Methodology

1. TIBR Term Rate Indices are calculated using following formula:

$$\left[\prod_{i=1}^{d_o} \left(1 + \frac{TIBR \times n_i}{365} \right) - 1 \right] \times \frac{365}{d}$$

Where:

d - is the number of calendar days in the relevant Interest

Period; do - is the number of business days in the relevant interest period;

i - is a series of whole numbers from one to do, each representing the relevant business day in chronological order from, and including, the first business day in the relevant interest period;

ni - for any day "i", means the number of calendar days from and including such day "i" up to but excluding the following business day;

Article 5. TIBR CI and TIBR Compounded Interest Rate Calculation Methodology

1. The TIBR CI is calculated based on the TIBR rate.
2. The TIBR CI is a TIBR rate calculated using a compound interest accrual method over a period of time, with an initial rate of 100. The initial indicator is the TIBR rate as of August 1, 2018, when the NBG started publishing the updated TIBR rate.
3. The TIBR CI reflects the impact of compound interest accrual on each business day at the TIBR rate and allows the result of complex interest accrual at the TIBR rate to be calculated standardly and easily over a period of time.
4. TIBR CI is calculated using following formula:

$$TIBR\ CI_i = TIBR\ CI_{i-1} \times \left(1 + \frac{TIBR_{i-1} \times d_{i-1}}{365}\right)$$

Where:

TIBR CI_i - is the TIBR compounding index for i business day, published on the i business day, displayed to eight decimal places;

TIBR CI_{i-1} - is the TIBR compounding index for i-1 business day, published on i-1 business day, displayed to eight decimal places;

TIBR_{i-1} is the TIBR rate for i-1 business day and published i business day;

d_{i-1} is the number of calendar days from i-1 business day to i business day, during which TIBR_{i-1} applies.

5. The TIBR CI rate for any period can be calculated using the TIBR CI values for the start and end dates of this period using the following formula:

$$TIBR\ CR_{Period} = \left[\frac{TIBR\ CI_{End\ date}}{TIBR\ CI_{Start\ date}} - 1 \right] \times \frac{365}{T}$$

Where:

The TIBR CR Period - is the TIBR compounded interest rate for the calculation period, displayed to four decimal places;

TIBR CI End date - is the TIBR compounding index for the last day of the calculation period; TIBR CI Start date - is the TIBR compounding index from the day of the calculation period;

T - is the number of days in the calculation period.

Article 6. TIBR Rate Contingency Plan

1. If during the reporting day the total number of transactions participating in the calculation of the TIBR rate is less than 5 and/or the total volume of eligible transactions is less than 50 (fifty) million GEL, the NBG shall calculate the TIBR rate according to the first contingency plan.
2. According to the first contingency plan, the volume-weighted average percentage of the TIBR rate is calculated in accordance with the formula defined in subparagraph "d" of paragraph 3 of Article 3 of this Rule, and the following data are taken into account:
 - a) The corresponding transactions of Article 2 of this Rule and subparagraphs "a" and "b" of paragraph 3 of Article 3;
 - b) 10% of the largest volume between the total volume of NBG overnight loans used on the day of calculation of the TIBR rate and the total volume of NBG overnight deposits, for which the interest rate calculated in the following manner is used as the interest rate:
 - b.a) in the case of using the volume of the NBG overnight loan, the interest rate of the NBG overnight loan minus the average indicator of the differences between the daily TIBR rate and the interest rate of the NBG overnight loan over the last 5 (five) banking days;
 - b.b) in the case of using the volume of the NBG overnight deposit, the interest rate of the NBG overnight deposit plus the average indicator of the differences between the daily TIBR rate and the interest rate of the NBG overnight deposit over the last 5 (five) banking days.
3. If the total volume of transactions calculated according to the first contingency plan is less than 50 (fifty) million GEL, then the NBG shall use the second contingency plan.
4. According to the second contingency plan, the TIBR rate is calculated as the NBG monetary policy rate plus the average difference between the TIBR rate and the NBG monetary policy rate over the previous 5 (five) banking days.
5. If the calculation of the TIBR rate according to the second contingency plan continues consecutively for 5 (five) banking days, then the TIBR rate shall be the NBG monetary policy rate.
6. The fact of using a contingency plan shall be reflected in the Excel file of the Tbilisi Interbank Interest Rate placed on the statistical data page of the NBG official website.
7. The contingency plan is used for a short-term period, and in the case of its use for a long-term period, the NBG shall act in accordance with Article 8 of this Rule.

Article 7. Publication of TIBR Indices

1. On every business day, no later than 10 a.m. National Bank of Georgia:
 - a) Publishes the previous business day TIBR indices on Bloomberg page NBGB <GO>, which is available to all its terminal users;
 - b) Publishes the previous business day TIBR Indices on NBG web-site.
2. After publication, TIBR Indices are final and any change is prohibited.
3. However, if NBG discovers errors in TIBR Indices calculation, where revised data is three or more basis points (>0.03%) different from the earlier calculated and published TIBR Indices, on the same day NBG corrects the TIBR Indices and publishes them. Corrected TIBR Indices are published once for a given day, no later than 10 a.m. of next business day with "corrected" status.

4. In cases where TIBR Indices calculation is not possible due to some technical circumstances it is possible to calculate those rates on following business day no later than 10 a.m.

Article 8. TIBR Indices Audit and Regulation Changes

1. Once a year, NBG Internal Audit reviews the accuracy of TIBR Indices calculation and publication according its methodology.
2. Once a year, NBG reviews TIBR Indices calculation methodology in order to compare and evaluate whether that methodology reflects the current market practices.
3. If NBG determines, that TIBR Indices calculation methodology does not reflect market reality and market demand, NBG makes relevant changes in this regulation after consultation with interbank market participants.