

The Average Deposit Index (ADI) as a reference interest percentage for Factoring deals

Methodology

1. Subject

The present Methodology regulates the calculation of the Average Deposit Index (ADI) as the reference interest rate of UniCredit Factoring EAD (Factor) for factoring contracts denominated in BGN, as well as the method of its application and its periodical change.

2. Scope

The ADI is the reference interest rate, applicable for factoring contracts denominated in BGN provided by the Factor for Legal Entities.

3. Data source and method of calculation

The ADI data source is the Bulgarian National Bank (BNB) Interest rate statistics, in particular the table "Interest rates and overnight deposits, term deposits and deposits redeemable at notice of Non-financial corporations and Households, published on the BNB website:

<http://www.bnb.bg/Statistics/StMonetaryInterestRate/StInterestRate/StIRInterestRate/index.htm#>

Hereinafter referred to as "Interest Rate Statistics" or "Table"

Only data on deposits in BGN are used.

The ADI is average (weighted average) interest rate on the total volume of BGN deposits of Non-financial corporations and Households in the banking system in Bulgaria.

As BNB itself does not currently publish this most aggregated interest rate but provides all the data necessary for its calculation, the Factor calculates it entirely on the basis of these data as follows:

A. Identifies the categories of customers and the types of deposits, which, collected together, exhaust all the BGN deposits from Interest Rate Statistics. Currently, these are the following columns in the Table:

- Non-financial corporations:
 - Overnight deposits in BGN;
 - Term deposits in BGN, over 1 day to 2 years;
 - Term deposits in BGN over 2 years;
 - Deposits redeemable at notice in BGN, up to 3 months
 - Deposits redeemable at notice in BGN, over 3 months
- Households:
 - Overnight deposits in BGN;

- Term deposits in BGN, over 1 day to 2 years;
 - Term deposits in BGN over 2 years;
 - Deposits redeemable at notice in BGN, up to 3 months
 - Deposits redeemable at notice in BGN, over 3 months
- In order to avoid a misunderstanding, it should be noted that other categories of deposits are presented in the Table (over 1 day to 1 month, over 1 month to 3 months, over 3 to 6 months, over 6 to 12 months and over 1 to 2 years), but they are ignored for the purposes of the calculation as they are already represented in the category of “time deposits in BGN over 1 to 2 years.

B. Finds out two rows of the table corresponding to an effective annual percentage and, respectively, volumes (in millions) for the same month. The first row contains the averaging values and the second one the weights of each value.

C. For each of the categories (columns) under item A, the two values of the rows under item B are multiplied, i.e. the effective annual percentage multiplied by the volume, in millions, representing its weight.

D. The outputs from item C are summed up.

E. The weights (volumes in million BGN) for each of the categories (columns) under item A are summed.

F. The results from item D are divided by the results from item E.

G. The result from item F is rounded to the second decimal place.

In summary, the following formula is applied:

$$\frac{\sum_i^n (EAP_i \times W_i)}{\sum W}$$

Where:

- EAP is effective annual percentage
- W is the volume, weight
- i is the categories of clients, types of deposits, listed in item A
- n is the final number of categories of clients, types of deposits, listed in item A.

An example of the corresponding calculation of ADI value based on data as of April 2018 is illustrated below:

INTEREST RATES AND VOLUMES OF OUTSTANDING AMOUNTS ON OVERNIGHT DEPOSITS, TIME DEPOSITS AND DEPOSITS REDEEMABLE AT NOTICE OF NON-FINANCIAL CORPORATIONS AND HOUSEHOLDS¹ SECTORS²

	Non-financial corporations											Households										
	Overnight deposits ³	Time deposits							Deposits redeemable at notice ³	Overnight deposits ³	Time deposits							Deposits redeemable at notice ³				
		in BGN									in BGN											
		over 1 day up to 2 years									over 1 day up to 2 years											
in BGN	over 1 day up to 1 month	over 1 up to 3 months	over 3 up to 6 months	over 6 up to 12 months	over 1 up to 2 years	over 2 years	up to 3 months	over 3 months	in BGN	over 1 day up to 1 month	over 1 up to 3 months	over 3 up to 6 months	over 6 up to 12 months	over 1 up to 2 years	over 2 years	up to 3 months	over 3 months					
annual effective interest rate																						
2018 I	0.01	0.31	0.32	0.29	0.13	0.28	0.92	1.47	0.12	-	0.03	0.27	0.02	0.05	0.14	0.32	0.96	1.91	0.06	-		
2018 II	0.00	0.32	0.36	0.30	0.15	0.28	0.90	1.27	0.13	-	0.02	0.26	0.02	0.05	0.14	0.31	0.88	1.87	0.06	-		
2018 III	0.00	0.28	0.29	0.25	0.15	0.27	0.88	1.28	0.15	-	0.02	0.24	0.02	0.05	0.13	0.30	0.81	1.81	0.06	-		
2018 IV	0.02	0.22	0.24	0.26	0.13	0.17	0.77	1.37	0.11	-	0.02	0.23	0.02	0.05	0.13	0.29	0.76	1.77	0.06	-		
volumes in million BGN																						
2018 I	11502.6	1485.3	501.5	234.6	174.9	510.3	63.9	47.1	7.2	-	9557.0	11220.6	1984.2	1063.0	1723.6	5468.8	981.1	1082.7	7137.6	-		
2018 II	11614.2	1498.9	524.3	230.4	174.4	508.4	61.4	47.3	6.9	-	9799.7	11246.5	2026.4	1062.8	1730.3	5469.1	957.9	1080.6	7154.7	-		
2018 III	11582.5	1418.4	370.0	312.5	168.5	508.0	59.4	47.2	6.9	-	9924.9	11278.0	2079.3	1062.2	1733.4	5461.5	941.6	1078.8	7168.2	-		
2018 IV	10989.3	1815.6	324.5	378.0	182.9	874.6	55.6	50.0	6.2	-	10097.2	11295.2	2124.5	1061.5	1733.7	5455.6	919.9	1080.0	7178.0	-		

Example: As of April 2018, the averaging values are in the yellow cells and their respective weight- in the blue cells. The calculation is the following: $= (0.02 * 10989.3 + 0.22 * 1815.6 + 1.37 * 50.0 + 0.11 * 6.2 + 0 * 0 + 0.02 * 10097.2 + 0.23 * 11295.2 + 1.77 * 1080.0 + 0.06 * 7178.0 + 0 * 0) / (10989.3 + 1815.6 + 50.0 + 6.2 + 0 + 10097.2 + 11295.2 + 1080.0 + 7178.0 + 0)$

The average weighted value is rounded to the second decimal place and the result is 0.14 (%).

Note: In the example above, the numbers correspond to the visual representation in the table, but the actual values in the yellow cells are not rounded to the second character, and those in the blue cells are not rounded to the first decimal place.

When calculating the value of ADI, as described above, the Factor does not exercise any discretion but only applies a commonly accepted formula for calculating an average weighted value of the statistics published by BNB.

If at any future moment BNB changes the format of the presented Interest rate statistics for the categories of clients and/or types of deposits, the Factors will adjust the calculations to the new format, and in any case the final result will be correct and consecutively calculated the average weighted interest rate over the entire volume of BGN deposits of Non-financial corporations and Households in the banking system in Bulgaria.

If at any future moment, BNB itself starts calculating and publishing this aggregate indicator, covering the entire volume of BGN deposits in Non-financial corporations and Households, the Factor will proceed to its direct use only by applying rounding to the second decimal place, if BNB does not do so.

4. Order and frequency of notification and period of validity.

The value of ADI is calculated monthly.

On their website:

<http://www.bnb.bg/Statistics/StMonetaryInterestRate/StInterestRate/StIRInterestRate/index.htm#>, BNB publishes the Interest Rate Statistics before the end of each calendar month, based on data for the previous month.

Based on the statistics published by BNB on the last month available in the table, the Factor calculates the new value of ADI following the methodology described in point 3 (above) and publishes it on its website: <https://www.unicreditfactoring.bg> on the first working day of the next calendar month.

The calculated and announced ADI value is applied from the first working day (for Republic of Bulgaria) in the calendar month, following the publication of the relevant BNB statistical data up to the day preceding the first working day of the next calendar month, inclusive.

Example:

- June 27: BNB publishes the Interest Rate Statistics with last data for May, on its website.
 - July 1 (if this date is a holiday for Bulgaria – the first working day thereafter): The Factor publishes on its website the relevant new value of ADI, calculated based on the data published by BNB on June 27.
 - July 1 (if this date is a holiday for Bulgaria – the first following working day): The new ADI value, valid for July, comes into force.
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- July 27: BNB publishes the Interest Rate Statistics with the last data for June, on its website.
 - August 1 (if this date is a holiday for Bulgaria – the first working day thereafter): The Factor publishes on its website the relevant new value of ADI, calculated based on the data published by BNB on July 27.
 - August 1 (if this date is a holiday for Bulgaria – the first following working day): The new ADI value, valid for August, comes into force.

In case BNB discontinues to publish the data on Interest Rate Statistics and the Factor is unable to calculate ADI for the next month, the Factor reserves the right to decide to extend the last calculated ADI value for a period of time, defined by the Board of Directors, after the end of the month in which the BNB stops publishing the statistical information, until the identification and approval by the Board of Directors of an appropriate substitute for ADI.