Recommendation on standard OIS transactions based on POLSTR

Document of the National Working Group for benchmark reform

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(Project)

The Recommendation has been prepared by the Financial Instruments and Valuation Stream of the National Working Group for benchmark reform based on analyses conducted and discussion of experts. Subsequently, the draft Recommendation was reviewed by the remaining streams of the National Working Group.

The Recommendation aims to provide financial market entities with a definition of a standard OIS transaction based on the PLN POLSTR index and takes the form of a specification of parameters for such a transaction.

The definition of a standard OIS transaction based on the PLN POLSTR index is intended to unify the approach to these transactions in the professional market in terms of market quotations, post-transaction handling, batch data used by participants of this market for valuation and risk measurement models, and others.

In formulating this recommendation, the principle of not departing from standard solutions established in market practice was followed, applying concepts understandable to market participants.

This recommendation does not restrict market participants in terms of applying different, individually agreed OIS transaction parameters depending on risk management needs.

Recommendation

Within the framework of a standard OIS transaction based on the PLN POLSTR index, it is recommended to apply parameters in accordance with the specification below. In particular, it is recommended to calculate interest on the floating leg of the OIS transaction based on compounding of the PLN POLSTR index from individual business days in the observation period coinciding with the interest period.

No	Currency	PLN
1	**Business Days Calendar**	Warsaw PLN
2	**INDEX**	[POLSTR]
3	**ISDA Index Denomination**	[PLN-POLSTR-OIS-COMPOUND]
4	**Floating Index Fixing time**	8:55 Warsaw Time
5	**Index Tenor (Daily only)**	1 business day
6	**Float Leg Reset Period**	1 business day
7	**Compounding (ISDA)**	Daily Compounding
8	**Effective Date**	Trade Date + 2 business days
9	**Float Leg FIRST Fixing Rate Date**	Effective date + 1 business days
10	**Payment Lag (Floating)**	2 business days
11	**Fixing Lag**	0
12	**Floating Leg Day Count Fraction**	ACT/365 (fixed)
13	**Float Leg Rate ROUNDING**	0.0001%

14	**Negative Floating Rate Reset**	Yes
15	**Fixed Leg Day Count Fraction**	ACT/365 (fixed)
16	**Negative Fixed Rate**	Yes
17	**Payment Lag (Fixed)**	2 business days
18	**Payment Frequencies (for both legs)**	Annual/Annual
19	**Business Day Convention**	Modified Following
20	**Schedule generation /Roll conv**	Backward (from end)
21	**EndOfMonth**	N

Justification:

Interest calculation on the floating leg of OIS transactions based on compounding of RFR (PLN POLSTR) from individual business days in the observation period, coinciding with the interest period, is a commonly applied method in professional markets with regard to derivative instruments and constitutes, in a way, the essence of OIS transactions. This method is consistent, inter alia, with the ISDA standard – OIS Compounding. Within the framework of the standard definition, other options were not considered.

Both the interest calculation basis applied on both legs of OIS transactions - ACT/365 (fixed), and the business day convention - Modified Following, are standards appropriate for the PLN money market. They are also the most frequently applied parameters of spot instruments and banking products in PLN. Hence, this choice aims to achieve the best possible alignment of OIS conventions with the conventions of spot instruments and products.

Regarding the precision of rounding calculations for the rate calculated for the floating leg, in market practice for other currencies, rounding is encountered in two variants, to ten-thousandths and to hundred-thousandths, and the choice was limited to these options within the framework of work on the recommendation. It was considered that in both cases the calculations provide sufficient accuracy and the differences between them are insignificant. Ultimately, rounding precision to ten-thousandths was chosen as analogous to the currently functioning precision for OIS transactions based on the POLONIA index.

In turn, the payment lag for the fixed and floating legs of OIS transactions, specified at 2 business days, was considered by market participants represented in the National Working Group to be appropriate for operational reasons. In market practice for other currencies, the following delays are encountered: 0 days (example GBP- SONIA), 1 day (example EUR- STR), 2 days (example USD- SOFR). The choice was narrowed to these options. All of these three options are almost identical in terms of economic equivalence, therefore the choice of a specific option is determined by operational issues related to transaction handling. 0 days was considered too short a period for operational reasons - the necessity of calculating and settling interest amounts on the day of transaction completion. From the remaining two equivalent options, it was decided to choose a 2-day payment lag, indicating that it is helpful for foreign entities operating in different time zones.

The remaining parameters are typical for OIS transaction parameters applied in professional markets of other currencies and as such leave no room for choice.

Attachment 1:

Formula for calculating payments on the floating and fixed legs of a standard OIS transaction

Floating leg:

$$r_{float} = \left(\prod_{t=1}^{t=n}\left(1 + RFR_t \frac{Day\ Count_t}{Day\ Count\ Basis}\right) - 1\right) \times \frac{Day\ Count\ Basis}{Day\ Count}$$

$$CF_{float} = N \times r_{float} \times \frac{Day\ Count}{Day\ Count\ Basis}$$

CF_{float}	Payment of the floating leg in a given interest period
r_{float}	Variable interest rate, rounded to the fourth decimal place
N	Notional amount of the transaction
t	Consecutive business days, where t=1 denotes the first day of the interest period, and t=n denotes the business day preceding the last day of the interest period
RFR_t	Risk-free rate on observation day t
$Day\ Count_t$	Actual number of calendar days between t and $t+1$
$Day\ Count$	Actual number of calendar days between the first day of the interest period (inclusive) and the end of the interest period
$Day\ Count\ Basis$	Convention according to which the method of determining the fraction of a year between two dates is established

Fixed leg:

$$CF_{fixed} = N \times r \times \frac{Day\ Count}{Day\ Count\ Basis}$$

CF_{fixed}	Payment of the fixed leg in a given interest period
N	Notional amount of the transaction
r	Fixed interest rate
$Day\ Count$	Actual number of calendar days between the first day of the interest period (inclusive) and the end of the interest period
$Day\ Count\ Basis$	Convention according to which the method of determining the fraction of a year between two dates is established

Settlement Amount:

$$CF = \left|CF_{fixed} - CF_{float}\right|$$

CF	Net settlement amount in a given interest period
CF_{fixed}	Fixed leg payment
CF_{float}	Floating leg payment