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Answers of the European Financial Congress¹ in relation to the International Swaps and Derivatives Association's consultation paper on Interbank Offered Rate (IBOR) fallbacks²

Methodology for preparing the answers

The answers were prepared in the following stages:

Stage 1

A group of experts from the Polish financial sector were invited to participate in the survey. They received the ISDA's consultation document and a form with consultation questions. The experts were guaranteed anonymity.

Stage 2

Responses were obtained from experts representing major commercial banks operating on the Polish market.

Stage 3

A discussion meeting on alternative risk-free rates was held by the EFC for experts participating in the survey.

Stage 4

The survey project coordinators from the European Financial Congress prepared a draft synthesis of opinions submitted by the experts in writing as well as those presented at the meeting. The draft synthesis was sent to the experts participating in the survey with the request to mark the passages that should be modified in the final position and to propose modifications and additions as well as marking the passages they did not agree with.

Stage 5

On the basis of the responses received, the final version of the European Financial Congress' answers was prepared.

¹ European Financial Congress (EFC – <u>www.efcongress.com</u>). The purpose of the EFC is to promote debate on how to ensure the financial security and sustainable development of the European Union and Poland.

² http://assets.isda.org/media/f253b540-193/42c13663-pdf/

Answers of the European Financial Congress to the consultation questions

	Forward Approach	Historical Mean/Median Approach	Spot-Spread Approach
Spot Overnight Rate	Not compatible		
Convexity-adjusted Overnight Rate	Not compatible		
Compounded Setting in Arrears Rate			Not compatible
Compounded Setting in Advance Rate			

Based on the table above, the following pairs of adjusted RFR and spread adjustment are possible:

- 1. Compounded Setting in Arrears Rate with Forward Approach
- **2.** Compounded Setting in Advance Rate with Forward Approach
- 3. Spot Overnight Rate with Historical Mean/Median Approach
- 4. Convexity-adjusted Overnight Rate with Historical Mean/Median Approach
- 5. Compounded Setting in Arrears Rate with Historical Mean/Median Approach
- 6. Compounded Setting in Advance Rate with Historical Mean/Median Approach
- 7. Spot Overnight Rate with Spot-Spread Approach
- 8. Convexity-adjusted Overnight Rate with Spot-Spread Approach
- 9. Compounded Setting in Advance Rate with Spot-Spread Approach

Preferred Approach

• Please rank the combinations listed above with 1 as your preferred approach, 2 as your second preferred approach, and so forth.

RANKING

- 1. Compounded Setting in Advance Rate with Historical Mean/Median Approach (original 6)
- 2. Compounded Setting in Arrears Rate with Historical Mean/Median Approach (original 5)

- 3. Spot Overnight Rate with Historical Mean/Median Approach (original 3)
- 4. Convexity-adjusted Overnight Rate with Historical Mean/Median Approach (original 4)
- 5. Compounded Setting in Advance Rate with Spot-Spread Approach (original 9)
- 6. Spot Overnight Rate with Spot-Spread Approach (original 7)
- 7. Convexity-adjusted Overnight Rate with Spot-Spread Approach (original 8)
- 8. Compounded Setting in Advance Rate with Forward Approach (original 2)
- 9. Compounded Setting in Arrears Rate with Forward Approach (original 1)

• Please explain your rankings. Please specifically comment on the characteristics of the combinations you ranked the highest that most influenced your decision.

Ranking: 6,5,3,4,9,7,8,2,1

The main advantage of approach number 6 is that the value of the rate for a given tenor is known at the beginning of the period. This method of calculation seems to best fit the new RFR to the nature of the replaced rate. Calculations based on this approach should indicate a lower tendency of variation than the overnight rate itself. An additional advantage of the selected methodology is its simplicity, which is important in the context of transparency and proper understanding among market participants. The methodology is also based on easily accessible data and reflects market conditions at the moment of transition to the alternative rate (fallback/discontinuation of the primary rate quotation). These features make it possible to mitigate the effects of market turmoil and similar events at the moment of transition to the alternative rate.

However, the analyzed method does have its drawbacks. One of them is the low probability of it keeping its current value neutral on the day it is applied (regarding the consistency of the spot value with the term values). Another drawback is that average historical market conditions may not apply to market expectations regarding future market conditions (e.g. expected changes in monetary policy).

The fallback for derivatives referencing IBORs should be as close as possible to IBORtype rates (even if we are limited in this exercise only to RFRs). Going by this rule, we have to exclude the "Compounded Setting in Arrears Rate" because it is not known in advance (of course, it is still the best "hedgeable" option, but one can make an ordinary OIS immediately instead of an IRS based on IBORs that eventually change into OIS if the relevant IBOR is permanently discontinued). On the other hand, if the reason for making IRS based on IBOR is to hedge a cash product such as a consumer loan, there will (most probably) be a need (assuming contractual, or at least technical, terms) to stay with the "in advance" feature, even after IBOR discontinuation.

The above-presented ranking and reasoning refer to derivatives. As regards cash products (especially mortgage loans), the approach should be analyzed separately.

• If you are completely opposed to an approach to adjusted RFRs, please do not rank it but explain why you are completely opposed to it.

Not applicable

 Indicate whether your preferences apply universally to GBP LIBOR/SONIA; JPY LIBOR/TONA; TIBOR/TONA; Euroyen TIBOR/TONA; CHF LIBOR/SARON and BBSW/RBA cash rate. Alternatively, provide a separate ranking for each IBOR that should be handled separately.

Universally

 If your preferences apply universally, please indicate whether you would also expect your preferences to apply to USD LIBOR/SOFR, EUR LIBOR/[the identified EUR RFR] and EURIBOR/[the identified EUR RFR].

Yes

 Please provide preliminary comments on your preferred approach for USD LIBOR/SOFR (regardless of whether your preference applies universally or to USD LIBOR/SOFR only). Indicate what, if any, additional information you need to confirm this as your preferred approach

We prefer a universal approach to all major currency IBORs to avoid arbitrage opportunities.

• Please indicate whether you would not be able to transact using definitions that incorporate fallbacks based on any of the approaches to adjusted RFRs or spread adjustments. If you would not be able to transact, please give specific examples of the types of derivatives for which the fallbacks would be problematic and explain why.

We will be able to transact in instruments that were liquid before the fallback procedure occurred.

• Would it be problematic for market participants to use different approaches to calculate adjusted RFRs and spread adjustments in fallbacks across different currencies? Please explain why or why not, commenting specifically on the potential implications of using different approaches across different currencies.

Of course, this is problematic but not critically.

 Please provide separate comments on the general appropriateness and effectiveness of each of the four approaches to adjusted RFRs and three methodologies for the spread adjustments. Please specifically comment on anticipated operational challenges, economic impacts, implications for hedging, feasibility of implementation and any other complexities. Indicate whether your comments apply to all contracts, new contracts only or legacy contracts only. With respect to any operational challenges, please explain how long it would take to overcome such challenges.

For all approaches and all contracts:

Operational challenges: very likely

Economic impact: material

Implication for hedging: very likely

Feasibility of implementation: difficult.

RFR:

- Compounded Setting in Advance Rate: the best method, because the past information consists of all market information embedded in the curve. Fixing in advance is an advantage for non-financial clients.
- Compounded Setting in Arrears Rate: the lack of a fixed rate in advance is a severe drawback for some types of instruments, but this is standard on corporate bonds, and so may be common in the future.
- Spot: a very simple method, especially for non-financial clients, but a single observation can be remote from the long-term mean.
- Convexity-adjusted Overnight Rate: compounding decreases simplicity and does not limit volatility.

Spread:

- Historical Mean/Median Approach: this method combines the simplicity and volatility of historical spreads. It is dependent on the historical time series referring to the new RFR and new hybrid IBOR.
- Forward Approach: the most accurate method; it minimises the risk of value transfer but is complicated (and therefore not transparent and difficult to understand), and dependent on the availability of data.
- Spot-Spread Approach: the most simple approach, but a single observation may interfere with the value of the contract if a fallback procedure is imposed.

- Questions about specific methodologies for calculating the spread adjustment:
 - Forward Approach
 - Should the forward approach be based on data from the day prior to the trigger only or a number of days or months prior to the trigger? If the latter, how many days or months? Please specifically consider 5 trading days, 10 trading days, 1 month and 3 months but also indicate whether a different length is most appropriate and explain why.

It depends on current volatility, but 1 month seems reasonable in order to avoid potential manipulations.

• What is the appropriate length of the forward spread curve? Please specifically consider 30 years, 40 years, 50 years and 60 years but also indicate whether a different length is more appropriate and explain why.

Looks like above 30 years simple extrapolation is enough. The real forecastable period is much shorter.

• Would it be acceptable to use data for cleared transactions only when using the forward approach to calculate the spread adjustment? If so, how should the differential between central counterparties (CCPs) be addressed?

It would be acceptable. The differences between different CCPs could be addressed by taking account of an average (possibly nominal-weighted). Note that some derivatives (CIRS) are not settled in CCPs.

- Historical Mean/Median Approach
 - What is the appropriate historical static lookback period? Please specifically consider 5 years and 10 years but also indicate whether a different time period is most appropriate and explain why.

This is purely about the acceptable common statement, and so any figure will be equally suitable/unsuitable. 5 years back seems like a good horizon, but it depends on the availability of data.

• Should the calculation be based on the mean or the median spot spread between the IBOR and the adjusted RFR? Please explain why.

On the median, because it eliminates the effect of outlier quotes.

- Spot-Spread Approach
 - Should the spot-spread approach be based on data from the day prior to the trigger only or, alternatively, some number of days prior to the trigger? If the latter, how many days prior to the trigger should this be? Please specifically consider 5 trading days, 10 trading days

and 1 month, but also indicate whether a different time period is most appropriate and explain why.

1 month

<u>General</u>

• How important or unimportant is it for the fallbacks to be approximately presentvalue neutral at the time of trigger? Please explain why.

It is crucial for the fallback rates to be PV neutral at the time of trigger, as any unexpected PV change can cause a market disruption and legal litigation with clients. Discontinuation of the benchmark is not about changes in rates but in the observability of rates – on its own, it should have no economic consequences.

• How important or unimportant is it for the fallback rates to be available in advance of the accrual period. Alternative, is setting in arrears acceptable? Please explain why or why not.

It is important for the rates to be available in advance. Setting rates in arrears would create too much uncertainty.

• How important or unimportant is it for the fallback rates to be wholly (or mostly) convexity free? Please explain why or why not.

It seems convexity is a secondary feature of the fallback rate for IBOR.

Additional Comment:

The fallback procedure analyzed in the ISDA questionnaire should only be applied in the context of major currencies and generally derivatives market. It should be taken into account that in countries such as Spain, Finland, Poland etc., with significant portfolios of mortgage products referenced to IBOR rates (predominantly with retail customers), the ISDA fallback procedure could invoke additional basis risk. It should be carefully analyzed, and country-specific features ought to be addressed.

The fallback procedure should not be applied as a rule in other currencies, nor should it be applied in countries with less developed financial markets (emerging markets). This is due to the fact that the level of activity in short-term derivatives used for determining fallback arrangements varies and sometimes there are specific legal constraints (e.g. banking tax in Poland).