LIBOR and benchmark reform – important information

Below is important information about LIBOR reference rate and additional information about benchmarks reform:

1. Cessation of selected LIBOR benchmarks

Please be advised that on 5 March 2021 and on 29 September 2021 the British Financial Conduct Authority (FCA) announced that

- a) the following rates will permanently cease to be developed:
 - CHF LIBOR (all tenors) as of the end of December 31, 2021;
 - CHF LIBOR (all tenors) as of the end of December 31, 2021;
 - GBP LIBOR (O/N, 1W, 2M and 12M) as of the end of December 31, 2021;
 - JPY LIBOR (S/N, 1W, 2M and 12M) as of the end of December 31, 2021;
 - USD LIBOR (1W and 2M) as of the end of December 31, 2021;
 - USD LIBOR (O/N, 12M) as of the end of June 30, 2023;
- b) the following rates will no longer be representative for the underlying market and economic reality that these rates were intended to measure:
 - GBP LIBOR (1M, 3M and 6M) as of the end of 31 December 2021;
 - JPY LIBOR (1M, 3M and 6M) as of the end of 31 December 2021;
 - USD LIBOR (1M, 3M, 6M) as of the end of 30 June 2023; and their representativeness will not be restored.

The FCA will require USD LIBOR to continue to be published in synthetic form for 1M, 3M and 6M tenors until 30 September 2024, after which the rate will be permanently discontinued.

Regulators, supervisors, market organizations and associations have undertaken a series of initiatives to develop alternative rates that could replace LIBOR for individual currencies. Such work is also being carried out for interest rate benchmarks other than LIBOR. The alternative benchmarks being currently developed are identified as nearly *risk-free rates* ("RFR").

It should be noted that RFR characteristics differ from the previous IBOR rates, e.g. in that they are typically *overnight* rates and are published after the period to which they pertain. Also, RFRs are calculated on a different basis than IBOR rates, therefore, they should not be considered an equivalent replacement for IBORs. To illustrate the above, here are some examples of the differences between LIBOR and RFR:

- LIBOR is a reference rate quoted for specific tenors O/N, 1W, 1M, 2M, 3M, 6M, 12M, while RFRs are usually *overnight* rates.
- LIBOR is a rate published at the beginning of a given (interest) period/tenor (forward-looking rate), while RFR is usually quoted after the period it pertains to (backward-looking rate).
- LIBOR includes the bank's credit risk and liquidity components. RFRs may differ in terms of their characteristics and components, but as a rule they contain little or no element of the institution's credit risk or liquidity.

Given the differences mentioned above, it is necessary to consider that the alternative RFR benchmark, which would be used in place of IBOR, may require an appropriate adjustment to adjust for the economic effects, i.e. reduce or eliminate changes in the economic value, of IBOR replacement ("adjustment," "adjustment spread"). Methodologies to calculate the adjustment are developed, among others, by relevant market associations, e.g. ISDA (International Swap Dealers Association) or stated in the contract documents.

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Below is a table of RFRs that have been identified by supervisors, regulators and certain working groups as potential alternative benchmarks or solutions alternative to LIBOR and certain IBORs. The table contains additional information about individual rates. The solutions being developed for each of the existing IBOR rates and potential RFR-type alternatives may be at different stages of advancement.

Country	IBOR-type reference rate	Status	RFR-type alternative rate	Transition committee website
Great Britain	GBP LIBOR	expected discontinuat ion of publication	SONIA	Sterling Working Group on RiskFree Rates
United States	USD LIBOR	expected discontinuat ion of publication	SOFR ₁	Alternative Reference Rates Committee (ARRC)
Japan	TIBOR	Reformed, expected to continue to be published	TONAR	Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks
	JPY LIBOR	expected discontinuat ion of publication	TONAR	
	Euroyen TIBOR	Reformed but possible risk of discontinued publication	TONAR	
European Union	EUR LIBOR	expected discontinuat ion of publication	€STR / EuroSTR	ECB Working Group on Euro RiskFree Rates European Money Markets Institute (EMMI) and Euro
	EURIBOR	Reformed, expected to continue to be published	€STR / EuroSTR	RFR Working Group
Switzerland	CHF LIBOR	expected discontinuat ion of publication	SARON	The National Working Group on Swiss Franc Reference Rates

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	Euroyen TIBOR	Reformed but possible risk of discontinued publication	TONAR	
European Union	EUR LIBOR	expected discontinuat ion of publication	€STR / EuroSTR	ECB Working Group on Euro RiskFree Rates European Money Markets Institute (EMMI) and Euro
	EURIBOR	Reformed, expected to continue to be published	€STR / EuroSTR	RFR Working Group
Switzerland	CHF LIBOR	expected discontinuat ion of publication	SARON	The National Working Group on Swiss Franc Reference Rates

Please note that for some products, the FFE (Fed Fund Effective) rate is considered instead of USD LIBOR.

2. EONIA reference rate

In this communication, we also wish to refer to EONIA, which is an *overnight* reference rate established for the Euro. In the case of EONIA, the Working Group for Euro Risk Free Rates, after verification and public consultation, recommended to market participants

that EONIA be gradually replaced with a new short-term rate ("EuroSTR") available since 2 October 2019. Until 2 October 2019, EONIA was calculated by the European Central Bank ("ECB") and administered by the European Money Markets Institute ("EMMI") as a weighted average of all *overnight* unsecured interbank lending transactions. Since 2 October 2019, EuroSTR has been available and EONIA is determined as EuroSTR plus a fixed spread of 8.5 basis points ("bps"). This calculation methodology is to be continued until EONIA is no longer published. The EMMI has already announced its plans to discontinue publication as of 3 January 2022.

3. Regulation (EU) 2021/168 of the European Parliament and of the Council of 10 February 2021

In addition, please be advised that 12 February 2021 saw the publication of Regulation (EU) 2021/168 of the European Parliament and of the Council of 10 February 2021 amending Regulation (EU) 2016/1011 as regards the exemption of certain third-country spot foreign exchange benchmarks and the designation of replacements for certain benchmarks in cessation, and amending Regulation (EU) No. 648/2012, which, inter alia, introduces the basis for designating, under the conditions specified in the Regulation, by the European Commission or the competent national authority of a Member State, respectively, a statutory substitute for a reference rate where the events specified in the above regulation have occurred.

With the above information in mind, we encourage you to follow news on reference rates, benchmarks reform, and to assess the impact of these changes on your business. Please be aware also that Citi Handlowy is currently working to prepare for the changes that may occur in this regard, an analysis of the application of relevant alternative RFRs is being carried out, as well as a number of other necessary efforts are being made to prepare correct processes at the Bank in this area.

Due to the planned phasing out of LIBOR, it will be necessary to set a new reference rate for the products based on that rate. Thus, the same changes will apply to all Citi Handlowy products referencing that benchmark. Changes in Bank's products can be made either under their existing contractual clauses or as a result of action by a (Polish or European) legislator, or by signing an amendment agreement to the existing agreement with the Bank. We will keep you informed of all the changes.

If you have any questions about the issues discussed in this communication, please contact a Citi Handlowy Relationship Manager.

Update – The European Commission has designated a replacement for CHF LIBOR3M for individual mortgage loans

In accordance with the Commission Implementing Regulation (EU) 2021/1847 of 14 October 2021 on the designation of a statutory replacement for certain settings of Swiss franc LIBOR (CHF LIBOR), a 3-month compounded rate SARON ((SAR3MC) ISIN CH0477123902) has been designated as a replacement for CHF LIBOR3M, with an adjustment spread (%) of 0.0031.

The full text of the Implementing Regulation can be found at (link)