

NOTICE CONCERNING REFERENCE RATES AND INDICES



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The risks identified in this notice are provided as general information only. Clients and counterparties of BNP Paribas that have entered into (or may in the future enter into) financial contracts or have purchased (or may in the future purchase) financial instruments that include a reference rate or index should conduct an independent investigation and analysis regarding the risks involved. BNP Paribas does not represent that the statements below are complete or exhaustive, nor is BNP Paribas in a position to express a view on the likelihood of any contingency highlighted by this notice occurring. BNP Paribas is not providing any advice nor assuming any responsibility to provide advice. If you wish to receive advice regarding the impact of these changes on the products and services you use, you should obtain guidance from your own independent professional advisors.

General risks related to the use of Benchmarks

Reference rates and indices (Benchmarks), such as the London Interbank Offered Rate (LIBOR), are commonly used to determine amounts payable under various financial contracts, loans, account based products and financial instruments (including derivatives and notes) (collectively, products), as well as their value.

Various Benchmarks and, in particular, interest rate Benchmarks are the subject of ongoing national, international and other regulatory guidance and reform. For instance:

- (i) with respect to certain interest rate Benchmarks, regulatory authorities and central banks have strongly encouraged the identification and use of alternative risk-free (or near risk-free) rates (RFRs) on the basis that they are based on more active and liquid overnight lending markets than interbank offered rates (IBORs) such as LIBOR;
- (ii) certain LIBOR settings have ceased to be published:
 - a. all euro and Swiss franc LIBOR settings
 - b. the overnight / spot next, 1-week, 2-month and 12-month sterling and Japanese yen LIBOR settings; and
 - c. the 1-week and 2-month US dollar LIBOR settings
- (iii) The 1, 3 and 6 month sterling and Japanese yen LIBOR settings have been declared to be permanently unrepresentative of the underlying market they seek to measure. While these 6 LIBOR settings continue to publish under an adjusted methodology such rates, known to market participants generally as 'synthetic' LIBOR, are only available for strictly limited purposes and for a limited period. The UK's FCA has confirmed that 'synthetic yen LIBOR' will cease at the end of 2022 while the availability of 'synthetic sterling LIBOR' is not guaranteed beyond end-2022. This means that any transactions that continue to reference the synthetic LIBOR settings should be transitioned to alternative rates as soon as possible. Use of the synthetic LIBOR settings for new transactions is not permitted.
- (iv) It has been confirmed that the remaining 5 US Dollar LIBOR settings will continue to be calculated using panel bank submissions until mid-2023, however they are subject to certain use restrictions. Use of US Dollar LIBOR is not permitted for new transactions, subject to certain specified and limited exceptions.

Official sector entities such as the US Federal Reserve and the UK FCA have made clear that Firms should now focus on converting their legacy US dollar LIBOR contracts to alternative rates in anticipation of the cessation of the rate in mid-2023. The US dollar risk-free rate SOFR had been noted to be a preferred alternative rate and is already being widely used for new business.

- (v) Certain APAC rates such as the Singapore Dollar Swap Offer Rate (SOR), the Thai Baht Interest Rate Fixing (THBFIX), the India Rupee Mumbai Interbank Forward Offer Rate (MIFOR), the Philippine Interbank Reference Rate (PHIREF) and the Malaysian Ringgit Wholesale Unsecured Interbank Funding Rate (KLIBOR)¹ are FX swap implied interest rate benchmarks which use US Dollar LIBOR as an input. Their calculation will therefore be affected by the permanent cessation or non-representativeness of US Dollar LIBOR, expected in mid-2023. ISDA has published protocols to allow for multilateral repapering

¹ KLIBOR of 2-month and 12-month tenors announced to cease on 1 Jan 2023 with no replacement rate.



of existing derivative transactions that reference these rates. The immediate fallback rates contemplated by the ISDA protocols are based on actual transactions in the FX swap market for FX swaps involving USD and the relevant local currency and a USD interest rate calculated by reference to the fallback rate produced for USD LIBOR. These immediate fallback rates will however not be permanently available², and upon their cessation the rates will further fall back to replacement rates to be recommended by the relevant local risk-free rate administrator.

It is to be noted that the fallback rates for SOR, THBFIX and MIFOR are different from the identified alternative rates for these benchmarks for use in new transactions. Alternative rates for use in new transactions in place of PHIREF and KLIBOR are yet to be identified.

Therefore it should be noted that:

- (a) some Benchmarks, including their methodology, are no longer, or may cease to be, available, or may change to ensure compliance with applicable law;
- (b) it may, now or in the future, no longer be permissible for market participants to enter into financial contracts or purchase financial instruments which reference some Benchmarks, because they (or their administrator) do not comply with applicable law;
- (c) some Benchmarks may come to perform differently to the way they did when originally referenced, including if and when contributors cease providing quotations or transaction data used to determine the Benchmark;
- (d) some Benchmarks may disappear and there is no guarantee that an appropriate alternative Benchmark will be available;
- (e) there may be merit in updating the terms of some products, to refer to a relevant RFR;
- (f) replacement of a Benchmark with the relevant RFR may result in your paying more or receiving less than you would have otherwise;
- (g) replacement of a Benchmark with the relevant RFR or entry into of an RFR linked product may mean that you have to update your internal booking and other systems;
- (h) we may no longer be able to offer you products linked to certain Benchmarks;
- (i) we will be offering you products that are linked to RFRs;
- (j) there may be merit in updating existing IBOR and other similar rate linked products to introduce new fallback provisions;³ and
- (k) there could be divergence in fallback and other conventions across products and jurisdictions. This means that there could be mismatches, for example if a derivative is being used to hedge specific exposure under another product.

Clients and counterparties of BNP Paribas that have entered into financial contracts, loans, account based products or purchased financial instruments that reference a Benchmark (or may in the future enter into or purchase such financial contracts, loans, account based products or financial instruments) should therefore (I) be aware of possible changes in, or disruption to, such Benchmarks or the possibility of the disappearance of such Benchmarks and (II) understand the potential market, liquidity, legal, operational, regulatory and financial impact on those financial contracts, loans, account based products or financial instruments.

² It has been determined that the immediate fallback rate for SOR and THBFIX will continue to be published until the end of 2024 and 2025 respectively.

³ A "fallback" provision sets out the consequences of an event. For example, it may provide that the parties should use an alternative rate as and when the relevant rate is permanently discontinued.



Examples of possible change, disruption or disappearance include:

- (i) the expectation that certain LIBOR rates currently available on a synthetic basis will cease to be available after the end of 2022;
- (ii) the anticipated unrepresentativeness and expected discontinuation of the publication of the remaining USD LIBOR settings on 30 June 2023 and its resultant impact on other linked benchmarks; and
- (iii) the fact that we may no longer offer products referencing benchmarks such as LIBOR in the future.

Parties entering into transactions that continue to use Benchmarks subject to reform or cessation may be exposed to certain risks including:

- (i) Financial contracts and transaction confirmations that have not already been adapted for Benchmark reform are likely to require amendments ahead of cessation or reform of relevant Benchmarks to ensure products perform as expected. Although some products will contain fallback provisions if a relevant Benchmark ceases, these may not provide a long-term solution and may differ across products. Some products may not include fallback provisions at all or provide discretion to one party in a transaction.
- (ii) Reformed Benchmarks may perform differently than in the past, and financial products referencing existing Benchmarks scheduled to be discontinued may perform differently as a result of the application of fallbacks. For example, the Benchmarks may be higher, lower or more volatile than in the past. This means you may be paying more or receiving less than you otherwise would have expected. Additionally, the value of the product may alter as a result of changes to a Benchmark, and the product may be worth more or less than it would have if the Benchmark had continued to be available.
- (iii) There may be a mismatch between the rates fallen back to in commercially-linked products (e.g. where a derivative is intended to operate as a hedge to a loan or bond), particularly if reference rates or fallback provisions are not aligned between commercially-linked positions. There may be differences in methods of calculations or conventions used for alternative reference rates across the market. This means that payments and valuation in respect of similar financial products or linked financial products may be different.
- (iv) Operational and other challenges may arise in the event of Benchmark cessation (e.g. where systems need to be updated to support alternative rates).

Please note this is not an exhaustive list of risks, and you should consider other risks that could arise with respect to your business. These risks may also be applicable to other Benchmarks which are subject to discontinuation or Benchmarks which use LIBOR as input into their calculation.

RFRs are different to LIBOR both structurally and economically. LIBOR is forward-looking and reflects the rate banks would charge other banks to borrow on an unsecured basis for various periods (called tenors). A LIBOR rate includes a measure of bank credit risk, and a term liquidity premium based on the length of the tenor. RFRs are backward-looking and are based on overnight rates actually charged on a pool of virtually risk-free investments. They reflect the characteristics of the underlying local market, and they do not compensate lenders for making longer-term funds available nor compensate for bank credit risk. Some pre-existing instruments and contracts transitioning from IBOR to RFR reference rates may incorporate a credit adjustment spread to account for the economic differences between the two rates.

Market conventions for products linked to alternative rates and associated credit spread adjustments may change over time. You should carefully consider the risks and benefits of using one replacement rate over another.



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