



## What is LIBOR and why is it important?

Interbank Offered Rates (IBORs), including the London Interbank Offered Rate (LIBOR) are interest rate benchmarks that represent the cost of short-term, unsecured, wholesale borrowing by large banks. IBORs are published for a variety of currencies and tenors.

A critical component of the financial system, the IBORs are used in a very wide spectrum of products ranging from residential mortgages to corporate bonds to derivatives (and everything in between) and by some estimates underpin more than \$350 trillion of financial contracts.

# Why transition away from LIBOR?

The financial crisis that began in 2007 prompted the first major concerns over LIBOR's credibility, as the rate behaved in unpredictable and volatile ways that were inconsistent with other market rates and prices. As the volume of direct borrowing underpinning LIBOR submissions decreased, LIBOR panel banks relied on hypothetical transactions and expert judgement.

Despite improvements made post-financial crisis, the volume of transactions supporting LIBOR continues to shrink and, as a result, the regulator of LIBOR, the U.K.'s Financial Conduct Authority, called for the market to transition to more robust reference rates around the world.

## What will LIBOR be replaced with?

Regulators worldwide have convened currency-based working groups to select alternative reference rates (ARRs), sometimes called "risk-free rates," to serve as alternatives or replacements for the different currency IBORs. The ARRs are set forth in the table below:

Currency	Existing rate	Alternative reference rate	Industry working group
USD	LIBOR	<b>SOFR,</b> Secured Overnight Financing Rate	Alternative Reference Rates Committee (ARRC)
EUR*	LIBOR, EURIBOR	€STR, Euro Short-Term Rate	Working Group on Euro Risk-Free Rates
GBP	LIBOR	<b>SONIA,</b> Sterling Overnight Index Average	Working Group on Sterling Risk-Free Reference Rates
JPY*	LIBOR, TIBOR	TONA, Tokyo Overnight Average	Study Group on Risk-Free Reference Rates
CHF	LIBOR	<b>SARON,</b> Swiss Average Rate Overnight	National Working Group on Swiss Franc Reference Rates

<sup>\*</sup>The Euro Short-Term Rate (€STR) will replace the Euro Overnight Index Average (EONIA) at the end of 2021. No potential cessation date has been given for EURIBOR or TIBOR at this time.

### How are ARRs different from IBORs?

ARRs differ from IBORs in several fundamental ways. IBOR rates are forward-looking term rates which incorporate unsecured bank credit risk. In contrast, ARRs are overnight interest rates which incorporate little or no credit risk. Furthermore, the markets underpinning the ARRs are significantly more active than the markets underpinning the IBORs. Therefore, while IBORs may rely on expert judgement, ARRs are transaction-based.

Benchmark	IBORs	ARRs
Tenors	Published for various tenors; LIBOR tenors include: overnight, 1 week, 1 month, 2 months, 3 months, 6 months, and 12 months	Overnight
Secured vs. Unsecured	Unsecured	Secured: SOFR and SARON; Unsecured: €STR, SONIA, and TONA
Credit risk	Incorporates a term bank credit spread	Minimal credit risk
Rate determination method	Relies in large part on expert judgement, due to low volume in underlying market	Transaction-based; significant volume

### Is the transition the same for all IBOR currencies?

In some jurisdictions, the new ARRs are expected to coexist alongside certain reformed IBORs, such as EURIBOR in Europe and TIBOR in Tokyo. While each working group is focused on their specific currency transition, there is a global effort to work across jurisdictions in recognition of the global impacts of the LIBOR transition.

### What is the timeline for the LIBOR transition?

The U.K.'s Financial Conduct Authority and the administrator of LIBOR, have confirmed that 1-week and 2-month USD LIBOR, along with GBP LIBOR, EUR LIBOR, CHF LIBOR, and JPY LIBOR will cease being published or become unrepresentative on December 31, 2021 as previously intended. The remaining USD LIBOR tenors (overnight, 1-month, 3-month, 6-month, and 12-month) will continue to be published through June 30, 2023. The FCA indicated that it is unlikely that any tenor would be declared unrepresentative prior to the final publication dates.

The FCA has announced that it may use enhanced supervisory powers to compel ICE to continue to publish an unrepresentative LIBOR on a "synthetic" basis, after the proposed end dates. In these cases, the FCA has indicated that the rates would be based on a modified methodology and would be considered unrepresentative.

# How is Wells Fargo preparing for the transition?

Wells Fargo recognized the LIBOR transition posed a critical risk to the company and our customers. As a result, in February 2018, Wells Fargo established a dedicated, enterprise-level office called the LIBOR Transition Office (LTO), staffed with people whose full-time focus is the LIBOR transition. The LTO is comprised of subject-matter experts in derivatives, credit products, cash products, and consumer products, as well as project management, finance, risk, legal, communications, and all other major disciplines that are necessary for a successful transition. In addition to providing oversight for the enterprise transition work, the LTO represents Wells Fargo on industry groups and committees related to the LIBOR transition.

## What will the LIBOR transition mean for customers?

Customers will need to understand the new alternative reference rates, why the industry is moving away from LIBOR, and how these changes may impact new and existing IBOR-linked contracts. Customers should consider whether and when to transact in products that reference new ARRs.

Customers should consider reviewing existing contracts to ensure they contain robust language that sets forth the steps to be taken, or the interest rate to be applied, should an IBOR be discontinued during the term of a contract. These contract provisions are commonly referred to as "fallback language."

For derivatives, the International Swaps and Derivatives Association (ISDA), after consultation with market participants, developed more robust fallback language now included in its standard definitions for use in new derivatives transactions. ISDA published a protocol to allow market participants to include the new fallback language in existing or legacy transactions for adhering counterparties. Wells Fargo adhered to the protocol and we will continue reaching out to our derivatives customers as the transition continues.

At Wells Fargo, we are taking steps to ensure our customers have the necessary support through this transition. Our goal is to ensure our customers are informed with the appropriate information and equipped to make educated decisions. For more information, please contact your Wells Fargo relationship manager.

#### Important Information

"Wells Fargo" means Wells Fargo Bank, N.A. Wells Fargo Corporate & Investment Banking is the trade name for the corporate banking, capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including but not limited to Wells Fargo Securities, LLC, a U.S. broker-dealer registered with the U.S. SEC and a member of NYSE, FINRA, NFA and SIPC, Wells Fargo Securities Canada, Ltd., Member – Canadian Investor Protection Fund, Wells Fargo Securities International Limited and Wells Fargo Bank N.A., London Branch (both of which are authorized and regulated by the U.K. FCA), and Wells Fargo Bank, N.A., a member of NFA. Wells Fargo Securities, LLC, Wells Fargo Securities Canada, Ltd. and Wells Fargo Securities International Limited are distinct entities from affiliated banks and thrifts. Derivatives products (including "swaps" as defined in the Commodity Exchange Act ("CEA") and Commodity Futures Trading Commission ("CFTC") regulations) are transacted through Wells Fargo Bank, N.A., a CFTC registered swap dealer, member of the National Futures Association and physical commodities are transacted through Wells Fargo Commodities, LLC., a wholly-owned subsidiary of Wells Fargo & Company.

#### Informational Purposes Only

This document and any other materials accompanying this document (collectively, the "Materials") are for general information only. Although we believe that market data and other information contained in the Materials is reliable, it is not warranted as to completeness or accuracy, is subject to change without notice, and we accept no responsibility for its use or to update or keep it current. The Materials are not an offer or commitment for any products or transactions. Historical data, past trends and past performance do not reflect or guarantee future results. Financial projections and economic forecasts are based on hypothetical assumptions about uncertain future market conditions and events and therefore should not be relied upon in connection with any asset, liability, transaction or otherwise, including any decision whether or when to invest or hedge or to acquire or dispose of any asset, liability or transaction. Some of the information or opinions stated in this message may have been obtained or developed by Wells Fargo from sources outside Wells Fargo. In such cases, Wells Fargo believes the information or opinions to be reliable. However, Wells Fargo will not have independently confirmed the reliability of such information or opinions and does not guarantee their accuracy or completeness or the reliability of their sources. The information and opinions in these Materials, whether or not they were obtained or developed from outside sources, may not be appropriate for, or applicable to, some or any of your activities or circumstances.

In our written and oral communications with you, we are not giving you any economic, tax, accounting, legal, or regulatory advice or recommendations, and are not acting in a fiduciary relationship with you. You should conduct a thorough and independent review of the economic, tax, accounting, legal, and regulatory characteristics, consequences, and risks of any transaction in light of your particular circumstances, consulting with such advisors as you consider appropriate. This information does not constitute trading or investment advice or research, and has not been prepared in accordance with any laws or regulations designed to promote the independence of research.

### **Updating the Materials**

We reserve the right to amend, supplement, or replace these Materials at any time, and your use of the Materials constitutes your agreement to update the Materials with any such amendments, supplements, or replacements we furnish you.

#### **Limitation of Liability**

In no event shall Wells Fargo Bank, N.A. be liable to you or any third party for any direct or indirect, special, incidental, or consequential damages, losses, liabilities, costs, or expenses arising directly or indirectly out of or in connection with the Materials.

### **LIBOR Transition Risks**

This information is not intended to override, and should be considered in conjunction with, any disclosures, or other statements identifying potential risks provided to you by Wells Fargo. The events described in these Materials could have unpredictable and material consequences for transactions, products, and services that require payments or calculations to be made by reference to LIBOR. These consequences include, but are not limited to, the following:

- (a) changes to the way in which LIBOR is calculated, or differences between the way a replacement rate and LIBOR are calculated, could significantly affect the value, price, cost and/or performance of affected contracts;
- (b) replacement rates for LIBOR may differ across affected contracts, and those differences may create material economic mismatches with any affected contracts used for hedging or similar purposes;
- (c) some existing affected contracts may not provide for any replacement rate; as such, there could be disputes about what replacement rate applies when LIBOR is unavailable or is no longer representative or whether contracts are enforceable in the absence of any replacement rate;
- (d) new alternative rates are likely to be developed over time and these new rates may be significantly different from both LIBOR and replacement rates that are currently being considered:
- (e) existing or new regulations may limit the ability of market participants to enter into new transactions, products, or services linked to LIBOR if a determination or announcement is made that LIBOR is no longer representative of the relevant market;
- (f) Wells Fargo may have rights to determine a replacement rate for LIBOR for affected contracts, including any price or other adjustments to account for differences between the replacement rate and LIBOR, and the replacement rate and any adjustments we select may be inconsistent with, or contrary to, your interests or positions; and
- (q) moving from LIBOR to a replacement rate may raise a variety of tax, accounting, and regulatory risks.

Wells Fargo cannot provide any assurances as to the consequences, or likely costs or expenses associated with any of the changes arising from the LIBOR transition, though they may be important to you. The above is provided for informational purposes only and is not intended to apply to any specific customer or transaction.