

Recommendation for SOFR-Based Intercompany Loans

The Alternative Reference Rates Committee
January 29, 2020

Executive Summary

This note lays out a recommended method for using the Secured Overnight Financing Rate (SOFR) in intercompany loans issued by nonfinancial corporations. The recommendations were developed for the Alternative Reference Rates Committee (ARRC) by the members of its Nonfinancial Corporate Working Group (NCWG), which the ARRC formed in order to focus on the readiness of nonfinancial corporations for the LIBOR transition.¹ The NCWG represents over 80 nonfinancial corporations across a wide set of sectors and coordinates actively with institutions on issues relevant to nonfinancial corporations such as vendor readiness, intercompany and customer loans, back-office systems, and structures and conventions for nonfinancial corporate borrowing.

The consensus recommendation of the NCWG is that SOFR-based intercompany loans use the 30- or 90-day Average SOFR set in advance, with a monthly, quarterly, semi-annual, annual, or other reset period as is determined appropriate by the firm. The NCWG notes that the 30- and 90-day Average SOFR rates incorporate several beneficial attributes that make them a preferable alternative to U.S. dollar (USD) LIBOR: they are highly robust and produced by the public sector in a way that is easily communicated and accessed by global authorities and private sector participants alike, they can be used within the current systems for intercompany loans and do not necessitate significant changes to implement, and they represent sound, fit-for-purpose rates for intercompany loans that can be used immediately not only for dollar-based loans but also loans denominated in a range of other currencies.

As recommendations from the ARRC, the conventions set forth in this paper do not constitute binding rules or regulatory guidance, and market participants must decide for themselves whether, or to what extent, they will adopt and apply them consistent with the size and complexity of their activities and institutions, and with the nature of their engagement in relevant transactions, taking into account relevant supervisory and regulatory policy. Nothing in this paper is intended to limit the range of possible new product development based on SOFR, or the terms and conditions under which market participants transact in any variable rate products based on SOFR (or any other rate).

¹ The ARRC is a group of public and private sector entities, convened and sponsored by the Federal Reserve with a mandate to develop recommendations for a successful transition from USD LIBOR. <https://www.newyorkfed.org/arrc/about>. The ARRC's members include private-market buy-side, sell-side, end user, and intermediary participants in a broad range of interest rate products and transactions, and ex-officio members of the official sector, including the Federal Reserve and other market regulators. To help meet its mandate, the ARRC has established numerous working groups with additional public and private sector market participants to study market transition issues potentially affecting various products currently based on USD LIBOR.

Background

In 2014, the Federal Reserve convened the ARRC. The ARRC was tasked with identifying an alternative rate to USD LIBOR that is compliant with International Organization of Securities Commissions' (IOSCO) standards, transaction-based, and derived from a deep and liquid market. The ARRC was further tasked to promote the voluntary use and adoption of such rate.

The ARRC evaluated possible alternatives to USD LIBOR over several years, engaging in market-wide consultation and deliberation, as well as seeking input from its Advisory Group of end-users. Factors considered included underlying market depth, resilience over time, usefulness to market participants, and consistency with IOSCO Principles for Financial Benchmarks.

The ARRC selected SOFR in 2017 as its recommended alternative to USD LIBOR. SOFR is based on overnight transactions in the U.S. dollar Treasury repo market, which is the largest rates market at a given maturity in the world. National working groups in other jurisdictions have similarly identified overnight nearly risk-free rates (RFRs) like SOFR as their preferred alternatives.

SOFR has characteristics that LIBOR and other similar rates based on wholesale term unsecured funding markets do not. Some of SOFR's benefits include:

- It is a rate produced by the FRBNY for the public good;
- It is based on an active and well-defined market with sufficient depth to make it extraordinarily difficult to ever manipulate or influence;
- It is produced based on observable transactions in a transparent, direct manner and in full alignment with the IOSCO Principles for Financial Benchmarks, rather than being dependent on estimates, like LIBOR, or derived through models; and
- It is based on transactions in a market that was able to weather the global financial crisis and that the ARRC believes will remain sufficiently active to be able to be reliably produced in a wide range of market conditions.

To support efficient adoption of SOFR, the FRBNY, as SOFR administrator, and the Treasury Department's Office of Financial Research (OFR) publishes 30-, 90-, and 180-day SOFR Averages, referred to as "30-day Average SOFR", "90-day Average SOFR" and "180-day Average SOFR."

FRBNY issues full and detailed Statement of Compliance with the IOSCO Principles for Financial Benchmarks for the benchmark rates that it administers, including for SOFR, 30-day Average SOFR, and 90-day Average SOFR, on an annual basis. The SOFR averages employ daily compounding of the overnight SOFR rate on business days, as determined by the SOFR publication calendar.

Specifically, the SOFR averages are calculated as:

$$SOFR\ Average = \left[\prod_{i=1}^{d_b} \left(1 + \frac{SOFR_i \times n_i}{360} \right) - 1 \right] \times \frac{360}{d_c}$$

Where:

$SOFR_i$ = SOFR applicable on business day i

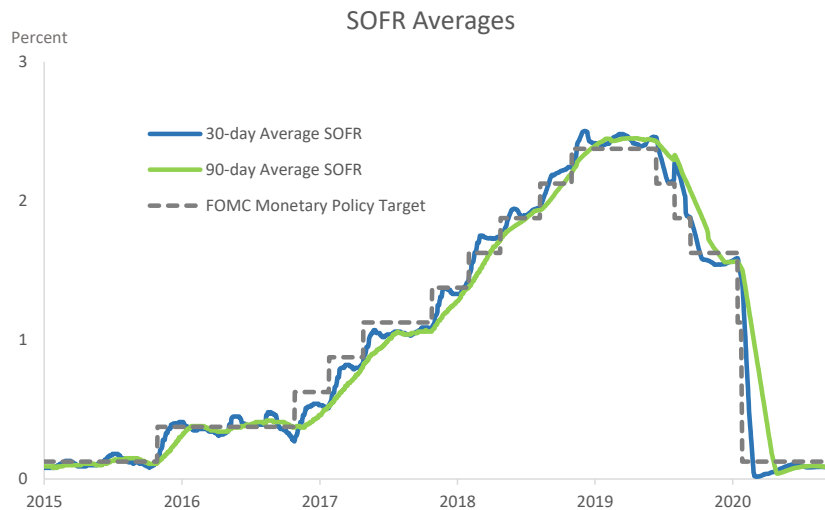
n_i = number of calendar days for which $SOFR_i$ applies (often 1 day, or 3 days for typical weekend)

d_c = the number of calendar days in the calculation period (that is, 30-, 90-, or 180- calendar days)

d_b = the number of business days in the calculation period

i denotes a series of ordinal numbers representing each business day in the calculation period

The SOFR averages for a given publication date incorporate all the SOFR values starting exactly 30-, 90-, and 180-calendar days before the publication date, regardless of whether or not that date is a weekend or holiday, and extend through the SOFR published that day. In order to preserve the fixed-day count structure, the SOFR averages are assigned the SOFR value from the preceding business day when the start date of a given tenor falls on a weekend or a holiday. For example, if the start date falls on a Saturday, the SOFR for the preceding Friday is applied for two calendar days (Saturday and Sunday). If the start date falls on a Sunday, the SOFR for the preceding Friday is applied for one calendar day (Sunday). The SOFR averages are published as percentages rounded to the fifth decimal place on each day that the SOFR is published, to a dedicated web page on the FRBNY website, shortly after the SOFR is published at approximately 8:00 a.m. ET.



SOFR averaging is preferred because it smooths out day-to-day fluctuations in the overnight SOFR rate while moving closely with and accurately reflecting general movements in money market rates and movements in the Federal Reserve's monetary policy target (Figure 1). Providing the rate in advance of an interest period benefits the consumer by enabling them to budget their upcoming payment. The choice between a 30-day or 90-day average can be made depending on a lender's current practice or preference. Although 90-day Average SOFR is generally somewhat less volatile than 30-day Average SOFR, 30-day Average SOFR will also better reflect current rate conditions. Using 30-day Average SOFR would also be consistent with ARRC recommended conventions for some other products, such as adjustable-rate mortgages.

Using an average of SOFR over time presents other benefits in addition to smoothing daily market fluctuations. For example, 30-day and 90-day Average SOFR are made readily available on the FRBNY website and thus do not require further calculation. The FRBNY and Office of Financial Research provide transparency and certainty to the calculation, reducing the risk that disputes may arise from 3rd party calculations.

The NCWG did not discuss margin levels and believes that margins should remain at the discretion of the parties involved in an intercompany loan. However, for intercompany loans converting to SOFR or for purposes of comparison between LIBOR and SOFR-based intercompany loans, the NCWG recommends that the spread adjustment recommended by the ARRC for business loans be applied.

Recommended Conventions for New Intercompany Loans

Rate of Interest

30- or 90-day Average SOFR as published by the Federal Reserve Bank of New York on the applicable interest determination date for the ensuing interest period.²

Lookback/Lockout/Payment Delay

Not applicable (30- or 90-day Average SOFR will be set in advance)

Holiday and Weekend Convention

The 30- and 90-day Average SOFR are published on all SIFMA government securities market business days (“business days”).

Daycount

Actual/360 days, which is the standard convention in U.S. money markets, is recommended for SOFR-based loans; however it is possible to use other daycount conventions such as Actual/365 days, which is used for sterling.

Business Day Convention

The ARRC recommendation is “Modified Following Business Day Convention,” meaning that payments that should be paid on a day that falls on a non-Business Day will be adjusted to the next succeeding business day, unless that business day falls in the next succeeding calendar month, in which case the interest payment date will be the preceding business day.

Rounding

It is recommended that interest-rate calculations based on SOFR be rounded (not truncated) to 5 decimal points and dollar amounts be rounded to 2 decimal points, for example, for any invoice or ledger reports, but that calculations not be rounded internally.

Floors

If there are interest rate floors in a loan agreement, the floor will be applied to the published average rate

Compensation for Losses

Typical “breakage” language may not be applicable in intercompany loans, but could be included

² SOFR Averages are published on the Federal Reserve Bank of New York website:
<https://apps.newyorkfed.org/markets/autorates/sofr-avg-ind#Chart12>

Recommended Conventions for the Conversion of LIBOR Intercompany Loans

The ARRC's recommended conventions for intercompany loans that convert to SOFR are the same as set out above for new loans; however, as discussed above, when moving from LIBOR to SOFR or when comparing a LIBOR-based rate to a SOFR-based rate, it is appropriate to include a spread adjustment that corrects for the historical differences between LIBOR and SOFR. The ARRC thus recommends the following additional convention for these loans:

Spread Adjustment

It is recommended that legacy intercompany loans that "fall back" from LIBOR to SOFR use a spread adjustment recommended by the ARRC for business loans for the appropriate tenor (e.g., 3M LIBOR to 3M SOFR). The recommended spread adjustment is the published five-year historical median difference between LIBOR and SOFR, and would be applied to loans that transition from LIBOR to SOFR.

The ARRC's recommended spread adjustments for these loans are equal to ISDA's spread adjustments for USD LIBOR derivatives; ISDA has recommended similar spread adjustments for other LIBOR currencies, and these spread adjustments could be used to compare intercompany loans in other LIBOR currencies to loans based on the comparable risk-free rates. While the level of LIBOR may fluctuate relative to the fixed spread adjustments recommended by ISDA and the ARRC, these spread adjustments have been subject to widespread, global consultation and are recognized as a fair and reasonable measure of the difference between LIBORs and risk-free rates over extended periods of time.