

Refinitiv[®] USD IBOR Cash Fallbacks

The industry challenge

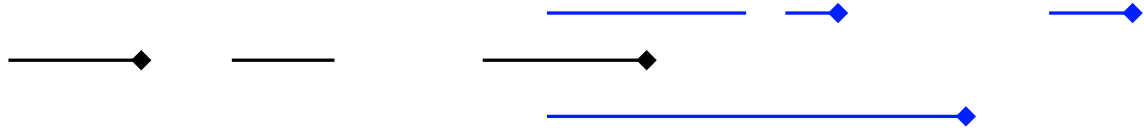
LIBOR underpins hundreds of trillions of dollars of financial instruments and contracts, making it one of the most widely-used benchmarks in the world. On March 5, 2021, the Financial Conduct Authority (FCA) announced that, immediately following December 31, 2021, one-week and two-month USD LIBOR settings will permanently cease and immediately following June 30, 2023, the remaining USD LIBOR tenors will either cease publication or become no longer representative. ICE LIBOR[®] and LIBOR[®] are registered trade marks of ICE Benchmark Administration Limited (IBA), and are used by Refinitiv with permission under licence by IBA.

The Alternative Reference Rates Committee (ARRC) Progress Report, published March 31, 2021, estimated there will be approximately \$5tn USD LIBOR referencing contracts in business loans, consumer loans, bonds and securitisations maturing after June 2023. Many of these exposures may have suitable fallback language and will be able to transition away from LIBOR prior to cessation. However, a subset will have no effective means to transition and so will become reliant on legislation. State lawmakers, with support from the ARRC, have signed new legislation into New York law and Alabama law, which reduces the adverse economic outcomes associated with legacy LIBOR fallback language for contracts governed by those laws. Where the contract has no fallback or the fallback is based upon LIBOR, the new legislation defines:

- The circumstances under which references to LIBOR in the contract will be replaced and the effective date of the replacement
- The rate that would replace LIBOR by operation of law under those contracts, which will be the SOFR-based rate recommended by the ARRC
- The spread adjustment added to the replacement rate to account for differences with LIBOR, and the conforming contract changes to implement the replacement, which in each case will be those recommended by the ARRC

If the legacy language gives a party the right to exercise discretion to determine the fallback rate, that party can decide whether to use the ARRC's recommended rate and benefit from a statutory safe-harbor from certain legal challenges.

Further details of the ARRC's recommended fallback language are available at: newyorkfed.org/arrc/fallbacks-contract-language.



Our offering

The Refinitiv® USD IBOR Cash Fallbacks provide the rates described in the ARRC's recommended fallback language. These comprise:

- Adjusted Secured Overnight Financing Rate (SOFR): the average SOFR rate for each tenor
- Spread adjustment: difference between the USD LIBOR for each tenor and SOFR, compounded in arrears for that tenor
- An 'all-in' fallback rate: the sum of the adjusted SOFR and the spread adjustment for each tenor

There are two types of Refinitiv USD IBOR Cash Fallbacks: those for institutional products and those for consumer products.

Refinitiv USD IBOR Institutional Cash Fallbacks

There are a number of different versions of the Refinitiv USD IBOR Institutional Cash Fallbacks. The adjusted SOFR components comprise (i) compound SOFR in arrears, (ii) simple SOFR in arrears (including single daily SOFR rates for overnight tenors) and (iii) compound SOFR in advance (using SOFR averages published by the Federal Reserve Bank of New York).

Added to each adjusted SOFR rate is the corresponding spread adjustment, which is calculated as the median of the historical differences between USD LIBOR for each tenor and the compounded in arrears SOFR for that tenor over a five-year period prior to March 5, 2021. In contrast to Refinitiv USD IBOR Consumer Cash Fallbacks, there is no transition period. Each of the compound and simple SOFR in arrears versions is available with (depending on tenor):

- No lookback, no observation shift, no lockout
- Lookback without an observation shift (three, five and 10 days)
- Lookback with an observation shift (two, three and five days)
- Lockout (two and three days)

Refinitiv USD IBOR Institutional Cash Fallbacks are published to five decimal places in seven tenors (overnight, one-week, one-month, two-month, three-month, six-month and 12-month).

These production rates are administered by Refinitiv Benchmark Services (UK) Limited ('RBSL') and are designed for use in financial and nonfinancial corporate contracts.

Refinitiv intends to include spread-adjusted Term SOFR for USD IBOR Institutional Cash Fallbacks in due course.

Refinitiv USD IBOR Consumer Cash Fallbacks

The Refinitiv USD IBOR Consumer Cash Fallbacks are based upon compound SOFR in advance, plus the spread adjustment.

The adjusted SOFR rates for such Consumer Cash Fallbacks are the SOFR averages published by the Federal Reserve Bank of New York.

Until end June 2023, the one-month, three-month and six-month settings have the spread adjustment calculated as the average difference between USD LIBOR and the SOFR averages published by the Federal Reserve Bank of New York over the rolling 10 days (on which both USD LIBOR and the SOFR averages are published) leading up to each publication date. Until the end of 2021, the one-week and two-month settings also have the spread adjustments calculated using that same methodology. During these periods, the consumer rates are published as prototypes to enable market participants to evaluate them and provide feedback. They should not be used for any other purpose, including as a reference, index or benchmark in financial instruments or financial contracts.

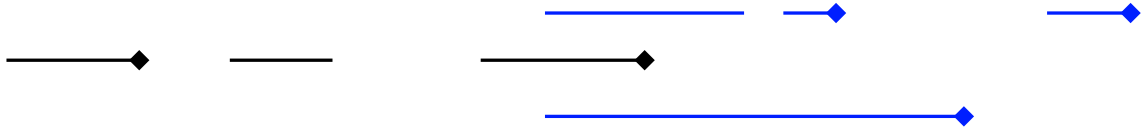
From July 2024, the spread adjustment for the one-month, three-month and six-month settings is calculated as the median of the historical differences between USD LIBOR for each tenor and the compounded in arrears SOFR for that tenor over the five-year period prior to March 5, 2021. From the start of January 2023, the spread adjustment for the one-week and two-month settings is calculated using the same methodology.

For the transition period between the start of July 2023 and the end of June 2024, the spread adjustment for the one-month, three-month and six-month settings is calculated as the linear interpolation between the two rates outlined above. Similarly, for the transition period between the start of January 2022 and end of December 2022, the spread adjustment for the one-week and two-month settings is calculated using the same methodology.

Refinitiv USD IBOR Consumer Cash Fallbacks are published to five decimal places in five tenors (one-week, one-month, two-month, three-month and six-month). The one-week and two-month settings are based upon the one-month SOFR averages published by the Federal Reserve Bank of New York, plus the respective one-week and two-month spread adjustments. The remain settings use the respective one-month, three-month and six-month SOFR averages. Two versions are available for each tenor: one that applies a floor of zero to the all-in rates and one that does not.

The USD IBOR Consumer Cash Fallbacks 1-week and 2-month settings are production benchmarks administered by RBSL and designed for use in financial contracts. The other USD IBOR Consumer Cash Fallbacks settings remain in prototype.

Refinitiv intends to include spread-adjusted Term SOFR for USD IBOR Consumer Cash Fallbacks in due course.



How to access the rates

The tables below show the different versions of the Refinitiv USD IBOR Cash Fallbacks that are available and the associated identifiers (RICs). These can be accessed through the full suite of Refinitiv products, including Refinitiv® Eikon, Refinitiv® Real-Time and Refinitiv® Datascope.

Refinitiv USD IBOR Cash Fallbacks are also available on the Refinitiv website.

Consumer cash products

Compound in advance

'All-in' fallbacks

Feature	O/N	1W	1M	2M	3M	6M	12M
No floor		USDCFCFCADA1W=	USDCFCFCADA1M=	USDCFCFCADA2M=	USDCFCFCADA3M=	USDCFCFCADA6M=	
Floor		USDCFCFCADE1W=	USDCFCFCADE1M=	USDCFCFCADE2M=	USDCFCFCADE3M=	USDCFCFCADE6M=	

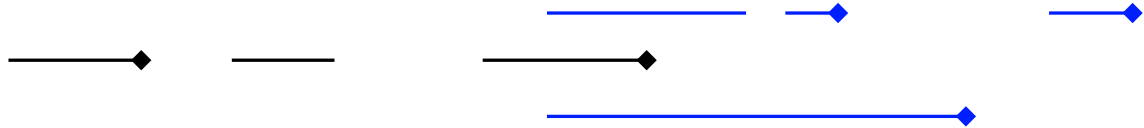
Adjusted SOFR

Feature	O/N	1W	1M	2M	3M	6M	12M
N/A		SOFR1MAVG=	SOFR1MAVG=	SOFR1MAVG=	SOFR3MAVG=	SOFR6MAVG=	

Spread adjustments

Feature	O/N	1W	1M	2M	3M	6M	12M
N/A		USDCFCSCADA1W=	USDCFCSCADA1M=	USDCFCSCADA2M=	USDCFCSCADA3M=	USDCFCSCADA6M=	

USD IBOR Consumer Cash Fallbacks one-week and two-month settings will remain in prototype status until immediately following December 31, 2021. The USD IBOR Consumer Cash Fallbacks 1-week and 2-month settings are production benchmarks administered by RBSL. The other USD IBOR Consumer Cash Fallbacks settings will remain in prototype until mid-2023. The prototype rates enable market participants to evaluate them and provide feedback. They should not be used for any other purpose, including as a reference, index or benchmark in financial instruments or financial contracts.



Institutional cash products

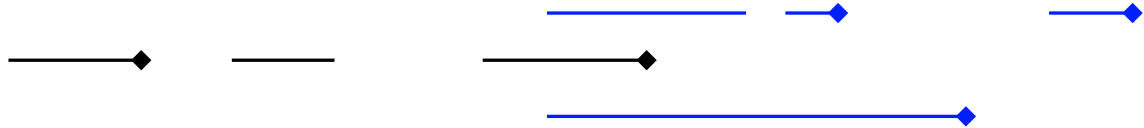
Compound in arrears

'All-in' fallbacks

Feature	O/N	1W	1M	2M	3M	6M	12M
No lookback or lockout	USDCFIFSARAON=	USDCFIFCARA1W=	USDCFIFCARA1M=	USDCFIFCARA2M=	USDCFIFCARA3M=	USDCFIFCARA6M=	USDCFIFCARA1Y=
Three-day lookback (no observation shift)		USDCFIFCAR3B1W=	USDCFIFCAR3B1M=	USDCFIFCAR3B2M=	USDCFIFCAR3B3M=	USDCFIFCAR3B6M=	USDCFIFCAR3B1Y=
Five-day lookback (no observation shift)			USDCFIFCAR5B1M=	USDCFIFCAR5B2M=	USDCFIFCAR5B3M=	USDCFIFCAR5B6M=	USDCFIFCAR5B1Y=
10-day lookback (no observation shift)			USDCFIFCAR10B1M=	USDCFIFCAR10B2M=	USDCFIFCAR10B3M=	USDCFIFCAR10B6M=	USDCFIFCAR10B1Y=
Two-day lookback (observation shift)		USDCFIFCAR2C1W=	USDCFIFCAR2C1M=	USDCFIFCAR2C2M=	USDCFIFCAR2C3M=	USDCFIFCAR2C6M=	USDCFIFCAR2C1Y=
Three-day lookback (observation shift)		USDCFIFCAR3C1W=	USDCFIFCAR3C1M=	USDCFIFCAR3C2M=	USDCFIFCAR3C3M=	USDCFIFCAR3C6M=	USDCFIFCAR3C1Y=
Five-day lookback (observation shift)			USDCFIFCAR5C1M=	USDCFIFCAR5C2M=	USDCFIFCAR5C3M=	USDCFIFCAR5C6M=	USDCFIFCAR5C1Y=
Two-day lockout		USDCFIFCAR2D1W=	USDCFIFCAR2D1M=	USDCFIFCAR2D2M=	USDCFIFCAR2D3M=	USDCFIFCAR2D6M=	USDCFIFCAR2D1Y=
Three-day lockout		USDCFIFCAR3D1W=	USDCFIFCAR3D1M=	USDCFIFCAR3D2M=	USDCFIFCAR3D3M=	USDCFIFCAR3D6M=	USDCFIFCAR3D1Y=

Adjusted SOFR

Feature	O/N	1W	1M	2M	3M	6M	12M
No lookback or lockout	USD SOFR=	USDCFUJCARA1W=	USDCFUJCARA1M=	USDCFUJCARA2M=	USDCFUJCARA3M=	USDCFUJCARA6M=	USDCFUJCARA1Y=
Three-day lookback (no observation shift)		USDCFUJCAR3B1W=	USDCFUJCAR3B1M=	USDCFUJCAR3B2M=	USDCFUJCAR3B3M=	USDCFUJCAR3B6M=	USDCFUJCAR3B1Y=
Five-day lookback (no observation shift)			USDCFUJCAR5B1M=	USDCFUJCAR5B2M=	USDCFUJCAR5B3M=	USDCFUJCAR5B6M=	USDCFUJCAR5B1Y=
10-day lookback (no observation shift)			USDCFUJCAR10B1M=	USDCFUJCAR10B2M=	USDCFUJCAR10B3M=	USDCFUJCAR10B6M=	USDCFUJCAR10B1Y=
Two-day lookback (observation shift)		USDCFUJCAR2C1W=	USDCFUJCAR2C1M=	USDCFUJCAR2C2M=	USDCFUJCAR2C3M=	USDCFUJCAR2C6M=	USDCFUJCAR2C1Y=
Three-day lookback (observation shift)		USDCFUJCAR3C1W=	USDCFUJCAR3C1M=	USDCFUJCAR3C2M=	USDCFUJCAR3C3M=	USDCFUJCAR3C6M=	USDCFUJCAR3C1Y=
Five-day lookback (observation shift)			USDCFUJCAR5C1M=	USDCFUJCAR5C2M=	USDCFUJCAR5C3M=	USDCFUJCAR5C6M=	USDCFUJCAR5C1Y=
Two-day lockout		USDCFUJCAR2D1W=	USDCFUJCAR2D1M=	USDCFUJCAR2D2M=	USDCFUJCAR2D3M=	USDCFUJCAR2D6M=	USDCFUJCAR2D1Y=
Three-day lockout		USDCFUJCAR3D1W=	USDCFUJCAR3D1M=	USDCFUJCAR3D2M=	USDCFUJCAR3D3M=	USDCFUJCAR3D6M=	USDCFUJCAR3D1Y=



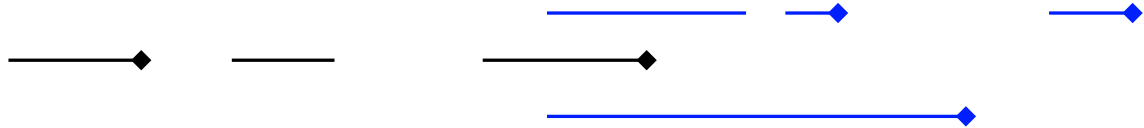
Simple in arrears

All-in’fallbacks

Feature	O/N	1W	1M	2M	3M	6M	12M
No lookback or lockout	USDCFIFSARAON=	USDCFIFSARA1W=	USDCFIFSARA1M=	USDCFIFSARA2M=	USDCFIFSARA3M=	USDCFIFSARA6M=	USDCFIFSARA1Y=
Three-day lookback (no observation shift)		USDCFIFSAR3B1W=	USDCFIFSAR3B1M=	USDCFIFSAR3B2M=	USDCFIFSAR3B3M=	USDCFIFSAR3B6M=	USDCFIFSAR3B1Y=
Five-day lookback (no observation shift)			USDCFIFSAR5B1M=	USDCFIFSAR5B2M=	USDCFIFSAR5B3M=	USDCFIFSAR5B6M=	USDCFIFSAR5B1Y=
10-day lookback (no observation shift)			USDCFIFSAR10B1M=	USDCFIFSAR10B2M=	USDCFIFSAR10B3M=	USDCFIFSAR10B6M=	USDCFIFSAR10B1Y=
Two-day lookback (observation shift)		USDCFIFSAR2C1W=	USDCFIFSAR2C1M=	USDCFIFSAR2C2M=	USDCFIFSAR2C3M=	USDCFIFSAR2C6M=	USDCFIFSAR2C1Y=
Three-day lookback (observation shift)		USDCFIFSAR3C1W=	USDCFIFSAR3C1M=	USDCFIFSAR3C2M=	USDCFIFSAR3C3M=	USDCFIFSAR3C6M=	USDCFIFSAR3C1Y=
Five-day lookback (observation shift)			USDCFIFSAR5C1M=	USDCFIFSAR5C2M=	USDCFIFSAR5C3M=	USDCFIFSAR5C6M=	USDCFIFSAR5C1Y=
Two-day lockout		USDCFIFSAR2D1W=	USDCFIFSAR2D1M=	USDCFIFSAR2D2M=	USDCFIFSAR2D3M=	USDCFIFSAR2D6M=	USDCFIFSAR2D1Y=
Three-day lockout		USDCFIFSAR3D1W=	USDCFIFSAR3D1M=	USDCFIFSAR3D2M=	USDCFIFSAR3D3M=	USDCFIFSAR3D6M=	USDCFIFSAR3D1Y=

Adjusted SOFR

Feature	O/N	1W	1M	2M	3M	6M	12M
No lookback or lockout	USDSOFR=	USDCFJUSARA1W=	USDCFJUSARA1M=	USDCFJUSARA2M=	USDCFJUSARA3M=	USDCFJUSARA6M=	USDCFJUSARA1Y=
Three-day lookback (no observation shift)		USDCFJUSAR3B1W=	USDCFJUSAR3B1M=	USDCFJUSAR3B2M=	USDCFJUSAR3B3M=	USDCFJUSAR3B6M=	USDCFJUSAR3B1Y=
Five-day lookback (no observation shift)			USDCFJUSAR5B1M=	USDCFJUSAR5B2M=	USDCFJUSAR5B3M=	USDCFJUSAR5B6M=	USDCFJUSAR5B1Y=
10-day lookback (no observation shift)			USDCFJUSAR10B1M=	USDCFJUSAR10B2M=	USDCFJUSAR10B3M=	USDCFJUSAR10B6M=	USDCFJUSAR10B1Y=
Two-day lookback (observation shift)		USDCFJUSAR2C1W=	USDCFJUSAR2C1M=	USDCFJUSAR2C2M=	USDCFJUSAR2C3M=	USDCFJUSAR2C6M=	USDCFJUSAR2C1Y=
Three-day lookback (observation shift)		USDCFJUSAR3C1W=	USDCFJUSAR3C1M=	USDCFJUSAR3C2M=	USDCFJUSAR3C3M=	USDCFJUSAR3C6M=	USDCFJUSAR3C1Y=
Five-day lookback (observation shift)			USDCFJUSAR5C1M=	USDCFJUSAR5C2M=	USDCFJUSAR5C3M=	USDCFJUSAR5C6M=	USDCFJUSAR5C1Y=
Two-day lockout		USDCFJUSAR2D1W=	USDCFJUSAR2D1M=	USDCFJUSAR2D2M=	USDCFJUSAR2D3M=	USDCFJUSAR2D6M=	USDCFJUSAR2D1Y=
Three-day lockout		USDCFJUSAR3D1W=	USDCFJUSAR3D1M=	USDCFJUSAR3D2M=	USDCFJUSAR3D3M=	USDCFJUSAR3D6M=	USDCFJUSAR3D1Y=



Compound in advance

'All-in' fallbacks

Feature	O/N	1W	1M	2M	3M	6M	12M
N/A			USDCFIFCADA1M=		USDCFIFCADA3M=	USDCFIFCADA6M=	

Adjusted SOFR

Feature	O/N	1W	1M	2M	3M	6M	12M
N/A			SOFR1MAVG=		SOFR3MAVG=	SOFR6MAVG=	

USD IBOR Institutional Cash Fallbacks are production benchmarks administered by RBSL and are designed for use in financial and nonfinancial corporate contracts.

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