

LIBOR Transition – Need to know

REGULATORY FOCUS

Financial Conduct Authority

"The discontinuation of LIBOR should not be considered a remote probability 'black swan' event. Firms should treat it as something that will happen and which they must be prepared for. Ensuring that the transition from LIBOR to alternative interest rate benchmarks is orderly will contribute to financial stability. Misplaced confidence in LIBOR's survival will do the opposite."

Andrew Bailey, Chief Executive, Financial Conduct Authority (FCA), July 2018

FCA and Prudential Regulation Authority (PRA)

19 September 2018, the FCA and PRA wrote to CEOs of major banks and insurers supervised in the UK asking for the preparations and actions they are taking to manage transition from LIBOR to alternative interest rate benchmarks.

Bank of England - BOE

"Since the financial crisis, Libor really has become the rate at which banks don't lend to each other." Mark Carney, Governor, Bank of England, May 2018

U.S. Commodity Futures

Trading Commission - CFTC

"The discontinuation of LIBOR is not a possibility. It is a certainty. We must anticipate it, we must accommodate it and we must adapt to it". J. Christopher Giancarlo, Chairman, CFTC, July 2018

What is LIBOR and why transition?

LIBOR, the London Inter-bank Offered Rate, is a systemically important interest rate benchmark, aimed at providing an indication of the average rates at which banks could obtain unsecured funding from each other.

LIBOR is determined and published daily by ICE Benchmark Administration (IBA) for USD, GBP, EUR, CHF and JPY across 7 tenors (O/N to 12months) based on the submissions of Panel Banks.

A lack of Interbank transactions means that the rates are based predominantly on the expert judgement of Panel Banks submitting the rate. The FCA (July'17) announced that it will no longer compel those banks to submit to LIBOR after 2021 - **availability of LIBOR post 2021 is uncertain.**

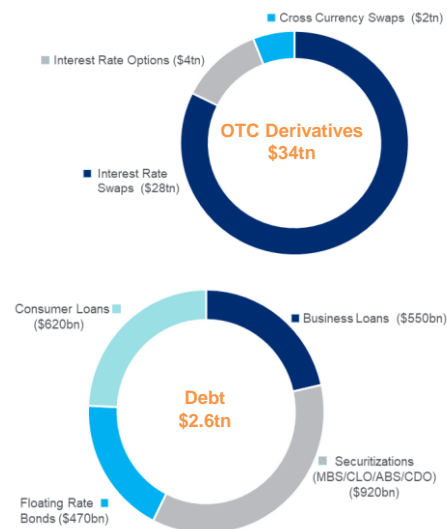
Following guidance from the Financial Stability Board (FSB), regulatory led public / private working groups were established to identify and promote adoption of robust alternate risk free rates (ARFRs) founded on substantial underlying transactions across the LIBOR currency jurisdictions (see table below).

But...transition is not like...

- ❖ **ARFRs are overnight rates**, with no term structure.
- ❖ **ARFRs do not incorporate credit risk.**
- ❖ **ARFRs characteristics differ by currency.**

Why is LIBOR Transition a challenge?

LIBOR is entrenched in market activity and **underpins more than \$370tn of USD LIBOR contracts** across a variety of products (predominantly derivatives). It is estimated that \$36.6tn will still be outstanding after the end of 2021 and this number continues to grow. There is a risk that contracts and products cease to function as intended post-2021 if changes are not implemented in support of the transition from LIBOR to ARFRs.



Source: Second Report of the Alternative Reference Rates Committee (Federal Reserve Bank of New York, 2018). Breakdown in diagram is based on Citi's own calculations.

Jurisdiction	Working Group	RFR	Rate Name	Administrator	Description
	Working Group on Sterling Risk-free Reference Rates	SONIA	Sterling Overnight Index Average	Bank of England	UNSECURED Rate reflects overnight wholesale deposit transactions.
	Alternative Reference Rates Committee	SOFR	Secured Overnight Financing Rate	Federal Reserve Bank of New York	SECURED Rate reflects multiple overnight repo market segments.
	Working Group on CHF Reference Rates	SARON	Swiss Average Rate Overnight	SIX Swiss Exchange	SECURED Rate reflects interest paid on interbank overnight repo average.
	Study Group on Risk-free Reference Rates	TONA	Tokyo Overnight Average Rate	Bank of Japan	UNSECURED Rate reflects overnight call rate market
	Working Group on Risk-free Reference Rates for the Euro Area	EuroSTR	European Short Term Euro Rate	European Central Bank	UNSECURED Rate reflects overnight wholesale deposit transactions.

Source: Deloitte: "LIBOR transition. Setting your firm up for success", amended by Citi

USEFUL REFERENCE MATERIAL

Bank of England (BoE)

Sterling Working Group:

<https://www.bankofengland.co.uk/markets/transition-to-sterling-risk-free-rates-from-libor>

Alternative Reference Rate Committee (ARRC) USD

Working Group:

<https://www.newyorkfed.org/arrc>

Swiss CHF Working Group:

https://www.snb.ch/en/for/finmkt/finmkt_benchrn/id/finmkt_reformrates

Bank of Japan (BoJ) Yen

Working Group:

<https://www.boj.or.jp/en/paym/market/sg/index.htm/>

European Central Bank (ECB)

Euro Working Group

https://www.ecb.europa.eu/paym/initiatives/interest_rate_benchmarks/WG_euro_risk-free_rates/html/index.en.html

LIBOR transition is a fast evolving area and Citi encourages all market participants to assess the impact of transition and to keep informed.

Please reach out to your Relationship Manager or Trading/Sales contact if you have any questions. Alternatively email [*LiborTransition.Info@citi.com](mailto:LiborTransition.Info@citi.com).

What are the challenges of a LIBOR Transition?

Given LIBOR's extensive use across financial markets, the transition away from LIBOR presents various risks and challenges to financial markets and institutions, including Citi. These include, but are in no way limited to:

- 1. Contractual robustness:** Current fallback language in contractual documentation was intended to deal with a temporary unavailability of LIBOR. Currently the industry is working on defining the correct robust fallback language for a permanent discontinuation.
- 2. Availability of a Term RFR:** End users of cash products (mainly loans) prefer forward-looking term rates to ensure certainty over future cash flows. The development of such term RFR will require deep and liquid derivative markets in RFR products.
- 3. Operational complexity:** LIBOR is used across different systems, models and controls. The transition will require the scoping and revision of existing infrastructure to accommodate the new RFRs.

Our preparation

In 2018, Citi established the **LIBOR Transition program** with Senior Management involvement and coverage across all Citi's businesses and functions.

Citi is actively engaged in a number of the regulatory led working groups, including the Alternative Reference Rates Committee convened by the Federal Reserve Board to promote and advance development of alternative reference rates and to identify and address the potential challenges from any transition to such rates.

Our Transition Objectives

Aligned with our mission to **Be the Best for our Clients**, as part of establishing a central LIBOR Transition Program, Citi has set out five overarching objectives for the transition:

- 1.** To minimise, as far as possible, value transfer for existing client contracts;
- 2.** To participate in the development of new alternative risk free rate linked products and services for Citi's clients;
- 3.** To ensure that, throughout the transition, Citi continue to not deliberately advantage any market participant to the disadvantage of another;
- 4.** To assist clients' ability to manage transition risk, including a move to voluntary transition and minimise market disruption; and
- 5.** To find solutions which minimise litigation, judicial and regulatory risks.

Citi position on the market

Issuance: Citigroup Inc has carried out SOFR-linked FRN issuances in Q4 2019 and Q1 2020.

Underwriting: Bloomberg reported that Citi was the top underwriter in SOFR bonds in 2019.

Derivatives: Citi is active in derivative products referencing the ARFRs, including swaps and futures referencing SOFR, SONIA, TONAR and EuroSTR.

LIBOR Transition to Alternative Risk Free Rates:

	Pre-2020	2020	2021	2022
	<ul style="list-style-type: none"> Apr-17: Reformed SONIA selected as GBP RFR Apr-18: Reformed SONIA published 	<ul style="list-style-type: none"> Mar-20: Interest rate swap conventions change from LIBOR to SONIA 	<ul style="list-style-type: none"> Q2-20: BoE target for end-users of loan systems ready to support SONIA syndicated loans Q3-20: Provisional live SONIA term rate published 	<ul style="list-style-type: none"> Q1-21: BoE target - Stock of LIBOR referencing contracts significantly reduced Q1-21: BoE target - No new issuance of GBP LIBOR referenced loan products expiring after end-2021
	<ul style="list-style-type: none"> Oct-17: ARRC adopts Paced Transition Plan Apr-18: SOFR published 	<ul style="list-style-type: none"> Apr-19: ARRC fallback language for FRNs & Syndicated Loans May-19: ARRC fallback language for bilateral business loans & securitisations 	<ul style="list-style-type: none"> Oct-20: CME & LCH move to SOFR discounting & PAI 	<ul style="list-style-type: none"> Q2-21: CCPs to not accept EFR swaps for PAI, or discounting H1-21: Forward-looking SOFR Term Rate expected
	<ul style="list-style-type: none"> Dec-17: Last TOIS fixing prior to SARON transition Oct-18: Compounded SARON selected for Term Rate solution 	<ul style="list-style-type: none"> Q1-20: SIX expected to go-live for daily publication of compounded SARON 		
	<ul style="list-style-type: none"> Apr-15: Study Group established Dec-16: TONAR selected as JPY RFR 	<ul style="list-style-type: none"> Apr-19: Consultation paper first draft published Jul-19: Establishment of the Task Force on Term Reference Rates Nov-19: Bank of Japan consultation results published 	<ul style="list-style-type: none"> Q2-20: JPY based term rates published for testing 	<ul style="list-style-type: none"> Q2-21: JPY swap based Term Rate developed
	<ul style="list-style-type: none"> Feb-18: WG on Euro RFRs set up 	<ul style="list-style-type: none"> Oct-19: Amended EONIA methodology implemented Nov-19: EURIBOR hybrid methodology implementation completed Oct-19: EuroSTR published 	<ul style="list-style-type: none"> Jul-20: LCH, CME and Eurex move to EuroSTR discounting & PAI from EONIA 	<ul style="list-style-type: none"> Jan-22: EONIA termination Q1-22: EBR Transition Provisions end
	<ul style="list-style-type: none"> Sep-18: FCA "Dear CEO" letter sent 	<ul style="list-style-type: none"> Feb-20: ISDA consultations permanent and pre-cessation fallbacks 	<ul style="list-style-type: none"> Late-20: Expected ISDA new definitions & protocol to be implemented 	<ul style="list-style-type: none"> End 2021: Potential LIBOR cease date

Note: Timeline prepared on a best efforts basis as of April 30, 2020

Certain products mentioned in this communication may contain provisions that refer to a reference or benchmark rate which may change, cease to be published or be in customary market usage, become unavailable, have its use restricted and/or be calculated in a different way. As a result, those reference or benchmark rates that are the subject of such changes, may cease to be appropriate for the products mentioned in this communication. We encourage you to keep up to date with the latest industry developments in relation to benchmark transitioning and to consider its impact on your business. You should consider, and continue to keep under review, the potential impact of benchmark transitioning on any existing product you have with Citi, or any new product you enter into with Citi. Citi does not provide advice, or recommendations on the suitability of your product choice including with respect to any benchmark transitioning on any existing product you have with Citi. You should obtain professional independent advice (legal, financial or otherwise) in respect of the suitability of your products in light of benchmark transitioning as you consider necessary.