

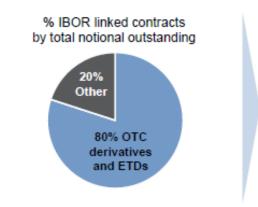


### **IBOR BACKGROUND**

LIBOR is the predominant interest rate benchmark for USD, GBP, CHF and JPY derivatives contracts. EURIBOR is the most widely used interest rate benchmark for EUR contracts. The MPG Report showed in 2014 that OTC derivatives and ETDs represent approximately 80% of LIBOR-linked contracts by outstanding notional value, and thus derivatives formed much of the early focus for global transition and reform initiatives. Going forward, this focus will broaden to include other products, such as securities, loans, ETDs and mortgages.



The main categories of contracts indexed to IBORs include OTC derivatives and ETDs, syndicated loans, securitized products, business loans, retail loans, floating rate bonds and deposits.



1 Source: MP0	Final Report	on Reforming	Interest Rate	Benchmarks.	July	/ 2014.
---------------	--------------	--------------	---------------	-------------	------	---------

uep	usits.				
Product			Product examples		
٠	OTC derivatives		Interest rate swaps, FRAs, cross-currency swaps		
	ETDs		Interest rate options, Interest rate futures		
	Loans	٠	Syndicated loans, business loans, mortgages, credit cards, auto loans, consumer loans, student loans		
	Bonds and FRNs	٠	Corporate and non-US government bonds, agency notes, leases, trade finance, FRNs, covered bonds, capital securities, perpetuals		
٠	Short-term Instruments		Repos, reverse repos, time deposits, CDS, commercial paper		
٠	Securitized products		MBS, ABS, CMBS, CLO, CMO		
٠	Other		Late payments, discount rates, overdraft		



# TRANSITION FROM IBOR TO ALTERNATIVE RFR (RISK FREE RATES)

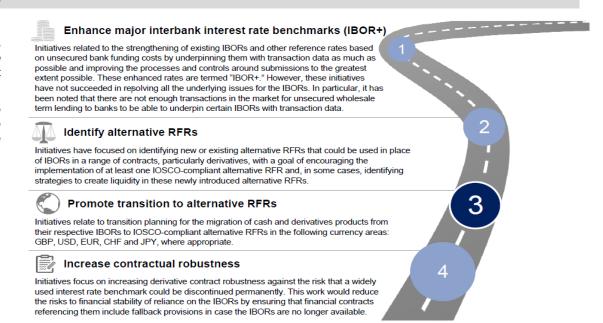
#### The need to transition from certain key IBORs to alternative solution

A lack of robustness and durability in certain key IBORs, coupled with the large volume of financial transactions that reference these rates, has resulted in systemic risk concerns.

- The minimal number of transactions in the unsecured interbank funding market means that submissions by panel banks are largely based upon judgment
- In the face of concerns regarding potential liabilities associated with judgment-based submissions, panel banks have become significantly less willing to submit. (For example, EURIBOR panel of submitting banks has fallen from 43 to 20 since 2013)

#### FSB recommendations and global roadmap

- Since 2014, the Financial Stability Board has recommended reviewing and improving the benchmarks by anchoring them, to the greatest extent possible, with financing transactions.
- The FSB has also invited central banks to coordinate the development of alternatives to IBOR benchmarks with so called "Risk Free Rates" (RFR) and to organize the transition from IBOR to these new benchmarks.



The timing has recently accelerated as with the FCA's statements that panel banks would only be required to submit LIBOR contributions until the end of 2021



## WHERE WE ARE: OVERVIEW OF ALTERNATIVE RFR

				+	
Rate Administrator	Bank of England	FED	ECB (TBC)	SIX Swiss Echange	Bank of Japan
Working group	Working Group on Sterling Risk Free Reference Rates	Alternative Reference Rates Committee	New Working Group on RFR for the Euro Area	The National Working Group on Swiss franc Reference Rate	The Japan Study Group on Risk-Free Rates
Alternative RFR	Reformed SONIA	SOFR	ESTER	SARON	MUTAN (TONAR)
Publication Date	April 23rd 2018	April 3rd 2018	Planned for Dec 2018	2009	1997
Description	<ul><li> Unsecured</li><li> Fully transaction based</li><li> Overnight</li></ul>	<ul><li>Secured</li><li>Fully transaction based</li><li>Overnight</li><li>Covers multiple repomarket segments</li></ul>	TBC  • Unsecured  • Fully transaction based  • Overnight	<ul> <li>Secured</li> <li>Reflects interest paid on interbank overnight repo</li> </ul>	<ul><li>Unsecured</li><li>Overnight</li></ul>
Market Liquidity	<ul> <li>Swap up to 2Y: liquid</li> <li>Basis swap vs Libor GBP above 2Y: liquidity in progress</li> <li>Future 1M &amp; 3M:, low liquidity.</li> </ul>	Swaps and Futures : low liquidity	None	<ul><li>Existing market on swaps</li><li>No Futures market</li></ul>	<ul><li>Existing market on swaps</li><li>No Futures market</li></ul>
Comment	LSE and IBA recently launched 3 month SONIA futures contract	<ul> <li>SG Trading begins SOFR Futures and swaps.</li> <li>Push on going from FED</li> </ul>	None	The TOIS has been replaced by SARON in DEC 17	

The alternative RFR benchmarks are overnight, whereas current use of IBORs is largely in term rates.



### TRANSITION: WHEN IT WILL HAPPEN

### A lot of uncertainties remain on the schedule and transition protocol



Jan 2020

# Any benchmark used in Europe must be compliant with BMR.

- Current benchmarks must be reformed for being compliant
- No new contracts could be made on non BMR indices
- No obligation of publication of fixing for non BMR benchmark

End of LIBOR publication

Dec 2021

- The agreement with the panel bank for keeping contribution will end
- Bailey speeches : FCA won't oblige anymore to contribute but will not forbid it

ARRC (Fed)
Roadmap

Post 2021

- The transition is mentioned in the ARRC roadmap without any information of date
- ARRC promotes a voluntary transition of the market.

