

June 26, 2019

The transition away from the London Interbank Offered Rate (LIBOR) is a global phenomenon that has the financial industry mobilizing ahead of a looming deadline expected for the end of 2021.

In aggregate, \$400 trillion in assets 1 across currencies including the British pound, Japanese yen, Swiss franc, euro and U.S. dollar need to migrate towards nearly risk-free rates.

Regulators, prudential authorities and private-sector market participants have been collaborating to select alternative rates across the world based on **core principles identified** 2 by the International Organization of Securities Commissions (IOSCO).

However, benchmark reform efforts are at various stages and an asymmetrical adoption of alternative reference rates increases the risk of a disorderly transition for firms and their clients.

"Global reform is more complex when taking into account the U.K., Europe and Switzerland because regional markets have their own idiosyncrasies and authorities," said Cyprien Decoux, head of Rates Structuring EMEA at J.P. Morgan. "In the U.S., market participants have one reform to follow with the creation of the new Secured Overnight Financing Rate (SOFR)".

Why 2021? Andrew Bailey, chief executive of the Financial Conduct Authority (FCA), said in a speech in 2017 (Opens Overlay) that the FCA would no longer compel panel banks to submit LIBOR rates after 2021. In July 2018, (Opens Overlay) he added that the FCA may declare the rate not representative, making the possibility that LIBOR will cease to exist a likely outcome. The FCA is tasked with overseeing the LIBOR benchmark.



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Cyprien Decoux

J.P. Morgan, Head of Rates Structuring EMEA In the United States, benchmark reform is already a reality: SOFR reached its one year anniversary in April and the index is robust. Daily trade volumes of **SOFR** index components 3 are roughly \$950bn - this is more than 1800x the average daily unsecured bank trades underlying USD LIBOR tenors. According to **J.P. Morgan** research analysts 4, progress has been faster than expected with growing use in both derivatives and cash markets - activity in SOFR futures and floating rate notes (FRNs) continues to build, facilitating the growth of overthe-counter swap markets.

In this article, we leverage insight from our Sales, Trading and Research teams to outline the state of affairs in the U.K., Europe, Switzerland and Japan.

J.P. Morgan has also released a podcast on international benchmark reform featuring Decoux, Charles Bristow, global head of Rates, Fixed Income Financing, Credit Portfolio Trading, and Markets Resource Management at J.P. Morgan, and Chris Palmer, who leads the firm-wide LIBOR transition program.

What work is being done across the globe?

In 2014, international supervisory bodies such as the Financial Stability Board (FSB) observed a decline in activity in interbank short-term funding markets after the financial crisis. Their conclusion: this decline constitutes a structural risk for unsecured benchmark interest rates.

National working groups across the globe with both public and private sector representatives were then created to identify alternative nearly risk-free reference rates (RFRs) that would comply with international standards outlined by IOSCO.

But the fact that each of these indices is being reformed within its own geography means international benchmarks will ultimately contain different profiles.



It's really important that people understand what is underpinning each index. You're going to have a couple of different families, secured and unsecured, and different solutions to building a term structure.

Charles Bristow

Global Head of Rates, Fixed Income
Financing, Credit Portfolio Trading,
and Markets Resource Management,
J.P. Morgan



Benchmark Reform in Europe



The message in Europe is more complicated for clients because regulators are backing two benchmarks. The European Money Markets Institute (EMMI) is reforming the existing Euribor rate while the European Central Bank builds a replacement for EONIA.

Fabio Bassi

Head of European Rates Research,

J.P. Morgan

Benchmark reform in the U.S. and the U.K. is more advanced compared to the Eurozone, which has needed to find solutions that are compatible with differences in markets across the bloc.

While authorities and working groups in the U.S. and the U.K. decided on one alternative reference rate, continental Europe is pursuing a dual track. The administrators of the existing Euro Interbank Offered Rate (Euribor) – the EMMI – decided to reform the index.

"The EMMI effectively created a waterfall methodology to make the Euribor indices more transaction-based rather than judgment based" said Decoux. Moreover, the EMMI changed the panel bank submission policy and now participating banks must give 5 years notice before leaving, which means Euribor is set to continue into the near-future.

In parallel, the ECB launched a working group to create a new overnight Euro Short Term Rate (€STR).

€STR is intended to "complement existing benchmark rates produced by the private sector and serve as a backstop reference rate," **according to the ECB** 5.

Further complicating matters, the implicitly different credit risk of sovereign bonds in the Eurozone means EU authorities couldn't select a secured funding rate.

What is €STR?

€STR reflects wholesale Euro unsecured overnight borrowing costs of euro area banks. While EONIA only takes interbank activity into consideration, €STR has a larger transaction base that includes deposits from pension funds, insurance companies and other non-bank depositors.

Key Dates

May 2017	European Money Markets Institute (EMMI) announced plans to reform Euribor ₉	
September 2017	The European Central Bank (ECB) announced it would develop a new euro unsecured overnight interest rate 10	The new rate will be published by the ECB as of October 2, 2019 6. Until then, the ECB is publishing pre-€STR
June 2018	ECB announced methodology for the new unsecured overnight interest rate, €STR ₁₁	data periodically.
August 2018	Results of ECB public consultation on the assessment of candidate euro near risk-free rate published: 88% of	€STR replaces EONIA, which is on track to become non-compliant with
	responses viewed €STR as most appropriate rate ₁₂	the EU benchmark regulation by the end of 2021.7 Until that point in time, EONIA will track the new ECB
September 2018	ECB announced that banks chose €STR as alternative reference rate to replace EONIA 13	benchmark with a fixed spread of 8.5 basis points, according to the ECB. 8
May 2019	EMMI applied to the Belgian Financial Services and Markets Authority (FSMA) to make Euribor compliant with EU benchmark regulation 14	This means that once €STR is launched liquidity will likely move from one benchmark to another
October 2019	ECB to publish €STR ₁₃	relatively quickly.
December 2021	Potential deadline whereby Euribor and EONIA would no longer be compliant with EU benchmark regulation 15	

"It's a type of migration mechanism," said Bristow. "By putting them in lockstep, it's analogous with pegging a currency. You're essentially turning EONIA and €STR into the same thing from a moment in time."

Benchmark Reform in the United Kingdom



The situation is very different for GBP compared to EUR and USD because people are already familiar with SONIA in the U.K. markets.

Tom Prickett

Global Head of Euro Linear Derivatives Trading, J.P. Morgan The reform process for GBP is more advanced than in EUR and JPY: the Bank of England (BOE) became the administrator of the Sterling Overnight Index Average (SONIA) in April 2016 and a year later the Working Group on Sterling Risk-free Reference Rates selected it as the preferred RFR.

This reformed benchmark broadens the range of eligible transactions used in its calculation to include overnight unsecured transactions negotiated bilaterally as well as those arranged via brokers.

SONIA was chosen as opposed to other secured overnight rate alternatives - such as the sterling Repo Index Rate - given the expectation that movements in the unsecured overnight deposit rate are likely to be stable and highly correlated with the **Bank of England base rate** 16. Moreover, SONIA is already an accepted index within the U.K. swap market.

"The national working groups decided that reforming SONIA and having it as an ongoing index with more depth would guarantee a smoother migration," said Prickett. "They couldn't do this in Europe because EONIA wasn't resilient enough."

There has been a steady increase in SONIA use both in over-the-counter derivatives and exchange traded futures alongside floating-rate note issuance. As of June 5, 40 sterling bond issuances have referenced compounded SONIA, **according to the**BOE ₁₇, in addition to the first residential mortgage-backed security.

"Clearly you can see goodwill in migrating towards the use of SONIA," said Bristow. "We have a stable, large market in SONIA-based swaps, particularly at the short-end of the curve but also at the long-end of the curve. The real challenge for the industry and for the stakeholders is get to the next stage where you begin to transition the stock of inventory into a SONIA base."

April 2017 April Reformed SONIA rate published 19 July 2018 First SONIA-linked floating rate note launched 18 Q1 2020 Term rates expected to be produced and made available for use where appropriate 18

2022

Key Dates

LIBOR production no longer guaranteed by the FCA 18

Benchmark Reform in Switzerland and Japan

The Bank of Japan formed a cross-industry committee in July 2018 on Japanese yen interest rate benchmarks, selecting the Tokyo Overnight Average Rate (TONAR) as the preferred unsecured alternative reference rate.

The Yen lending market currently consists of three benchmarks: Yen LIBOR, Euroyen TIBOR (Z TIBOR) and Domestic TIBOR (D TIBOR). Yen LIBOR and Euroyen TIBOR are **expected to cease** 20 by the end of 2021, leaving a void, but D TIBOR will continue to exist.

In this new hybrid approach, D TIBOR and TONAR will be the future lending rates with a forward looking term rate planned for TONAR once a liquid futures market develops. An Overnight Index Swaps (OIS) futures market doesn't exist in Japan, though the Tokyo Financial Exchange expects **trading of futures** 21 to start mid-2020.

In Switzerland, the National Working Group on Swiss Franc Reference Rates recommended the Swiss Average Rate Overnight (SARON) as the alternative to CHF LIBOR. The **working group openly** 22 said that there will be no forward looking term structure created off SARON, because they don't believe there are enough transactions in the market to create an IOSCO-compliant forward looking term rate.

Industry Uncertainties

While significant progress has been made in advancing the global transition to alternative rates, key industry challenges remain that must be addressed.

Term Rate Structure: Development of certain cash markets is currently dependent on term rate introduction. Regulators have acknowledged that term rates will assist with the transition to alternative reference rates and development has already begun in the U.S. and U.K. markets. However, it is not yet clear if term rates will be available for use across all products.

Clarification of LIBOR
"Time of Death: Clarity
on how or when LIBOR
will no longer be
considered a
representative
benchmark is critical to
an orderly transition.

Market Adoption:
Issues vary across
jurisdictions and
market adoption could
unfold at different
paces, therefore
creating market
fragmentation.

Hedge Accounting Policy: Potential for large operational impact and income statement volatility if international accounting standard setters do not provide relief to existing cash and derivative contracts. This could lead to underutilization of alternative reference rates if market participants deem these to be material impacts.

Fallback rates and contract language: Trillions of dollars of contracts are tied to LIBOR. So-called fallback language—a legal mechanism in contracts to provide a back-up plan— has been written into many contracts on the assumption that any interruptions in the publication of LIBOR would be temporary. LIBOR cessation could therefore create contractual uncertainty for legacy products.

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