CNMV
Comisión Nacional del Mercado de Valores

Status of interest rate benchmark reform

Presentations at the 3rd Conference organised by the CNMV on 15 June 2021

October 2021

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Foreword. The status of the interest rate benchmark reform

Rodrigo Buenaventura[1]

The benchmark reform not only has financial, legal, accounting, operational and behavioural implications for the entities that regularly operate with these benchmarks, but all of us, the public and private sectors alike, have an interest in reinforcing their soundness and guaranteeing their sustainability. For this reason, it arouses great interest among representatives of the financial and non-financial systems, despite the regulatory fertility that we have experienced in recent years following the financial crisis that began in 2008 and the current changes as a result of the COVID-19 crisis and the tools to seek the long-awaited economic recovery. This reform also strengthens the integrity, transparency and liquidity of financial markets, facilitates the implementation of monetary policy and preserves financial stability.

Although in the euro area the Euribor modernisation process is consolidating successfully, and the transition towards the risk-free rate, the €STR, is progressing reasonably, the Libor transition represents a major challenge for the markets and requires a coordinated effort for its completion by all participants, be they supervisory authorities, financial and non-financial entities, markets and their infrastructures, or users of the benchmarks.

As the Financial Stability Board (FSB) acknowledges in its recent progress report, failure to adequately prepare for the transition may hamper the effectiveness of financial contracts and jeopardise financial stability.

Cessation of Libor

On 5 March 2021 the UK authorities officially confirmed the end of the publication of Libor on 31 December 2021 in all its tenors and currencies except US dollars, publication of which will continue until 30 June 2023 in order to facilitate the transition of current contracts. This transition is necessary given that the US dollar benchmark is the most widely used in the world.

To achieve effective transition, the UK authorities have urged entities not to enter into new GBP Libor-based contracts from 31 March 2021 or USD Libor-based contracts from 31 December 2021.

The FSB expects the authorities in other jurisdictions to carry out similar actions directed at their supervised entities and thereby avoid arbitrations and asymmetric actions amongst them.

1 Chairman, CNMV.

In Spain, there are numerous non-financial companies, public administrations and financial entities that have signed financing or hedging contracts referenced to this benchmark. For this reason, the CNMV issued a communication in January 2021 in which it recommended that entities follow the roadmap published by the FSB. At the same time, we reiterated the recommendations made in July 2019 on:

– The advisability of monitoring developments and actions of the working groups and the main advances in the reform process.

– Identifying and evaluating the risks and possible impacts deriving from their exposure.

– Designing a global strategy to plan the corresponding implementation actions.

– Having an appropriate organisational structure to coordinate the design and implementation of the transition work.

The disappearance of Libor means that the market must move towards alternative rates that, according to the recommendations of the FSB and other authorities, must be based on the risk-free rates identified in each of them: SONIA as a replacement for the GBP Libor references, SOFR for the USD Libor, SARON for references in Swiss francs, TONA for Libor in Japanese yen and the €STR for euro Libor.

One of the essential actions that entities have to complete during 2021 is the amendment of contracts and instruments linked to the benchmark to replace it with the alternative rates recommended by the working groups sponsored by the central banks. In the field of OTC derivatives contracts, the International Swaps and Derivatives Association (ISDA) has designed a Supplement and a Protocol that facilitate the adaptation of contracts. Clearing houses have also played a fundamental role, facilitating the adaptation of centrally cleared derivative contracts and thereby stimulating and facilitating the path for cash transactions and instruments.

The CNMV, like other European and international authorities and institutions, has advised Spanish entities to consider the advisability of subscribing to these ISDA documents, taking into account their particular situation and their own needs, which may be of a legal, accounting or hedging nature.

I also want to underline the importance of the FSB Progress Report to the G20 on Libor Transition Issues, in which it asks the supervisory authorities to urge all participants to act in order to complete the global transition roadmap so that they are prepared for its disappearance at the end of 2021 and to operate in the new environment of risk-free rates.

Situation in the euro area

The situation in the euro area is less disturbing, since the disappearance of Euribor is not envisaged. On the contrary, the reform of its methodology and of its control environment have allowed it to continue measuring the same underlying interest, but in a much more precise way and in compliance with EU regulations. This strengthened methodology has proven its strength, validity and credibility during the COVID-19 crisis.

Regarding the reinforcement of contracts referenced to Euribor, which is a requirement of the Benchmark Regulation, on 11 May 2021 the Working Group published its final recommendation on replacement rates for Euribor based on €STR by type of cash product.

In any case, following the recommendations of the FSB, it is essential, for the sake of financial stability, that a deep and liquid market be developed around risk-free rates which, as they are based on high volumes of money market transactions, are more solid and robust than traditional interbank benchmarks. In the euro area, the designated risk-free rate is the €STR, published by the European Central Bank (ECB) since October 2019.

The €STR is not, however, developing as fast as expected, since market participants continue to operate in the derivatives markets with the Eonia, which is expected to disappear by the end of 2021.

In this regard, it must be remembered that it is important to start operating with the €STR as soon as possible. It is true that the clearing houses plan to switch from clearing of derivatives referenced to Eonia to €STR, which will undoubtedly determine an essential advance in the progress of the market in favour of this benchmark.

Apart from this, it is a legal requirement for contracts to contain fallback clauses, in some cases forward-looking, to reinforce contracts referenced to Euribor, and these forward-looking rates require deep and liquid €STR derivatives markets for their calculation.

Accordingly, it can be expected that market liquidity will shift to the €STR, and that this in turn will allow the development of forward-looking rates.

Conclusion

In short, because these benchmarks play a crucial economic role, it is necessary to strengthen them and ensure their sustainability in order to preserve financial stability. Further, the transition to the new scenario presents a significant set of challenges for both regulators and supervisors and the private sector.

The joint dissemination of information and collaboration with all those involved in this reform process has proven useful and effective. I believe, therefore, that this is the way forward in a matter of such magnitude for our financial system and for our economy.

I conclude by reiterating the CNMV's commitment to monitoring the reforms, so we will continue our work in collaboration with other administrations and with the private sector, and encouraging everyone to decisively undertake the necessary measures to successfully complete the process of reform.

1 Introduction

Víctor Rodríguez Quejido[2]

On 15 June 2021 the CNMV organised the 3rd Conference on "The status of interest rate benchmark reform". Due to the restrictions and preventive measures related to the COVID-19 pandemic, the session was held online, a format which, while not allowing the desired human contact, has the advantages of flexibility and vast reach and dissemination. In fact, at the date of this publication, more than 1,300 people have downloaded the video of the event, which was followed live by more than 200 people.

Since the two previous conferences – the first in June 2018 and the second in October 2019 – there have been significant advances in the benchmarks reform process, which call for this session to inform all participants in the Spanish markets of the current situation and more particularly the events that will take place in a few months' time in relation to the disappearance of Libor, until now the most important benchmark in quantitative terms and the most widely used in the world.

Although Libor is not the most important benchmark among Spanish entities, according to our estimates the level of exposure to this benchmark for Spanish entities, both financial and non-financial, exceeded €2 trillion at the end of last year, so it can be considered a systemic benchmark for our markets. Although the highest exposure figures correspond to financial institutions, non-financial companies that operate in international markets also have exposure to this benchmark, which means that, although it is not quantitatively systemic, its disappearance may have significant repercussions for companies that have to be properly understood and managed.

For this reason, following the recommendations of the Financial Stability Board (FSB) that supervisory authorities adopt measures to promote and facilitate the transition in their respective jurisdictions, the CNMV organised this conference coinciding with the announcement on 5 March 2021 by the UK authorities confirming that Libor would cease to be published with effect from 31 December 2021 at all terms and in all currencies except for US dollars, publication of which would continue until 30 June 2023 to facilitate the transition of current contracts.

In addition, and with regard to the specific situation of the euro area, the final date is approaching for the definitive disappearance of the overnight interbank rate, the Eonia, which has been calculated since October 2019 as the €STR plus 8.5 basis points. Unlike Libor, the Euribor is not expected to disappear. However, the regulations require contracts to be strengthened by means of suitable fallback rates, for which the Working Group on Euro Risk-Free Rates has also just published its recommendations based on using the €STR. For this to occur, it is essential that the markets using this benchmark develop sufficiently.

2 General Director of Policy and International Affairs, CNMV.

All these issues were analysed by a prominent group of panellists in the conference of 15 June, which was divided into two parts, the first on the Libor transition and the second on the particular situation of the euro area in relation to the use of the €STR and the strength of Euribor contracts.

– The session began with a presentation from the European Securities and Markets Authority (ESMA), represented by Iliana Lani, its current head of Ratings, Indices and Securitisations, who put forward the regulatory and supervisory perspective of the benchmark reform in the European Union.

– Moving on to the Libor situation, there was a special presentation by the competent Libor authority, the Financial Conduct Authority (FCA), represented by Edwin Schooling Latter, Director of Markets and Wholesale Policy at the FCA, who outlined the details of the planned calendar up until the benchmark's final disappearance.

– Next, due to the important role that the International Swaps and Derivatives Association (ISDA) has played in promoting and facilitating the reform by adapting the general framework of derivatives contracts to address the reforms, the work carried out in the adaptation of derivative contracts was presented by Ann Battle, who has led the reform process from ISDA.

– This first part concluded with a panel of experts who, moderated by the CNMV, debated and offered different perspectives on the milestones and pending challenges for the cessation of Libor. The General Secretary of the European Association of CCP Clearing Houses (EACH), Rafael Plata, and representatives of two global entities, Banco Santander, represented by Mónica López-Monís, Global Head of Regulatory and Supervisory Relations and Group Senior Executive Vice-President, and Telefónica, represented by Arturo Polo, its Director of Derivatives.

In the second part of the session, dedicated to the euro area, two round tables were held, also composed of experts and moderated by the CNMV:

– A first panel that dealt with the importance of developing the markets around the new €STR benchmark, with Pablo Lago, Head of the Monetary Policy Desk and Liquidity Management unit at the Bank of Spain and Sergi Castellá, Managing Director of ALM, Treasury & Funding at CaixaBank.

– The second panel was made up of representatives of Spanish entities in the Working Group on Euro Risk-Free Rates: Adolfo Fraguas, Director of Legal Services at BBVA and Sergi Castellá from CaixaBank. It was also joined by the administrator of the Euribor – the European Money Markets Institute (EMMI) – represented by its CEO Jean-Louis Schirmann, and Michele Mazzoni from ESMA to discuss the strength of the contracts referenced to Euribor from different perspectives.

– Finally, the Chairman of the CNMV who, due to last minute circumstances was unable to participate in the conference, contributed to this publication with the institutional message of the CNMV.

On behalf of the CNMV, and on my own behalf, I reiterate my thanks to all the attendees, speakers and panellists who took part in the Conference and who have contributed to this publication for their collaboration and support in the objective of disseminating these interest benchmark reforms and promoting the adaptation of markets and their participants.

2 Regulatory and supervisory perspective of the interest rates reform in the European Union

Iliana Lani[3] and Michele Mazzoni[4]

2.1 The impact of Libor discontinuation in the European Union

The process of discontinuing Libor started in July 2017 with a speech on "the Future of Libor" by Andrew Bailey, at the time the Chief Executive of the UK FCA.[5] Since then, many milestones have been already achieved, both by market participants and legislators in different jurisdictions, and the market is now entering the last, crucial phase of the Libor discontinuation process.

Libor, one of the most used benchmarks globally, will soon cease to be published. Its upcoming discontinuation represents a significant market event that impacts the financial system in the European Union (EU) and elsewhere. European financial entities should be in the process of preparing themselves for the discontinuation of Libor, reducing their exposures to all Libor currencies and tenors.

The most used settings of USD Libor (the overnight and 1, 3, 6 and 12 months USD Libor settings) will continue to be published by the Libor administrator (IBA) until 30 June 2023.[6] However, in November 2020 and March 2021, the American Federal Reserve encouraged financial firms to cease entering into new contracts that use any of the USD Libor tenors as a reference rate as soon as practicable and in any event by 31 December 2021.[7] On 2 June 2021, the Financial Stability Board (FSB) and the International Organization of Securities Commissions (IOSCO) issued two statements[8] in which they reiterated the words of the US authorities.

In the European Union too, supervised entities should stop using Libor, including all USD Libor settings, in new contracts before January 2022. On 24 June 2021, the European Securities and Markets Authority (ESMA), together with the European Banking Authority (EBA), the European Central Bank (ECB) and the European Commission published a statement[9] defining the supervisory expectations about the use of Libor in the EU in the next months. In this statement, ESMA, the ECB and the European Commission encourage EU supervised entities to:

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3 Head of Ratings, Indices and Securitisation (RIS) Department, ESMA.

4 Senior Officer, Ratings, Indices and Securitisation (RIS) Department, ESMA.

5 See: https://www.fca.org.uk/news/speeches/the-future-of-libor

6 See the 5 March 2021 IBA communication on its intention to cease the publication of the Libor settings: https://ir.theice.com/press/news-details/2021/ICE-Benchmark-Administration-Publishes-Feedback-Statement-for-the-Consultation-on-Its-Intention-to-Cease-the-Publication-of-Libor-Settings/default.aspx

7 See: https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20201130a1.pdf (November 2020), and https://www.federalreserve.gov/supervisionreg/srletters/SR2107.htm (March 2021).

8 See: https://www.fsb.org/wp-content/uploads/P020621-4.pdf (FSB) and https://www.iosco.org/library/pubdocs/pdf/IOSCOPD676.pdf (IOSCO).

9 See: https://www.esma.europa.eu/sites/default/files/library/joint_public_statement_usd_libor.pdf

– Stop using the 35 Libor settings, including USD Libor, as a reference rate in new contracts as soon as practicable and in any event by 31 December 2021.

– Limit the use of any Libor setting published under a changed methodology (also known as "synthetic" Libor) only to contracts that are particularly difficult to amend ahead of Libor's cessation (commonly referred to as "tough legacy").

– Include robust fallback clauses nominating alternative rates in all contracts referencing Libor.

It should be noted that the regulatory framework around the discontinuation of systemically important benchmarks has been recently complemented by the EU legislators, granting a new power to the European Commission. Pursuant to the new Article 23(a) of the Benchmark Regulation (BMR), the European Commission can now designate replacement rates for an interest rate benchmark if its cessation would significantly disrupt the functioning of EU financial markets or pose a systemic risk to the EU financial system.

The European Commission is currently considering the use of this new power in relation to Swiss Franc Libor because this interest rate is used in retail mortgages in some EU Member States. In March this year the European Commission issued a Consultation Paper[10] regarding this process to gather the views of the stakeholders. The Consultation Period is now over and soon the European Commission will inform the public about the next steps for the designation of the Swiss Franc Libor replacement rate.

2.2 The interest rates reform in the euro area

The Euro Short Term Rate, or €STR, published by the ECB,[11] arguably represents the central piece of the interest rate puzzle in the European Union. In September 2018, €STR was elected by the Working Group on Euro Risk-Free Rates as the new risk-free rate for the euro and, at the end of 2021, with the planned discontinuation of Eonia, €STR will permanently substitute Eonia as the euro overnight rate. The finalisation of the switch from Eonia to €STR by EU financial firms is crucial.

Financial firms need to take every necessary action to ensure the full and timely transition from Eonia to €STR, as only few months remain before the end of Eonia. EU supervised entities should now actively use €STR instead of Eonia in all their new contracts, as well as in their internal systems and calculations. More work is needed to ensure that the EU financial system is ready to adapt to a world without Eonia, and the dealers should now focus on the development of a liquid and robust market around €STR.

In relation to Euribor, on 11 May 2021 the Working Group on Euro Risk-Free Rates published its final recommendation on Euribor fallback trigger events and €STR-based Euribor fallback rates.[12] This document has been the most complex achievement

10 See: https://ec.europa.eu/info/consultations/finance-2021-chf-libor-rate_en

11 See: https://www.ecb.europa.eu/stats/financial_markets_and_interest_rates/euro_short-term_rate/html/index.en.html

12 See: https://www.ecb.europa.eu/pub/pdf/other/ecb.recommendationsEURIBORfallbacktriggereventsandE-STR.202105~9e859b5aa7.en.pdf

reached so far by the Working Group and represents a turning point for the interest rates reform in the European Union.

It provides market participants with clear indication on how to include fallback provisions in cash products referencing Euribor. The final recommendation does so by identifying the specific trigger events that the fallback provisions should include and, for each asset class identified within the cash products category, recommends a precise fallback rate based on €STR.

In January 2022, ESMA will substitute the Belgian Financial Services and Markets Authority (FSMA) as supervisor of Euribor administrator. ESMA does not anticipate the discontinuation of Euribor in the foreseeable future. In July 2019, the Belgian FSMA authorised the provision of Euribor by its administrator, the European Money Markets Institute (EMMI), on the basis of the new, hybrid methodology.[13] This authorisation will continue to be valid once ESMA will be EMMI's supervisor. ESMA considers the new hybrid methodology of Euribor to be robust and BMR compliant. Thanks to its new methodology, and the waterfall approach within it, Euribor was able to smoothly navigate the worst moments of the COVID-19 pandemic, between Q1 and Q2 in 2021.

The resilience of Euribor methodology, however, does not diminish the importance of the inclusion of fallback provisions in Euribor contracts. Considering that, in Spain and in other Member States, many counterparties to Euribor contracts are European households, and not professional investors, ESMA does not think that supervised entities can afford to take the minimum risk of contract frustration vis-à-vis Euribor products.

This is the reason why the latest recommendations by the Working Group on Euro Risk-Free Rates are extremely important. They also allow EU supervised entities to fully comply with the BMR, as the inclusion of fallback provisions in all Euribor contracts is a regulatory requirement under Article 28(2) of such Regulation. In the next months, ESMA, together with the CNMV and the other national authorities, will monitor the implementation by EU supervised entities in order to ensure that this step of the EU interest rates reform is fulfilled.

2.3 The role of ESMA: The Working Group on Euro Risk-Free Rates & direct supervision

Following the publication of the final recommendations on Euribor fallback trigger events and €STR-based Euribor fallback rates, the Working Group on Euro Risk-Free Rates accomplished its original mandate. However, the interest rate reform in the European Union is not over and therefore ESMA, together with the ECB, the European Commission and the Belgian FSMA, decided to start a new chapter for the Working Group.

The Working Group on Euro Risk-Free Rates is currently transitioning to a new format, in which ESMA is substituting the ECB as secretariat and Deutsche Bank is taking over the role of the Chair from ING. With this new setting, the Working Group will continue to represent the main forum where private and public sectors

13 See: https://www.fsma.be/en/news/fsma-authorises-emmi-administrator-euribor-benchmark

get together to exchange views and discuss challenges and solutions regarding issues emerging from the interest rates reform in the EU.

Many steps forward have been made since the creation of the Working Group on Euro Risk-Free Rates in early 2018. In addition to the final recommendation on Euribor fallback provisions, it should be noted that the Working Group published numerous reports, concerning various aspects of the interest rates reform in Europe, and it also recommended the modification of Eonia methodology, which is now equal to €STR plus 8.5 basis points, and the accompanying legal action plan, ensuring that each legal aspect of the transition from Eonia to €STR is clarified. In other words, over the last years the Working Group on Euro Risk-Free Rates has really been the main engine behind the interest rate transition in the EU.

Notwithstanding all the tangible results that the Working Group on Euro Risk-Free Rates has already accomplished, its journey is not over, and the rest of 2021 represents a critical time during which the Working Group must continue to play its role, in light also to the extensive knowledge and expertise that it has accumulated over the last years. A new webpage of the Working Group on Euro Risk-Free Rates is now published on ESMA website,[14] where any new document of the Working Group will be published going forward.

This is not the only change that is happening at ESMA in relation to benchmarks. As already mentioned, ESMA will become the supervisor of the administrator of Euribor, EMMI, at the end of 2021, replacing the Belgian FSMA. Thanks to a smooth cooperation with the Belgian FSMA, the preparatory work at ESMA to become the supervisor of EMMI is on track and ESMA will soon be ready to fulfil its new supervisory role. ESMA will also become the Chair of the Euribor college of supervisors, in which the CNMV has been a very active member since the college first meeting in 2017.

Besides, at the end of 2021 ESMA will also become the supervisor of non-EU benchmarks administrators which are registered under the recognition regime of BMR. There are already six non-EU administrators (based in the United States, Japan and Switzerland) that are recognised in the EU.[15] The number of non-EU administrators recognised in the EU is expected to gradually grow over time. The supervision of non-EU administrators represents an additional new important task for ESMA in the area of direct supervision.

Finally, in the context of the broader BMR, ESMA will continue to foster supervisory convergence among the EU Member States. As part of the supervisory convergence activities under BMR, ESMA and the National Competent Authorities will cooperate, inter alia, on the supervision of the obligations applicable to supervised contributors (Article 16 of BMR) and on the monitoring of the requirements applicable to users of benchmarks (Article 28(2) of BMR).

14 See: https://www.esma.europa.eu/policy-activities/benchmarks/working-group-euro-risk-free-rates

15 See the non-EU administrators recognised under the BMR in the ESMA register of benchmark administrators: https://registers.esma.europa.eu/publication/searchRegister?core=esma_registers_bench_entities

2.4 Conclusion

The interest rates reform is a multi-year effort presenting challenges of different nature. Some of them have been already solved thanks to an important collaboration between the private and the public sectors, within the Working Group on Euro Risk-Free Rates and in similar working-groups in other jurisdictions. A few challenges are still pending and, for the issues related to Eonia and to Libor, the solutions must be found before the end of 2021.

As the new secretariat of the Working Group on Euro Risk-Free Rates and the future supervisor of Euribor administrator, ESMA will play an even bigger role in the interest rates transition in the EU. ESMA therefore stands ready to fulfil its enhanced mission and to cooperate with stakeholders from both the public and the private sectors to ensure the accomplishment of the interest rate reform in the EU.

Part I
Libor transition

3 Calendar for the cessation of Libor

Edwin Schooling Latter[16]

3.1 Introduction

Following Andrew Bailey's announcements in 2017, there is now just over 6 months to go until the end of Libor as we have known it. There have been many challenges along the way. But the close collaboration between the official sector, market participants and their representative bodies has enabled us to overcome these challenges and get where we are today – certainty that panel bank Libor will stop at the end of this year (and at end-June 2023 for five of the USD Libor settings), and that most of the market is ready for that. The timetable varies a bit by product and by currency. But in sterling markets, for example – where Libor used to be deeply embedded – liquidity has largely moved from Libor to overnight rates.

3.2 USD Libor

At first glance, it looks like USD Libor will go on for 18-months longer than the other four Libor currencies. However, the path set out for USD Libor is not so different from that for sterling and yen. New use of USD Libor is also expected to stop at end 2021, or indeed as soon as practicable before that date. The additional 18 months for USD Libor is intended for legacy contracts only. So, there is much more symmetry with the approach for yen and sterling – where the UK FCA is proposing a synthetic Libor for legacy contracts only – than if you just look at panel end dates. US authorities published[17] in December last year their supervisory guidance on stopping new use of dollar Libor by the end of 2021.

3.3 SOFR-First

To help build liquidity in SOFR, US authorities, and major dealers and interdealer brokers in the United States, and the United Kingdom, are putting their collective weight behind a "SOFR-First" initiative. This is scheduled for 26 July. From that date, interdealer brokers are asked to replace trading of Libor linear swaps with trading of SOFR swaps. Based on a similar exercise in linear sterling swaps in October last year, and in non-linear sterling derivatives last month, this step will cause trading activity amongst swap dealers on these platforms to switch from Libor to SOFR. Prior to our own SONIA-First initiative in the United Kingdom, sterling Libor was still about 70% of our swaps volume. Now SONIA accounts for over 70%.

16 Director of Markets and Wholesale Policy, Financial Conduct Authority.

17 See: https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20201130a1.pdf

3.4 Credit sensitive rates

Andrew Bailey, Governor of the Bank of England, and the FCA have warned publicly about the risks embedded in so-called "credit sensitive" rates, which some commentators have suggested as a successor to Libor. The Securities and Exchange Commission (SEC) Chairman Gary Gensler has also set out[18] several concerns about these rates. In the United Kingdom, there has been a clear consensus from the beginning that credit sensitive rates are not required or wanted.

We saw in spring 2020 how yields on commercial paper, on which these credit sensitive rates are based, rose sharply. That increase was not so much a sudden deterioration in perceptions of bank credit quality. Nor did it reflect a similar increase in the average cost of new bank funding. It was about liquidity. What we really saw was "liquidity-sensitive" rates. Such sudden and to some extent obscurely sourced movements in rates are not an easy thing to explain to borrowing customers. So, firms should consider this carefully before offering products tied to such rates.

3.5 ISDA Protocol

The success of the ISDA Protocol for uncleared derivatives has been a key achievement in the Libor transition journey.

We've calculated that over 85% of outstanding uncleared sterling Libor derivatives have two-sided adherence to the Protocol. For that part of the USD swaps market, which is reported into the United Kingdom, two-sided adherence is a little over 90%. So, with the conversion to SONIA that will also take place at central counterparties (CCPs), 97.5% of the outstanding sterling Libor swaps market will convert to SONIA by year end. Similarly, those 90%+ of uncleared USD swaps, plus the cleared USD swaps, will convert to SOFR in mid-2023. So, it is clear liquidity will be concentrated in the new overnight RFRs.

The ISDA Protocol is still open for those that have not signed already. In the United Kingdom and the European Union, having fallbacks is a requirement under the Benchmarks Regulation (BMR) and the ISDA Protocol is one way to meet that requirement.

Many national working groups have also recommended the use of ISDA's spread adjustment in cash products too. The Financial Stability Board (FSB) released a statement[19] supporting this approach. Such consistency across asset classes and jurisdictions will help a smooth transition.

3.6 International co-ordination

Market participants regularly note the importance of coordination and consistency between international authorities on transition, and in particular when it comes to legislation to help contracts that can't be transitioned away from Libor. When dealing with a global issue like Libor, you need legislation to work in more than one

18 See: https://www.sec.gov/news/public-statement/gensler-fsoc-libor-2021-06-11
19 See: https://www.fsb.org/wp-content/uploads/P020621-3.pdf

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jurisdiction. So, the tools established in the United Kingdom, the United States and the European Union complement each other nicely. The ability for the European Commission, for example, to designate replacement rates where needed is a smart and flexible tool, enabling alignment where that's best, and tailored local solutions where needed.

Our key message for market participants is to be reassured that authorities have been cooperating closely and will continue to do so. From the beginning, this transition has involved international co-operation – through FSB and the International Organization of Securities Commissions (IOSCO).

3.7 Conclusion

We will continue to complete our transition work in the official sector. But most important of all is that you, as market participants, complete yours.

4 Adaptation of derivatives contracts

Ann Battle[20]

4.1 ISDA IBOR Fallbacks

To address the risk that one or more interbank offered rates (IBORs) are discontinued while market participants continue to have exposure to that rate, counterparties are encouraged to agree to contractual fallback provisions that would provide for adjusted versions of the risk-free rate (RFR) for the applicable currency as a replacement rate. It is impossible to overstate the significance of fallbacks, both in mitigating the systemic risk that would arise from the cessation of a key IBOR and in moving the industry a step further in the long journey away from Libor. International Swaps and Derivatives Association (ISDA) worked on the development of derivative fallbacks for over four years, engaging in complex, technical work in collaboration with the industry and regulators to develop the adjustments that would be applied to an RFR-based fallback so it could replace an IBOR as a reference rate without materially changing the original objectives of the transaction.

On 23 October, ISDA launched the IBOR Fallbacks Supplement (Supplement 70 to the 2006 ISDA Definitions) and IBOR Fallbacks Protocol. The Supplement amends ISDA's standard definitions for interest rate derivatives to incorporate robust fallbacks for derivatives linked to certain IBORs. These changes came into effect on 25 January 2021. Transactions incorporating the 2006 ISDA Definitions that are entered into on or after 25 January 2021 include the amended floating rate options (i.e., the floating rate options for the relevant IBORs with the fallbacks). Transactions entered into prior to 25 January 2021 (so called "legacy derivative contracts") continue to be based on the 2006 ISDA Definitions as they existed before they were amended pursuant to the Supplement, and therefore do not automatically include the amended floating rate option with the fallback.

The IBOR Fallbacks Protocol facilitates multilateral amendments to include the amended floating rate options, and therefore the fallbacks, in legacy derivative contracts. By adhering to the IBOR Fallbacks Protocol, market participants agree that their legacy derivative contracts with other adherents include the amended floating rate option for the relevant IBOR and therefore include the fallback. The IBOR Fallbacks Protocol is completely voluntary and amends contracts only between two adhering parties (i.e., it does not amend contracts between an adhering party and a non-adhering party or between two non-adhering parties). The fallbacks included in legacy derivative contracts by adherence to the IBOR Fallbacks Protocol are exactly the same as the fallbacks included in new transactions that incorporate the 2006 ISDA Definitions and that are entered into on or after 25 January 2021. To date, over 14,000 entities from over 100 jurisdictions have adhered to the IBOR Fallbacks Protocol.

20 Head of Benchmark Reform, ISDA.

Broad adherence to the IBOR Fallbacks Protocol is a major achievement and will significantly reduce the systemic impact of an IBOR permanently ceasing or, in the case of Libor, being deemed non-representative. According to analysis by the UK Financial Conduct Authority (FCA), over 85% of non-cleared interest rate derivatives in the United Kingdom referenced to sterling Libor now have effective fallbacks in place because both counterparties have adhered to the Protocol. Once cleared derivatives and futures (which include the fallbacks pursuant to clearinghouse rulebooks) are added, approximately 97% of sterling Libor interest rate derivatives are covered by fallbacks.

While fallbacks should not be used as the primary means of transitioning from IBORs to the RFRs, they will act as a critical safety net and risk mitigant, ensuring contracts that continue to reference IBORs switch to the adjusted RFR fallback if the relevant IBOR ceases to exist or, in the case of Libor, is deemed by the FCA to be non-representative of its underlying market.

However, the job is not done. Fallbacks are a vital one-size-fits-all safety net to ensure a workable back-up rate based on a clear, consistent and transparent methodology automatically applies at the point an IBOR ceases to exist, or Libor becomes non-representative, which will mitigate against the risk of market disruption. However, once robust fallbacks are in place, regulators have emphasized that market participants may be able to better tailor the economic terms of their contracts by actively transitioning their portfolios to alternative rates before any cessation or non-representativeness event. It is also necessary to develop solution for outstanding tough legacy exposures – those predominantly cash contracts for which it is not possible to make contractual amendments – and ensuring that solution is as consistent as possible across linked products and jurisdictions.

4.2 UK FCA announcement and the end of Libor

It has long been clear that market participants cannot rely on Libor after the end of 2021, but on 5 March 2021 the FCA gave firms a clear timetable for when they need to shift to alternative reference rates. Since that date, the derivatives industry has had clarity on exactly when new fallbacks for outstanding Libor exposures will kick in for all 35 currency and tenor pairs pursuant to the IBOR Fallbacks Supplement and the IBOR Fallbacks Protocol, as well as the spread adjustments that will be added to the adjusted RFRs in the fallback methodology.

Following a consultation by ICE Benchmark Administration (IBA), the administrator of Libor, the FCA confirmed that all seven tenors for both euro and Swiss franc Libor, overnight, 1-week, 2-month and 12-month sterling Libor, spot next, 1-week, 2-month and 12-month yen Libor and 1-week and 2-month USD Libor will permanently cease immediately after 31 December 2021. Publication of the overnight and 12-month USD Libor settings will cease for good immediately after 30 June 2023.

Furthermore, the FCA stated that it intends to consult on using proposed new powers under the Financial Services Bill to require IBA to continue publishing 1-month, 3-month and 6-month sterling Libor on a synthetic basis for a further period after the end of 2021, and 1-month, 3-month and 6-month yen Libor on a synthetic basis for an additional year after end-2021. The FCA launched such a consultation in June 2021. The FCA also stated that it will consider the case for requiring IBA to continue publishing 1-month, 3-month and 6-month USD Libor on a synthetic basis for a further period after the end of June 2023.

Importantly, the FCA confirmed these settings would no longer be representative of their underlying market after 31 December 2021 (for the six sterling and yen Libor tenors) and 30 June 2023 (for the three USD Libor tenors). It also stressed that use of synthetic Libor by UK regulated firms will not be permitted for new trades, while use by regulated firms in legacy transactions will be subject to permission from the FCA under its proposed new powers.

As well as providing clarity on the Libor timetable, the FCA statement represented an index cessation event under the IBOR Fallbacks Supplement and the IBOR Fallbacks Protocol, triggering a fixing of the fallback spread adjustment at the point of the announcement.

This spread adjustment is an important part of the overall fallback rate and reflects a portion of the structural differences between the IBORs and the RFRs used as a basis for the fallbacks – IBORs incorporate a credit risk premium and other factors, while RFRs are risk free or nearly risk free. Following multiple industry consultations by ISDA, it was determined that the fallback for each IBOR setting will be based on the relevant RFR compounded in arrears to address differences in tenor, plus a spread adjustment to account for the credit risk premium and other factors, calculated using a historical median approach over a five-year lookback period from the date of an announcement on cessation or non-representativeness. The information conveyed by the FCA on 5 March 2021 constituted such an announcement.

While the Libor spread adjustments were fixed at the point of the FCA announcement, the fallbacks will apply when each Libor setting ceases or becomes non-representative – so, after 31 December 2021 for outstanding derivatives that continue to reference all euro, sterling, Swiss franc and yen Libor settings. However, there are some nuances for USD Libor.

All USD Libor settings will continue to be published until the end of 2021. After that point, 1-week and 2-month USD Libor will cease, but the new fallbacks will not immediately take effect. Instead, the rate for the 1-week and 2-month USD Libor settings will be computed by each calculation agent using linear interpolation between the next shorter and next longer tenors that continue to be published. The fallbacks for all USD Libor settings will then apply after the end of June 2023, when the remaining USD Libor tenors cease or become non-representative.

As USD Libor is a component in the calculation of the Singapore dollar Swap Offer Rate and the Thai Baht Interest Rate Fixing, fallbacks for these rates will also apply after 30 June 2023.

4.3 Adoption of RFRs

With the fallbacks safety net in place, a major milestone in benchmark reform has been achieved, and market participants should be able to turn their attention more fully to voluntary RFR adoption.

ISDA-Clarus RFR Adoption Indicator tracks how much global trading activity (as measured by DV01) is conducted in cleared over-the-counter and exchange-traded

Interest Rate Derivatives (IRD) that reference the identified RFRs in six major currencies. It increased to 10.7% in May 2021 compared to 10.1% the prior month. On a traded notional basis, the percentage of RFR-linked IRD increased to 11.8% of total IRD in May compared to 10.8% the prior month.

Clearly, work is still required to build deep and liquid markets based on the RFRs, but there is no doubt that liquidity is moving in the right direction. ISDA's ongoing work on benchmark reform will help to support this. We recently published standard definitions for daily RFRs that can be used in new transactions, as well as materials for compounding conventions and non-linear products.

Milestones and pending challenges for the cessation of Libor

5 Libor transition: Challenges and preparation for global financial institutions

Mónica López-Monís[21]

The Libor reform is a long-term process promoted by international authorities whose final phase of discontinuation was announced to the market in March 2021 with the communication by the administrator of Libor (published in five currencies and seven terms) of the discontinuation dates or loss of representativeness. From this date, the planning and the message of the competent authorities is a resounding one: Libor must not be used in new contracts from 2021. Additionally, in an effort to facilitate the transition of existing contracts, GBP and JPY Libor will continue to be provided on a synthetic basis. USD Libor settings will continue to be published, with the contribution of the panel banks, until June 2023. In summary, financial institutions, but also other market participants, must actively and promptly prepare for the discontinuation of Libor.

Financial entities have participated in working groups promoted by the authorities in which the public and private sectors have discussed the best way to carry out the Libor transition. The public sector is doing important work to facilitate the Libor transition, work that is proving decisive as a driver of the transition.

The roadmap drawn up in the Libor transition follows the guidelines set by central banks and the recommendations of industry groups and transforms them into specific market milestones (discount curves in clearing houses, derivatives protocol, bilateral agreements, etc.). Due to the importance of their activity, financial institutions have a dynamic role in the reform of the benchmarks as agents enabling change.

21 Global Head of Regulatory and Supervisory Relations, Group Senior Executive Vice-President, Banco Santander.

Libor transition: Regulatory and supervisory context

– Since 2015, central banks and regulators in several major jurisdictions have formed working groups to find and implement suitable fallbacks for current IBORs such as the Eonia and Libor.

– On 27 July 2017 the CEO of the UK Financial Conduct Authority (FCA), which supervises Libor, publicly stated that it would not encourage or oblige financial institutions that are part of the Libor panel to publish information relating to this benchmark beyond the end of 2021.

– In October 2020, the International Swaps and Derivatives Association (ISDA) published its IBOR Fallbacks Protocol, which came into effect on 25 January 2021 and provided derivatives market participants with new Libor fallbacks for current and new derivatives contracts. Banco Santander, S.A. and several subsidiaries of the group have subscribed to this Protocol.

– In December 2020, ICE Benchmark Administration (IBA), an entity regulated by the FCA and authorised administrator of Libor, announced its intention of ceasing publication of the 1-week and 2-month USD Libor settings at the end of 2021 and of the remaining settings (1-day and 1, 3, 6 and 12-months) at the end of June 2023.

– In December 2020, the European Union (EU) approved new rules amending the EU Benchmark Regulation (BMR). The objective of these amendments to the BMR is to make sure that regulators can establish a statutory replacement benchmark before a systemically important benchmark is discontinued and thus protect the financial stability of the EU markets. In this regard, in June 2021, an EBF-EACB (European Banking Federation and European Association of Cooperative Banks) joint communication urged the European Commission to take a broad view of the global significance of the discontinuation of Libor, proposing a global solution for the Libor currencies and terms aligned with the recommendations and solutions put forward by the working groups of the United Kingdom and the United States and by competent authorities and central banks of other third countries.

– On 5 March 2021, after analysing the results of the public consultation carried out by the benchmark administrator, IBA, in December 2020, the FCA officially announced the cessation of publication of Libor.

In any case, the global preparation of all industry participants is vital and both financial and non-financial institutions face various challenges.

5.1 Challenges of the transition

1. **Diversity of alternatives among jurisdictions:**

– Five risk-free rates (€STR, SARON, SOFR, SONIA and TONA) have been identified for each of the Libor currencies with different transition alternatives.

– They are 1-day (overnight) and retrospective (backward looking) indices. SARON and SOFR are based on "guaranteed" operations, which further differentiates them from Libor.

– Libor is a forward-looking index and it includes a credit spread. To avoid this difference in determining the rates at term and the credit spread, a methodology has been defined for adjusting between Libor and risk-free rates.

– Scrutiny and regulatory demands from different jurisdictions.

2. **Market development based on Risk-Free Rates (RFRs):**

– It is critical that there be liquidity in the RFR derivatives markets to consolidate their use in terms of products and the development of the term curve.

– Financial products need homogeneous and global solutions.

3. **Need for a term curve**

– Term curves are expected to exist for all risk-free rates except SARON. SONIA has had a forward-looking term rate since January 2021 and SOFR will probably have one later in 2021. In the case of €STR, it is planned for late 2021 or early 2022.

4. **Incorporation and definition of fallbacks to cover the cessation of Libor in financing products.**

5. **Solution for "tough legacy" contracts.**

6. **Need to develop legislative solutions: Statutory replacement rate / Methodological change in (synthetic) Libor.**

7. **Appropriate management of risks and financial, accounting (valuation/hedging), legal and behavioural aspects.**

8. **Communication to clients:**

– Transparent explanation of the reform.

– Renegotiation of contracts if necessary.

In view of these challenges, we would stress that an orderly Libor transition involves providing the market with non-disruptive alternatives that must address the international nature of the transactions carried out, whether these involve financing, hedging or issues of debt.

From the point of view of preparing for the transition, the authorities have required banks to have planning and governance that are appropriate to their exposure to Libor. In this context, banks are preparing, with the aim of making the transition smooth for our businesses and customers. In order to control risks and address the different challenges generated by the transition, Banco Santander launched its IBOR Transition Programme in 2019.

At this point in the Libor transition, and because of its global nature, it is more important than ever to stress that market participants and clients must prepare for an imminent change. For this preparation, guides, working group recommendations, and also precise guidelines on progressive restrictions on the use of Libor have been published. All these references are very useful and valuable for answering various questions seeking to understand the dimensions of the Libor reform, the implications and the risks inherent in not reducing exposure to Libor.

5.2 How to prepare

1. Understanding the dimensions of the reform and the risks inherent in the transition:

- Quantify and monitor exposures to Libor.
- Understand how it affects existing contracts and how new ones must be documented. Assess the need to request information from advisers.
- Understand how it affects the infrastructure that supports business processes.
- Assess how market developments affect (clearing houses, publication of spreads, etc.).
- Assess the risks and possible accounting, legal, business, operational, prudential and behavioural impacts associated with the transition in different scenarios.
- Consider regulatory obligations and industry recommendations.

2. Actively reduce dependence on Libor:

- Plan actions to be implemented.
- Define scenarios and a roadmap for the transition of legacy products.
- Proactively use RFRs to replace Libor.
- Consider the need to transition when operating with products with expiry dates after 2021.
- Reduce exposure to Libor, do not overestimate the impact of regulatory measures in relation to the cessation of marketing of financial products.
- Communicate with clients and stakeholders.

5.3 Conclusions

- It is essential to ensure that the transition from Libor to risk-free rates happens non-disruptively. In this sense, the construction and publication of forward-looking term rates based on liquid derivatives markets is key to completing the transition, especially in retail or emerging market financing.

- The market sets the pace of the reform, the speed of transition to risk-free rates will increase as the market milestones are completed in the second half of 2021 and the existence of alternatives that cater to the different particularities of businesses and financial products.

- The ISDA Protocol represents a reduction in the risk of contractual uncertainty for derivatives, which account for by far the greatest exposure to Libor in the market. It is important for the success of the reform that this standard be adopted.

- The cases of use relating to spot products have been extensively analysed and fallback clauses are a tool to avoid disruptive situations that can complicate the Libor transition. Financing is a vital activity for the global economy which therefore needs global and at the same time precise solutions for the retail and international business financing activity.

- Official support from authorities and regulators is key to incentivising market participation. The authorities and the market must analyse possible alternatives to increase contractual strength and assess the need to provide a legal framework to reduce possible contingencies with effects on financial stability.

- Banks have an important energising role in the reforms. In performing this role they must understand the needs and degree of readiness of market participants and especially their clients, adapting to their level of sophistication, resources, business they carry out and their capacity for preparation.

- All sectors must prepare according to the strategic importance of their exposure to Libor. Knowledge and understanding of the reform is essential in order to analyse how it affects their processes and the businesses in which they operate.

- Banco Santander considers a basic line of its approach to benchmark reform to be the degree of readiness and the difficulties that its clients may have as the already clearly announced disappearance of Libor progresses.

6 Libor transition: Perspective of non-financial entities

Arturo Polo[22]

The reform of the Libor benchmark may be one of the most important milestones in financial markets in recent years. It is a reform that affects both financial and non-financial counterparties. It is a major challenge that spans many levels within organisations – front office, middle office, accounting, back office, systems and legal to name just a few.

Non-financial counterparties face an additional challenge because this reform affects both financial derivatives and the underlying debt positions that they hedge. Therefore, entities have to ensure that both the underlying and the hedge derivative switch to the same benchmark to avoid hedge accounting problems. Likewise, it is necessary to identify both the gross and net exposures in the derivative positions as well as the underlyings affected.

All these changes must be properly documented and two ways of doing this have been made available to users. The first is to subscribe to the ISDA Protocol and its Supplement. Alternatively, bilateral contracts can be signed between the counterparties, contracts that, incidentally, ISDA itself makes available to users. Subscribing to the Protocol is the fastest, easiest and most automatic way to make these changes, but it is a very rigid option and many users may prefer the option of bilateral contracts which, although requiring an arduous process of preparation and negotiation, allows more flexibility when considering the specifications that each company may require in the contracts.

At the level of company systems and processes, all have to be adapted to reflect the new ways of calculating risk-free rates, application of which is more complex and also affects the back office. This is because the calculations are performed in arrears and daily compounded, which means that the payment flow will not be known until a date close to payment.

This reform affects several jurisdictions and with different dates, so users have to be very attentive to any changes in the rules.

In short, this reform and the fact that the most widely used benchmark will soon cease to be usable, requires users to define a coordinated strategy across their organisation, with special emphasis on the legal aspects and impacts that it entails.

22 Director of Derivatives, Telefónica.

7 Risk management and risk-free rates: The contribution of CCPs to a successful transition

Rafael Plata[23]

7.1 CCPs and their link to the Libor reform

Central Counterparties (CCPs) are financial market infrastructures that guarantee the enforcement of transactions between buyers and sellers (i.e., the counterparties) of financial instruments (e.g., shares, bonds and derivatives) negotiated on trading venues (e.g., a "stock exchange" or bilaterally between banks (Over-The-Counter or OTC)) through a process called clearing. There are currently 19 CCPs Members of the European Association of Clearing Houses (EACH) providing services to its users.[24]

A CCP is therefore designed to guarantee the performance of trades, even upon the occurrence of extreme but plausible events. Because CCPs guarantee the performance of trades linked to Libor and other indices included in the benchmarks reform towards risk-free rates indices, it is in the interest of CCPs and its users to ensure a good transition to these risk-free rates. Such as smooth transition to indices that are true representatives of their underlying market would therefore contribute to smooth CCP risk management for the benefit of a stable financial market.

7.2 The functions of a CCP

In relation to the important function of trade guarantee, a CCP benefits the market by providing:

– **Efficiency**

  • **For users:** A CCP reduces the obligations between counterparties by netting offsetting positions, reducing the number of settlements and the funding needs of counterparties.

  • **For the market/real economy:** Through netting and the provision of offsets, a CCP reduces the volume of risk in the market and optimises the use of funding resources.

– **Risk management**

  • **For users:** A CCP independently and continuously manages the risk of counterparties and ensures there are sufficient resources available to deal

23 Secretary General, EACH.

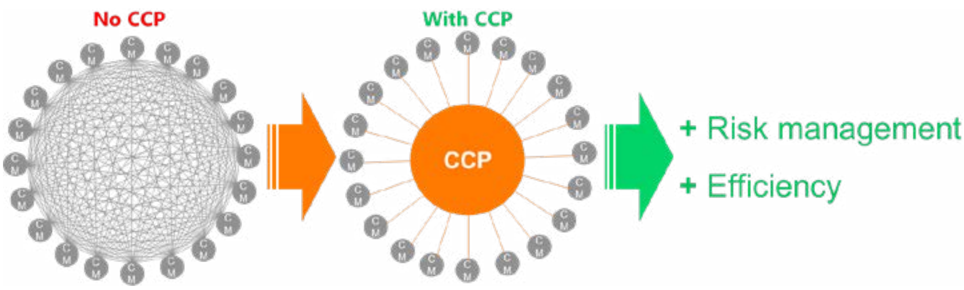
24 See: https://www.eachccp.eu/members/

with extreme but plausible market events (e.g., the default of several large clearing members – which typically include banks).

- **For the market/real economy:** A CCP limits the impact of stress events and reduces the risk of such events across the relevant market and the wider financial system. CCPs reduce the chance that the collapse of a financial institution will directly lead to financial losses by other clearing members or other participants in the market, including clients of clearing members who, in many cases, are participants in the real economy.

CCPs must ensure they have adequate resources to support each clearing member's position in the event the member defaults and is unable to meet the obligations of their positions. These resources are contributed by the CCP and the clearing members and, indirectly, the clients of clearing members. The resources must be balanced in a way that ensures those that take risk in the market provide sufficient funding to support those positions and provides incentives for the CCP, to perform adequate risk management. These resources currently amount to some €300 billion.[25]

The benefits of a CCP FIGURE 7.1



7.3 Work done to date on the benchmarks reform

For several years now, CCPs have been working with market participants to ensure a smooth and orderly transition towards risk-free rates. A major step took place in 2020 when, further to the request of the ECB's Working Group on Euro Risk-Free Rates,[26] European CCPs coordinated to ensure they all chose the same discounting switch from Eonia to €STR. This work was coordinated by the Euro Risk-Free Rates Working Group of EACH, chaired by Nathan Appel (Eurex Clearing) and Mónica Blanco (BME Clearing). After a slight delay as requested by users, European CCPs successfully transitioned from Eonia to €STR on 27 July 2020. This meant that CCPs no longer used Eonia as a reference benchmark, while the benchmark still existed and some legacy contracts linked to it were live and had to be handled by CCPs.

A similar switch from USD to SOFR took place on 16 October 2020.

25 Based on CCP's Public Quantitative Disclosure as published in https://www.eachccp.eu/cpmi-iosco-public-quantitative-disclosure/

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

Further to a successful 2020, the focus of year 2021 is twofold: Contractual conversion from Eonia to €STR and contractual conversion from Libor in different currencies to different risk-free rates. All these events are scheduled to take place in the second half of 2021 (see Table 7.1).

Steps in the benchmark reform during year 2021 TABLE 7.1

16 October	3/4 December	17/18 December	31 December
Contractual conversion Eonia → €STR	Contractual conversion Libor (CHF, EUR and JPY) → (SARON/€STR /TONAR)	Contractual conversion Libor (GBP) → (SONIA)	Cessation of Eonia and Libor (CHF, EUR, GBP, JPY)

A final transition from Libor (USD) to risk-free rates is scheduled to take place in June 2023.

7.4 Milestones ahead for CCPs in their transition towards risk-free rates

Given the challenging transition schedule for year 2021, CCPs affected by these transitions have developed intense project management that include user consultations and testing.

A large amount of user consultation related to the transition took place already during the last part of 2020 and the beginning of 2021. The objective of this consultations and testing was the maximisation of the success in transitioning to Libor and to hopefully minimise the use of fallbacks as described by International Swaps and Derivatives Association (ISDA)[27] in their Supplements to the 2006 ISDA Definitions published on 21 January 2021.

CCPs have already started to perform tests with market participants to ensure that issues that may occur during the conversion date are identified as much as possible in advance.

In the months to come and especially around the transition dates in the fourth quarter of 2021, CCPs will consider amongst other the following areas:

– **Operational management:** The technical interfaces of CCPs and clearing members are being adapted to accommodate the new contracts. CCPs will also choose ways to operational execute this conversion.

– **Legal management:** CCPs have generally revised their clearing rules to amongst other, refer to the ISDA IBOR Fallbacks supplement. When the conversion dates come, CCPs will need to reflect the conversion of trades in legal form (e.g., an amendment to the relevant trade).

– **Economic equivalence:** CCPs have designed protocols to ensure the economic equivalence of the of the amended trades with the original ones.

27 See: https://www.isda.org/book/supplements-to-the-2006-isda-definitions/

7.5 Conclusion

The transition to risk-free rates that reflect the true value of the underlying is arguably the largest change in European capital markets since the introduction of the Euro back in 1999. It impacts a wide range of economic activities such as mortgages, loans and financial transactions. CCPs are fully engaged in ensuring a smooth and orderly transition for the benefit of the risk management and efficiency they provide to their users. Plans have been designed, tests taken place and consultations done to contribute to a successful transition.

It is crucial that all users of CCPs, either direct or indirect, clearing members or end clients, are fully aware of the upcoming changes and get ready as soon possible. CCPs stand ready to go hand in hand with their market participants to ensure a successful process.

Information about CCPs

- **LCH:** https://www.lch.com/Services/swapclear/benchmark-reform
- **Eurex Clearing:** https://www.eurex.com/ec-en/find/circulars/Eurex-Clearing-Readiness-Newsflash-EurexOTC-Clear-Transition-plan-for-transactions-referencing-CHF-GBP-and-JPY-Libor-to-risk-free-rates-RfR-Timeline-and-further-details-2659222
- **ICE Clear Europe:** https://www.theice.com/publicdocs/futures/IFEU_Libor_Transition_Fallback_Proposal.pdf

8 Accounting impacts of the transition

Asís Velilla[28]

The reform to replace the "IBORs" (interbank interest rates such as Euribor or Libor) with new risk-free rates (RFRs) could potentially have had numerous impacts on institutions' financial statements. This prompted the International Accounting Standards Board (IASB), the issuer of the International Financial Reporting Standards (IFRS), to launch an emergency project to tackle the main problems arising on application of the general accounting standards to the economic impacts deriving from the reform.

The project was divided into two phases:

i) **Phase 1:** In this phase, the problems affecting financial information in the period prior to the replacement of an IBOR with an RFR were addressed. The IASB completed Phase 1 on 26 September 2019 with the publication of the "Interest Rate Benchmark Reform, Amendments to IFRS 9, IAS 39 and IFRS 7".

ii) **Phase 2:** In this phase, it focused on the issues affecting financial reporting when an IBOR is replaced with an RFR. In August 2020, the IASB published the "Interest Rate Benchmark Reform Phase 2, Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16".

Phase 1

The issues that affect the financial statements in the period prior to the replacement of an existing benchmark rate that were addressed in Phase 1 of the IASB's reform project related to amendment of certain requirements of hedge accounting.

– The "highly probable" requirement for cash flow hedges.

– Reclassification of the amount recorded in equity to profit or loss.

– Prospective effectiveness assessment.

– Retrospective effectiveness assessment under IAS 39.

– Separately identifiable risk components.

The fundamental problem that arose in the time preceding the replacement of the IBOR with an RFR was that under general accounting standards for the hedge

28 Partner, Financial Accounting Advisory Services, EY. Although this author did not participate in the 3rd Conference, he took part in the one held in 2019. This article on accounting impacts has been included to provider a fuller view of the effects of the reform.

accounting of forecast transactions these transactions must be considered "highly probable". Following the reform, it could be considered that the occurrence of any hedged item that is a future transaction based on an IBOR over a relatively long term would no longer be highly probable due to its potential replacement by an RFR. The consequences of this would be as follows:

i) First, hedge accounting would no longer be applicable from that point on.

ii) The amount previously recorded in Equity for the application of cash flow hedges, given that the hedged item is no longer expected to occur, should be reclassified at that moment to profit or loss.

To avoid these impacts, an exemption was included in the accounting regulations according to which entities must assume that the benchmark interest rates on which the hedged cash flows and/or hedging instruments are based do not change because of the IBOR reform, for the assessment of the following points:

– If a forecast transaction (or a component of it) is highly probable.

– If there is an economic relationship between a hedged item and a hedging instrument (IFRS 9).

– If a hedge is expected to be effective prospectively (IAS 39).

– When to reclassify to the amounts in the equity item of the cash flow hedge to profit or loss.

Similarly, when a risk component is hedged, accounting regulations require it to be separately identifiable and reliably measured. A component is separately identifiable if there is a market structure and the financial instruments set the price bearing in mind that risk component. Therefore, if the IBOR risk component of, for example, a fixed rate loan is hedged, when the transition from the IBOR to the new RFR occurs, it may no longer meet those requirements and therefore hedge accounting should no longer be applied. To prevent this impact, the accounting standard has been amended so that in order to assess whether the risk components of IBORs are separately identifiable, this criterion should only be assessed when the hedge is originated.

With respect to IAS 39 (the accounting standard on financial instruments that was superseded by IFRS 9, but which can still be applied for hedge accounting if an entity chooses to do so), hedge accounting should continue if it falls outside the 80-125% test range due to the benchmark interest rate reform, as long as the other requirements have been met.

These exemptions will not apply when the nature and timing of the designated cash flows are certain (i.e., the transition from the IBOR to the new RFR has been fully implemented).

As a result of the disclosures required under Phase 1, IFRS 7 was amended to require the following information be disclosed on the hedging relationships subject to the exemption:

– The significant interest rate benchmark to which the entity's hedging relationships are exposed.

- The extent of the risk exposure that the entity manages that is directly affected by the interest rate benchmark reform.

- How the entity is managing the process of transition to an RFR.

- A description of significant assumptions and/or judgements that the entity made in applying the reliefs (for example, assumptions and/or judgements about when the uncertainty arising from interest rate benchmark reform is no longer present with respect to the timing and the amount of the interest rate benchmark-based cash flows).

- The nominal amount of the hedging instruments in those hedging relationships.

Phase 2

The issues that affect, or will affect, the financial statements when an existing benchmark interest rate is replaced, addressed in Phase 2 of the IASB's reform project, related to:

i) Changes to the basis for determining the contractual cash flows of financial assets and liabilities.

ii) Hedge accounting.

One of the key issues when replacing an IBOR with a new RFR is to assess whether there has been a substantial change in the contractual cash flows (which were previously based on an IBOR and subsequently on an RFR). These changes could entail:

i) Amending the contractual terms.

ii) Activating a fallback clause.

iii) Altering the method for calculating the interest rate benchmark without amending the contractual terms of the financial instrument (as occurred with Eonia when its calculation was changed €STR plus 8.5 basis points).

Derivatives can be amended in the following ways:

i) Closing out the original derivative and replacing it with a new derivative with the same counterparty and similar conditions (except for the reference to RFR).

ii) Combining the current derivative with a new basis swap (IBOR for RFR).

For non-derivative financial instruments, the general accounting standards should assess whether there has been a substantial change. If so, the original financial instrument should be closed out and the new financial instrument should be recognised at fair value, recognising the difference in profit or loss. If the change is not substantial, the new cash flows should be discounted with the original IRR (Internal Rate of Return), recognising the difference between that amount and its amortised cost in profit or loss. In any case, an impact on the profit and loss account would be expected.

To prevent this impact from occurring, an exemption was included by which the IRR of the financial instrument is adjusted (there is no immediate impact on profit or loss, but the effect would be prospective via the IRR, as if it were a financial instrument bearing a floating rate when that interest rate is recalculated) if the following conditions are met:

– Modifications in cash flows are due to the reform.

– The previous and subsequent cash flows are "economically equivalent".

For hedge accounting, the following exemptions are permitted.

i) Amendments to hedging documentation: by changing the hedged item, the hedged risk and/or the hedging instruments, it is possible to adapt the initial documentation of the hedge without discontinuing it.

ii) A temporary exemption of the requirement for risk components to be separately identifiable. As discussed in Phase 1, the risk components must be separately identifiable. In this case, the risk component is permitted to be separately identifiable over the following two years (to allow hedges to be designated with the new RFRs).

For these exemptions to apply, the following conditions must be met:

– The changes must be required under the reform.

– The previous and subsequent cash flows must be economically equivalent.

– Hedging instruments must not be derecognised.

Exemptions can be applied more than once: for example, for the first time when modifying the hedging instrument and for a second time when changing the hedged item.

In terms of the disclosures required under Phase 2, IFRS 7 was amended to ensure that users of financial statements can understand the effect of the IBOR reform on financial instruments and the entity's risk management strategy. Therefore, entities must disclose information about:

– The nature and extent of risks arising from the financial instruments subject to the IBOR reform to which the entity is exposed and how the entity manages these risks.

– The entity's progress in transitioning from IBORs to alternative benchmark rates and how it manages that transition.

To meet these two objectives, the following information must be disclosed.

– How the entity is managing the transition from interest rate benchmarks to alternative benchmark rates, the progress made at the reporting date, and the risks deriving from financial instruments arising from the transition.

- Disaggregated by significant interest rate benchmarks subject to the reform, quantitative information on financial instruments that have not yet migrated to an RFR at the end of the reporting period, disclosing separately:
  - Non-derivative financial assets.
  - Non-derivative financial liabilities.
  - Derivatives.
- Where the IBOR reform has resulted in changes to an entity's risk management strategy, a description of these changes.

Conclusion

The reform under which IBORs are replaced with new RFRs could have potentially led to numerous accounting impacts on entities' financial statements due to the application of general accounting standards to the economic impacts of the reform. Therefore, the accounting regulator has included some modifications to provide exemptions and minimise this accounting impact. However, it is important to ensure the exemptions included in the accounting standards are properly understood to avoid surprises and unexpected or unwelcome impacts.

Part II
Use of €STR and strength of Euribor contracts

Building liquid and robust markets around €STR

9 The euro benchmark reform: Transition from Eonia to €STR

Pablo Lago Perezagua[29]

Following the global financial crisis that began in 2007, the sharp decrease in the volume of unsecured transactions traded caused the Eonia rate to lose representativeness. Moreover, the manipulation of some of the main benchmark rates, such as Libor, and the sanctions imposed by the authorities, resulted in a large number of institutions stopping their voluntary contributions to these indices. In Europe, the drop in voluntary contributions had an impact on both Euribor and Eonia. The fragile nature of indices based on voluntary contributions from credit institutions and, in the case of Euribor, on quotes and not on actual transactions, revealed the need for a uniform set of rules and a more rigorous, mandatory methodology largely based on actual transactions.

Until that time, Eonia had served as an implicit benchmark for the monetary policy of the European Central Bank (ECB), allowing the impact of Governing Council decisions on changes in key ECB interest rates to be gauged. The importance of this index also stemmed from its use as a benchmark in a large volume of financial contracts. To address the decline in the volume and in the number of institutions contributing to Eonia, the ECB decided to provide the market with a new benchmark rate to support the short-term euro money market. To this end, in September 2017 it announced the creation of €STR, taking on the role of its administrator.

At the same time, a number of European organisations set up a working group[30] to identify and recommend risk-free rates for the euro area that could serve as an alternative to the benchmarks used until then in a variety of financial instruments and contracts. In turn, this group was tasked with developing a plan for the transition of new and legacy contracts to risk-free rates. The group recommended that €STR be used as the risk-free rate for the euro area and has since focused its efforts on planning for a smooth transition from Eonia to €STR.

In June 2016, the *Official Journal of the European Union* published Regulation (EU) 2016/1011, applicable from 1 January 2018, on indices used as benchmarks in financial instruments and financial contracts, or to measure the performance of

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30 Working Group on Euro Risk-Free Rates.

investment funds. The regulation aimed to ensure the reliability of benchmarks and to minimise conflicts of interest in the benchmark determination process in the European Union.

Since neither Eonia nor Euribor fulfilled the requirements of the new regulation, a reform was undertaken to bring them into line with the new provisions. The Euribor calculation methodology was changed to comply with the Regulation and its administrator, the European Money Market Institute (EMMI), received authorisation from the Belgian Financial Services and Markets Authority in July 2019. As the same could not be done for Eonia, given the small volume of transactions in the overnight unsecured interbank market, it was decided to stop its publication and to replace it with €STR, a new, more representative, benchmark rate based on deposit transactions. A transitional period was established during which both benchmarks would coexist, and Eonia's calculation methodology was changed to meet the Regulation requirements during that period.

After assessing the different options and analysing the responses received, the ECB decided that €STR would be an unsecured deposit rate which reflects the borrowing costs on the euro wholesale market. The transactions are overnight and are conducted at arm's length by MMSR[31] panel banks with their financial counterparties. Specifically, they are deposit-raising transactions conducted with credit institutions, money market funds, investment funds, captive financial institutions and money lenders, insurance companies, pension funds and other financial corporations.

At the end of June 2018, the ECB published the calculation methodology for €STR.[32] The index is published at 08:00 every TARGET2 business day. For the benchmark to be considered valid, certain minimum market activity criteria must be met each day. Specifically, there must be at least 20 contributing banks and the volume of the 5 largest contributors must not exceed 75% of the value of the transactions included in the daily calculation. If any of the minimum criteria are not met on a given day, contingency procedures will be applied. These basically consist of calculating the volume-weighted average of a given day's rate and that of the previous day, making the necessary adjustments if the key interest rate has changed between those two days. In the event that the ECB, as the calculation agent, detects errors that would cause the rate to vary by more than 2 basis points, a new rate would be published before 09:00 on the same day.

Although the ECB is the €STR administrator and is responsible for its publication, Eurosystem central banks are the main point of contact with counterparties in the daily benchmark determination process, mainly for the verification of data provided by banks. Using the infrastructure created for MMSR, central banks that have not delegated this responsibility to the ECB collect data daily and submit them to the ECB. In a subsequent data-editing stage, all the central banks with reporting agents in their jurisdictions are responsible for checking the accuracy of the data received.

31 Money Markets Statistical Reporting.

32 European Central Bank (2021). "The euro short-term rate (€STR) methodology and policies". March.

One of the key differences between €STR and Eonia is that the former represents the interest on borrowing transactions, while the latter is an interbank lending rate. Both of them are unsecured. All the transactions on which calculation of Eonia was based related to the interbank market, while €STR is based on transactions between reporting agents and a wide range of counterparties from the wholesale market. As mentioned above, institutions contributed to Eonia voluntarily, while those contributing to €STR are obliged to do so under the MMSR regulation.

Lastly, another difference is that the EMMI published Eonia daily, at the close of business, based on the day's transactions, while the ECB, as the €STR administrator, publishes the rate at 08:00 each day, based on eligible transactions concluded on the previous business day.

In order to explore the possible transition paths from Eonia to €STR, the Working Group on Euro Risk-Free Rates conducted a survey among market participants. The feedback received revealed a preference for restricting the use of Eonia until it is definitively phased out on 3 January 2022. Additionally, following a public consultation, in March 2019 the Working Group recommended that the EMMI, as the administrator of Eonia, modify the calculation methodology for the transition period, so that it consisted of €STR plus a spread. In response, the EMMI announced that it would start using the methodology recommended by the Working Group on Euro Risk-Free Rates following the first publication of €STR in early October 2019. In this way, €STR and Eonia, recalibrated using the new methodology, will coexist during the transitional period. This will allow users with contracts referencing Eonia and maturing beyond 31 December 2021 to adapt their methodology to €STR, both from an operational standpoint, and from a legal, accounting and risk management perspective.

The ECB calculated the fixed spread for the recalibration of the new Eonia following the Working Group on Euro Risk-Free Rates's recommendations. These consisted of calculating a simple average of the spreads observed over a one-year period, from 17 April 2018 to 16 April 2019, but excluding the lowest and highest 15% of observations so as to avoid unwanted outliers in the series. In May 2019, coinciding with the EMMI's announcement of the change in Eonia's methodology, the ECB announced that the fixed spread would be 8.5 basis points[33] (0.085%), applicable from 2 October 2019 to 3 January 2022. The recalibrated Eonia is published every day at 09:15.

The usefulness of having forward rates based on €STR that could also serve as a reference in the market, led the ECB to launch a public consultation, the results of which were released in October 2020. The conclusions supported the publication of compounded rates at different terms, calculated on the basis of daily €STR data. Thus, on 15 April 2021, the ECB began to publish rates at terms of 1 week, 1 month, 3 months, 6 months and 1 year. The methodology is in the public domain[34] and the calculation is a simple average of the €STR registered during the days prior to each term. These are backward looking rates and are posted daily at 09:15.

33 See press release on the spread between €STR and Eonia published by the ECB on 31 May 2019.

34 See the ECB website for the rules for calculating and publishing the compounded euro short-term rate using €STR.

The Benchmark Regulation (BMR) requires contracts referenced to a benchmark or critical index, such as Euribor, have an alternative reference index. This is known as the fallback. In this way, if the main index is not available, it would serve as a back-up to guarantee the contract can go ahead using the replacement index. Up until now, there have been no significant forward rates in the euro area as an alternative to Euribor. Therefore, since April, the publication of these compounded rates calculated at the same terms as the benchmark has become significant. The market is expected to develop a forward curve incorporating forward-looking interest rate expectations based on €STR. However, this is not likely to happen until there is a sufficiently liquid and deep derivatives market.

10 Market perspective on the development of €STR

Sergi Castellá Quintana[35]

On 2 October 2019 a new milestone in the reform of interest rate benchmarks in the euro area promoted by the ECB was marked by the first publication of the new euro risk-free rate (RFR): the euro short-term rate or €STR. This met one of the objectives of the Working Group on Euro Risk-Free Rates formed by EU authorities and financial institutions to identify and recommend alternative rates to Euribor and Eonia, used in a wide variety of financial instruments and contracts in the euro area.

At the same time, instead of being calculated as the average of the interest rates at which euro area banks lend money to one another overnight, according to information reported to the European Money Markets Institute (EMMI) by a panel of 28 contributing banks, Eonia was thenceforth to be calculated as €STR plus a spread of 8.5 basis points. *De facto*, the Eonia became a benchmark derived from the new RFR, the €STR.

So began the process of replacing Eonia with €STR as the new overnight reference rate for the interbank market for new contracts, and also the process of adaptation of existing contracts. This conversion must be completed by 3 January 2022, the date on which Eonia will be discontinued.

10.1 What is the progress of the transition from Eonia to €STR?

One of the main challenges revolves around the development of a liquid and robust derivatives market based on the new overnight deposit rate (€STR), taking advantage of the existing infrastructures for Eonia. In this sense, despite the early admission by central counterparties (CCPs) of the €STR as an accepted rate for derivatives transactions, it is only in recent months that the volume has started to grow, and it still represents a very small percentage of the total volume of derivatives based on overnight rates.

There may be several reasons that allow us to understand the feeble growth of the €STR-referenced derivatives market, one of the main arguments being that, since Eonia is now a *de facto* €STR tracker, operating in Eonia is equivalent to operating directly in €STR. Therefore, continuing to operate in Eonia does not involve assuming any basic risk and in market practice the convenience of continuing to trade derivatives referenced to Eonia has become a habit, thus postponing the operational adaptations required by the €STR.

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Another relevant aspect is that the main CCPs will not migrate Eonia-linked derivatives to €STR until the weekend of 16 October. This date will almost certainly prove crucial in the transition, since from then on, overnight derivatives can be conducted through CCPs only with €STR as the benchmark. It is foreseeable that this will act as a trigger for the rest of the products and counterparties with contracts also referenced to Eonia to accelerate their conversion to €STR.

It might seem that the transition to €STR is slow, but the reality is that the migration process to the new RFRs in jurisdictions such as the United States or United Kingdom is taking place in a similar way and timeframe.

The archetypal case is the United Kingdom, where there is an explicit recommendation by the regulator not to carry out new transactions referenced to GBP Libor from April last and yet the volume of new derivatives transactions linked to Libor remains high. As in the case of Eonia, the migration by CCPs of all the operations from GBP Libor to SONIA foreseen for December – just days before the discontinuation of GBP Libor – will almost certainly prove crucial for SONIA to absorb all the volume so far retained by Libor in derivatives transactions.

The process is even more delayed and is proving even more complicated in the United States, where SOFR is proposed as a replacement for the current overnight benchmark (FED Funds) and the USD Libor. This situation has led regulators to postpone the cessation of USD Libor until June 2023.

10.2 Will €STR replace Euribor in new contracts?

The expectation is that €STR will replace Eonia in the market for products that currently use the overnight rate as a reference benchmark, but not that it will replace Euribor in those products and contracts that use the latter as a reference. Both regulators and supervisors have reiterated on numerous occasions in recent years that Euribor is a robust benchmark and that it complies with the new Benchmark Regulation (BMR).

In its two years of life, there has been limited use of the €STR in products that have traditionally been referenced to Euribor. In loans, the volume has been practically non-existent and in bond issues, only a few supranational bodies such as the EIB have used the €STR as a benchmark in some of their issues. These are one-off operations that for the moment do not affect the status of the Euribor as the main benchmark used in the issue of floating rate notes (FRNs).

Apart from this, Euribor is a term rate (1, 3, 6 and 12 months) whereas the €STR is an overnight rate. This is especially relevant for retail products such as mortgages where the interest rate needs to be known at the beginning of the fixing period. In these cases, the direct use of the €STR as a substitute for Euribor would not be possible. As an alternative, methodologies have been proposed to establish forward-looking rates based on the €STR. The development of these forward-looking rates based on the €STR requires a deep and liquid derivatives market, which will take some time to develop.

In any case, and since Euribor, unlike Libor, is not about to be discontinued, the use of the €STR is proposed as a fallback to be included in new contracts referenced to the Euribor following the recommendations made by the Working Group on Euro Risk-Free Rates last May.

It is likely that in the case of counterparties that operate in different jurisdictions (e.g., major multinationals) the process of adapting to the use of the new RFRs after the disappearance of Libor will lead to more frequent use of the new rates and methodologies, and that this will lead to greater predisposition to use the €STR as a benchmark in new contracts.

In conclusion, the transition from Eonia to €STR is taking place slowly but surely and will become a reality in a timeframe and manner similar to those of the other major jurisdictions. On the other hand, Euribor is a robust benchmark that complies with the new BMR, unlike Libor, which is scheduled to be discontinued in the coming months and years. This suggests that use of Euribor will continue to be high and that the development of new benchmarks based on the €STR will allow these to be incorporated as fallbacks in new contracts, which will result in a greater robustness of these Euribor-referenced contracts.

Euribor: Contract strength and fallbacks based on €STR

11 Euribor, a trusted and reliable reference for over 20 years

Jean-Louis Schirmann[36]

In 2016, the European Commission has declared Euribor a critical benchmark. With this criticality in mind, the European Money Markets Institute (EMMI) – Euribor's Administrator – has deeply reformed the benchmark to achieve its compliance with the Regulation of the European Union on Benchmarks (BMR).

11.1 Governance: A major cornerstone of the reform

The Governance Framework of Euribor has been considerably reinforced in recent years to increase the benchmark's transparency and integrity. Effective control and oversight arrangements have been put in place for the provision of Euribor. The benchmark benefits now – among others – from a solid Governance Code of Conduct, a dedicated Code of Obligations of the Panel Banks, and a Code of Obligations of the Calculation Agent. These Codes are furthermore supported by a large set of policies and procedures.

With the **Euribor Governance Code of Conduct**, EMMI has elaborated a framework for handling conflicts of interest, among others with the establishment of an independent Conflicts of Interest Committee. An entire control framework has also been developed to manage operational risks, deal with business continuity and disaster recovery plans, contingencies procedures, etc. In parallel, an accountability framework covering, among others, complaints, whistleblowing, or record keeping has also been implemented. Finally, transparency occupies a central place too with, for instance, the publication of public reports or the organisation of market consultations, in particular when material changes to Euribor are being contemplated.

Turning to the contributors to the determination of Euribor - the Panel Banks – the **Code of Obligations for Panel Banks** (COPB) stipulates their general obligations and covers aspects such as the relevant documentation to provide and the co-operation with their respective supervisory authorities. The COPB also deals with governance and organisation at the Panel bank level, for example their internal oversight and verification procedures. While the COPB encompasses controls of the Panel Banks' environment and accountability, it furthermore specifies the requirements to be

36 Chief Executive Officer, EMMI

satisfied for data contributions or guidelines for the Level 3 determination. Similar requirements apply to the Calculation Agent in the **Code of Obligations of the Calculation Agent** (COCA).

Of paramount importance too, an **independent Oversight Committee** of market experts supervises the application of this Governance Framework, and also monitors market developments.

11.2 The reformed methodology for Euribor

EMMI has also broadly consulted the market to devise and develop a fit-for-purpose "**hybrid" methodology for Euribor**, which has been implemented since November 2019. This methodology safekeeps and further increases the benchmark's resilience, its robustness, and its representativeness. Euribor is not based on quotes anymore, but it is essentially grounded in transactions in the unsecured euro money market. The contributions to the determination of Euribor by the 18 Panel Banks – which are fully representative of the underlying market – follow a 3-level hierarchical approach:

– Level 1 consists of **contributions based on eligible transactions** in the unsecured euro money market. These transactions have to satisfy a number of conditions, as for instance a minimal notional amount of €10 million.

– Level 2 is used if there are no Level 1 contributions for a given Panel Bank. It consists of contributions based on **transactions across the broader money market maturity spectrum**; with nearby maturities for instance, or transactions from previous days, adjusted by market factors. Level 2 counts three different sub-levels.

– Level 3 is used when Level 2 contributions cannot be made. It is based on **transactions from a range of markets closely related to the unsecured euro money market**. It is important to highlight that Level 3 contributions are completely different from the previous quote-based methodology: each Panel Bank uses very specific input data, and tailor-made modelling techniques depending on their own funding models. Data input can consist of transactions that could not be included in level 1, for instance transactions below the €10 million threshold but conducted at market rates; then of data from markets close to the underlying interest, for example. All Level 3 contributions made by a Panel Bank must be duly documented, validated, and always applied in a consistent fashion, under the guidance of EMMI.

With the hybrid methodology, Euribor continues to measure the same underlying interest, just in a different way. Euribor is now anchored into effective transactions, which further increases the robustness and representativeness of the benchmark.

In the wake of the whole reform process of Euribor – at governance and methodology levels –EMMI has then been granted, in July 2019, an **authorisation** by its supervisor – the Belgian Financial Services and Markets Authority (FSMA) – **for the administration of the benchmark under BMR**. The European Securities and Markets Authority (ESMA) will take over this role as from January 2022.

11.3 Robustness at all times

Euribor, a trusted and reliable reference for over 20 years

The hybrid methodology was fully implemented at the very end of 2019 and, a few months later, has already passed a first real-life test with the emergence of the COVID-19 pandemic. During this episode, **Euribor has proven very robust and resilient**. The benchmark was produced every single day, for each maturity, timely, without any mistakes and contingency measures. This was achieved not only thanks to solid operational processes, but also thanks to a robust methodology.

During this agitated period, **Euribor has also remained representative of its underlying market**, tracking market movements, including changes in monetary policy, even in the context of the temporarily reduced market liquidity in the first and second quarters of 2020. In this very particular context, Level 3 contributions turned out very useful, and they amounted for a fair share of the total of contributions to the determination Euribor at the worst of the health crisis.

11.4 Euribor is there to stay

Euribor has already been structurally reformed, but this does not mean the end of the story. EMMI is committed to make continued efforts to ensure that the benchmark always remains robust, reliable, and representative. In this regard, the first annual review exercise of Euribor's methodology was run in 2020. The review has been performed primarily to confirm that Euribor remains representative of the market it represents. It was also an opportunity to identify any potential for further recalibrations, or finetuning of the benchmark's methodology.

Based on the outcome of the analysis, EMMI has identified **four relevant adjustments** which have been implemented since April of this year. All of them **serve the representativeness of the benchmark**. While it is yet too early to provide a measure of their impact due to a too short lookback period, these changes all have a positive effect on Euribor: they improve its robustness, they make it more resistant to undue influence, they induce a decrease in the share of Level 3 submissions, and they enhance its responsiveness to market events.

With the continuation of such annual reviews, EMMI's intention is to provide the most reliable methodology, and to adjust to any structural market developments. The ultimate goal crystal-clear: **ensuring that Euribor is there to stay**.

11.5 Euribor fallback rates

The European regulator considers that Euribor users and their clients should be able to know in advance what would happen to their contracts in the *unlikely* scenario of a temporary or permanent discontinuation of the benchmark. Hence the introduction of fallback language in Euribor contracts.

EMMI regards this regulatory requirement as **a positive development making the case for Euribor even stronger**. As the administrator of the benchmark, providing users with such fallback rates is deemed a duty. That is why EMMI is currently developing an €STR-based term structure as a fallback to Euribor, for all existing maturities. In this venture, Ice Benchmark Administration (IBA) will be the Calculation Agent and EMMI the Administrator, bearing end-to-end responsibility for the benchmark.

The production of the €STR Term structure will depend on how quickly the €STR is adopted by the markets, in particular in the OIS segment. Provided a positive evolution, EMMI is confident to produce a **beta version** of this forward-looking fallback around the **end of the summer or the beginning of autumn this year**. The **real rates** should be available toward **end 2021, beginning 2022**. EMMI will communicate all relevant information on due time to the market, well ahead of the publication of the real rates.

12 Recommendations of the Working Group on Euro Risk-Free Rates on contractual clauses triggering the replacement of Euribor

Adolfo Fraguas[37]

On 11 May 2021, following a public consultation launched in November 2020, the Working Group on Euro Risk-Free Rates (hereinafter, the Working Group) published its Recommendations on the triggers of the Euribor fallback clauses and replacement rates for Euribor based on the €STR (hereinafter, the Recommendations). These Recommendations represent another milestone in the process of developing robust risk-free benchmarks in the euro area.

I shall presently explain the content of the first part of these Recommendations, relating to the triggers of the Euribor fallback clauses. But first, I should make it clear that the Working Group has not issued these Recommendations in the face of any imminent or immediate risk of the Euribor disappearing. As is known, Euribor currently complies with the requirements imposed by Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on the benchmarks used as reference in financial instruments and financial contracts or to measure the performance of investment funds (known as the Benchmark Regulation or BMR) and there is nothing to suggest that this will change in the future. Therefore, the Recommendations represent a forecasting instrument that, as we shall see presently, meets a double objective: complying with applicable regulations and establishing a risk reduction mechanism in the event of a hypothetical future unavailability of Euribor.

12.1 Benchmark fallback clauses

12.1.1 Origin

As is well known, Article 28.2 of the BMR establishes that: “Supervised entities other than an administrator as referred to in paragraph 1 that use a benchmark shall produce and maintain robust written plans setting out the actions that they would take in the event that a benchmark materially changes or ceases to be provided. Where feasible and appropriate, such plans shall nominate one or several alternative benchmarks that could be referenced to substitute the benchmarks no longer provided, indicating why such benchmarks would be suitable alternatives. The supervised entities shall, upon request, provide the relevant competent authority with those plans and any updates and shall reflect them in the contractual relationship with clients”.

In order to comply with the last sentence of the aforementioned Article 28, it is necessary to set forth in contracts of supervised entities what would happen in the

37 Director of Legal Services Spain, BBVA.

event that a benchmark used in a contract (either to determine an interest rate or a payment flow) should cease to be provided or materially change.

But beyond the requirements of the law, there are additional reasons making it advisable to provide for the eventuality of the non-availability of the benchmark of a contract. The difficulties that the hypothetical – and fortunately unlikely – disappearance of Euribor would entail for contracts using it as a reference are all too easy to imagine, and this eventuality, however remote it may seem, should be covered in contracts by some mechanism that avoids the initiation of disputes between the parties, possibly leading to legal action, about what to do in such a situation.

12.1.2 Concept

A fallback clause is a contractual stipulation that establishes in advance which alternative reference should be used in the event that the benchmark initially agreed by the parties is no longer available for use.

12.1.3 Elements

The elements that make up this type of stipulation are at least four:

i) Trigger events: the events causing the fallback to be activated. As accurate and objective a description as possible of the trigger events must be sought, so as to avoid subsequent disputes regarding interpretation and requests for further consent, either from one of the parties or from a third party.

ii) The effective date, which is the day on which the replacement of the benchmark starts to have legal effect on the contract. This date should coincide with the effective unavailability of the benchmark, even if such eventuality has been previously announced. Typically, on a certain date D, a benchmark administrator or its supervisory authority will publicly announce that on an upcoming future date, $D + X$, the benchmark will cease to be published or will cease to be representative. The effective date would be the second of these dates (that is, $D + X$), and not that of the announcement (D). Starting on the effective date, the fallback rate will be used to calculate either the interest to be paid in the interest periods that start from said effective date, or the payments to be made by one party to the other in the calculation periods that also start after the effective date.

iii) The fallback rate is the new benchmark to be applied from the effective date instead of the benchmark applied up to that time.

iv) The spread adjustment is a constant to be added to or subtracted from the fallback rate in order to maintain the equivalence of both the old and the new rates and thus prevent either party to the contract from benefiting, at the expense of the other, from the replacement of the benchmark.

12.1.4 Other considerations

Additionally, it is advisable to follow certain principles when agreeing on the fallback clauses. For example:

– Try to use clauses that are homogeneous with regard to different types of products, in order to manage the risk of one party benefiting to the detriment of the other or avoid disputes, basic risks, mismatches between products and their hedges, etc.

– Fallback clauses must be provided for situations in which the benchmark becomes permanently unavailable. Otherwise, there could be cases in which the (irreversible) replacement of the benchmark in the contract is triggered when for different reasons (e.g., due to one-off technological problems) it will in fact continue to be available normally after the problems that have caused its temporary unavailability.

– Fallback clauses must be provided for cases in which the benchmark becomes unavailable at all its tenors, since the unavailability of only some of them could be remedied (as in fact has been happening in recent years) using the remaining tenors of the benchmark, without the need to trigger its replacement (in any case, the use of that other tenor should also be provided for in the contractual documentation).

12.2 The recommendations

The Recommendations analyse six potential trigger events for the replacement of Euribor in a contract, and based on the responses received during the consultation process of the Working Group, it issues suggestions for action (always suggestions, since they are not binding and do not intend to condition the action of the parties that could be affected, and cannot be considered advice of any kind).

12.2.1 Definitive cessation of publication of Euribor with no successor

This is the eventuality that in a hypothetical future the publication of the Euribor could cease. The Working Group considers it advisable to provide for this eventuality in contracts as a trigger event for the replacement of Euribor when there is a public statement, either by the benchmark administrator (currently the European Money Markets Institute – EMMI) or by that administrator's supervisor (currently the Belgian supervisor, the Financial Services and Markets Authority – FSMA –, and from 2022 the European Securities and Markets Authority – ESMA).

Logically, it is necessary for the public statement to be more or less official, so a mere speech by the authority, for example, would not be sufficient. In addition, such a statement should not be made until such other palliative measures as may be appropriate, as provided in the BMR, have been exhausted, such as the mandatory contribution of Article 23 or the mandatory administration of Article 21.

While the process of drawing up the Recommendations was coming to a close, Regulation (EU) 2021/168 of the European Parliament and of the Council of 10 February 2021 was published, amending the BMR (the BMR Amendment), Article 23b, 2.b) and 2.c) of which deals precisely with the possibility of the European Commission's designating one or more replacements for a benchmark when this very trigger event occurs.

12.2.2 Lack of representativeness

In this case, the possibility arises of triggering the replacement of Euribor if the supervisory authority of the Euribor administrator were to issue a public statement confirming the loss of representativeness of Euribor, that is, its inability to measure the underlying market that it seeks to quantify. This trigger event is also known as the "pre-cessation event".

Logically, a declaration of this magnitude should only be made when the remedies provided in the BMR have been applied, where appropriate (mandatory contribution or administration, as in the previous case, or modification of the benchmark calculation methodology, for example).

The Working Group recommends the incorporation of this trigger event. In parallel, the BMR Amendment has also incorporated this trigger event so that, in accordance with Article 23b 2.a), the Commission may designate one or more replacement benchmarks.

12.2.3 Illegality or prohibition of use

This would cover a case in which the use of Euribor were to become illegal for any part of the contract or its use were to be prohibited from a certain moment.

In this case the Working Group recommends that the appropriateness or otherwise of including this trigger event be assessed in each case and for each type of contract. It is difficult to make a single recommendation for or against because of the very different circumstances that may apply. For example, it does not seem proportionate that in a bond issue distributed to the public, the fact that for a specific bondholder the use of Euribor were to become illegal or be prohibited should cause the benchmark to be replaced for the entire issue; in this case, it would probably be easier for the affected bondholder to sell the aforementioned bond. Conversely, in a bilateral loan it could make a lot of sense to provide that if it were to become illegal or be prohibited for the lender or the borrower to continue using Euribor as a benchmark from a certain point in time, this would constitute a trigger event.

This case is provided for in Article 23b 2.d) of the BMR Amendment, in the event that the competent authority of the administrator of a benchmark withdraws or suspends its authorisation in accordance with Article 35 of the BMR.

12.2.4 Cessation of publication without prior public announcement

This case is similar to the one discussed in section 12.2.1 above, with the difference that here the cessation of Euribor would occur without prior public communication by its administrator or the administrator's supervisor. That is, it would be a *de facto* cessation of publication.

This is an extremely unlikely event, given the crucial nature of Euribor and the serious effects that a sudden cessation of Euribor publication could have on financial stability.

Attempts have been made to justify its introduction as a kind of last resort trigger event, in case none of the other trigger events could be applied. However, if it is to be introduced, it should be borne in mind that, instead of a definitive cessation, a replacement of the Euribor could be triggered when its cessation of publication is merely temporary. It will therefore be extremely important for the parties to a contract, if they wish to incorporate it, to establish a sufficiently long period of time for the effective cessation of publication to trigger the replacement of Euribor, in order to avoid the risk of it wrongly being considered permanent and so bringing about prematurely and hastily an unnecessary replacement of Euribor.

12.2.5 Change in methodology

The changes in the calculation methodology of a benchmark, and therefore also of Euribor, are necessary under the BMR in that they allow the benchmark to be adapted to the reality that it seeks to measure. The legislator's concern for this continuous adaptation is revealed in Article 23.2 of the BMR, which establishes the obligation of administrators of critical benchmarks to submit to their competent authority every two years an assessment of the capability of each critical benchmark they provide to measure the underlying market or economic reality, and goes so far as to say, in Article 23.6 d), that the competent authority shall have the power to "require the administrator to change the methodology" of the critical benchmark. Similarly, Article 13.1.b) obliges the administrator to publish "details of the internal review and the approval of a given methodology, as well as the frequency of such review". The "Benchmark Determination Methodology for Euribor" published by the EMMI and currently in force envisages, in fact, as part of the benchmark methodology, its periodic review to adequately reflect the underlying market that it seeks to measure.

Therefore, it does not seem advisable to introduce as a trigger event for replacing Euribor something that the regulations themselves consider as normal and even necessary.

On previous occasions the Working Group has in fact recommended the introduction of clauses in contracts linked to Euribor that ratify the timeliness of these methodological developments.

Without prejudice to the foregoing, the Recommendations suggest that in certain circumstances and with a certain type of contract, the parties could agree to open deliberations on whether or not to modify the applicable benchmark in a contract in the event of a change in its methodology.

12.2.6 Application of contingency measures

Finally, the Working Group does not consider it advisable to include as a trigger event for the replacement of Euribor the eventuality of it being published temporarily by virtue of the various contingency measures provided in its calculation methodologies (e.g., in the event that a certain number of contributing banks or panel banks were to be compelled to provide their daily contributions and EMMI were to be forced to calculate and publish Euribor with fewer contributions than usual).

These measures merely resolve a situation that is considered specific and exceptional and that, therefore, does not seem to justify the effects that would result from a change in the benchmark initially agreed by the parties to the contract.

13 Recommendations of the Working Group on Euro Risk-Free Rates on fallback rates for Euribor in cash products

Sergi Castellá Quintana[38]

On 11 May 2021 the Working Group on Euro Risk-Free Rates published its recommendation on Euribor fallback rates based on the €STR. While there are currently no plans to discontinue Euribor, the development of stronger fallback language addresses the risk of a possible permanent disruption and is in line with the Benchmark Regulation (BMR). The recommendation, which was unanimously approved, is based on a market consultation which was taken into account in the final recommendation.

Although the Working Group's recommendations are not legally binding on market participants, they do provide guidance and represent the market consensus on Euribor fallback trigger events and on €STR-based fallback rates that market participants can consider in their contracts.

The recommendation refers only to cash products, since for derivative products the Working Group assumes the fallbacks established by ISDA.

Regarding the composition of the fallback rate, the Group recommends a term structure based on the €STR for each financial product and an adjustment differential to avoid the possible transfer of value in the event that a fallback is triggered.

The term structure includes two types of methodologies, which may be applied to certain asset classes depending on their characteristics.

i) The forward-looking term structures would be based on quotes and transactions in derivatives markets that refer to the €STR and reflect market expectations about the evolution of the €STR over the next interest rate period. They would be known at the beginning of the interest rate period.

ii) Backward-looking structures, based on simple mathematical calculations of the value of the daily fixings made in the past of the overnight risk-free rate, compounded over a given period. This methodology in turn has several versions: payment delay, lookback period and last reset.

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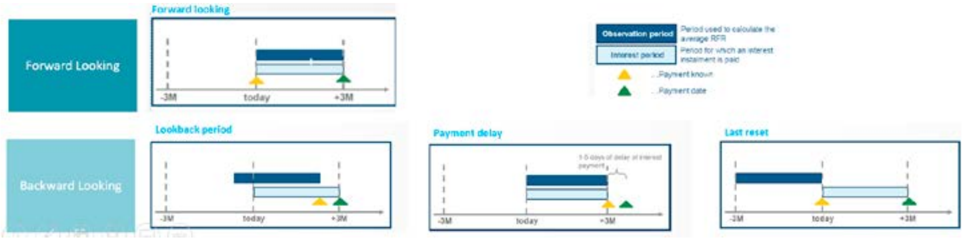

For cases in which a forward-looking structure is preferred, the Working Group recommends using a fallback with two levels: at the first level, the forward-looking methodology could be included, and at the second level, the Working Group recommends including the backward-looking methodology as a backup in case the forward-looking rate is not yet available at the time the fallback is triggered.

The following table shows a summary of the recommendations by type of cash product:

	Cases of specific use by product	Recommended replacement		Comments
Sophisticated clients	Corporate Lending	BWL lookback		• BWL lookback if consistency with the derivative hedge is more important
		FWL	BWL lookback	• Waterfall (FWL and BWL lookback) when it is important to know the rate at the beginning of the period
	Debt Securities	BWL lookback		• Consistency with other jurisdictions and with derivatives
	Securitizations	BWL lookback or FWL		• Depending on the underlying assets
Retail clients and SMEs	Mortgages/Loans	FWL	BWL: last reset (up to 3 mths) or lookback	• Preference for forward-looking. Second fallback, BWL last reset or BWL lookback depending on the need to know the rate at the beginning of the period
Passive	Current accounts	BWL payment delay		• No need to know the interest in advance
Other	Trade finance	FWL	BWL Last Reset (up to 3 mths)	• Discount products. Need to know the interest rate a the time of disbursement
	Export and emerging markets finance products	FWL	BWL Last Reset or lookbak	• The second fallback in the waterfall will depend on whether the rate at the beginning of the period needs to be known.
	Investment funds Funds transfer pricing (FTP)	No specific recommendation		• At the discretion of benchmark users

To ensure economic equivalence between Euribor and the corresponding €STR term structures (forward-looking or backward-looking), the Working Group recommends calculating and applying an adjustment that reflects the value of bank credit risk and other premiums implicit in Euribor. To do this, it proposes to use the same calculation method that the International Swaps and Derivatives Association (ISDA) has followed for derivative contracts, that is, the average of the historical spread over five years.

Finally, the Working Group proposes that, for the calculation of the backward-looking rates, the compound average rates of the €STR that the ECB has been publishing since 15 April 2021 be used.

With the publication of the recommendation on trigger events for Euribor replacement and on fallback rates, the Working Group fulfils the mandate that it received at the time of its creation. However, it is not expected to be dissolved due to its importance as a forum for discussion between the public and private sectors and as a driver of reforms in the euro area, so the group will continue to work on monitoring the benchmark transition. The Group's secretariat will pass to the European Securities and Markets Authority (ESMA), which, from January 2022, will assume the supervision of the Euribor administrator.

Acknowledgements

María José Gómez Yubero[39]

The CNMV, as the competent authority in Spain for benchmarks, is committed to monitoring the reform of interest rate benchmarks and has been working for some time to ensure the adaptation and coordination of the public and private sectors at the national level to achieve a common strategy and provide an orderly transition adapted to the particularities of our economy and our financial system, safeguarding the interests of both consumers and investors as well as financial stability.

To this end, the CNMV has been leading a working group, which has also functioned as a communication and coordination channel, in which public administrations and entities and associations from the private sector, both financial and non-financial, are present, and several conferences have been held to publicise these reforms.

Following the official announcement determining the disappearance of Libor and the recommendations of the Working Group on Euro Risk-free Rates on fallback rates for contracts linked to Euribor, this 3rd Conference was held on 15 June with the participation of members of the CNMV and with representatives of the European Securities Market Authority (ESMA), the Bank of Spain, the UK Financial Conduct Authority (FCA), the International Swaps and Derivatives Association (ISDA) and European Association of CCP Clearing Houses (EACH) as well as Spanish financial (Banco Santander, BBVA and CaixaBank) and non-financial (Telefónica) institutions.

With the aim of consolidating, compiling and allowing greater dissemination of the messages and contributions to this event, the CNMV is publishing this monograph on the event in both Spanish and in English.

My thanks and those of the CNMV to all the people and institutions that with their effort and generosity have contributed to the success of the 3rd Conference of the CNMV on the status of interest rate benchmark reform and to this publication.

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